Embedding Information Literacy in Educational Research Graduate Classes

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Faculty-Library Collaboration:  
Embedding Information Literacy in Educational Research Graduate Classes  
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Introduction  
In any academic context, when one mentions the term research, students immediately panic and assume this research is something they cannot do, or even ever have the capacity to learn under any circumstances. This response seems fairly common, in our experience, among students new to graduate programs and graduate level research. The tendency on the part of the students is to make this a daunting project, impossible to complete. As faculty members, we know how to conduct research. Our goal then, becomes one where we describe the steps, have students practice each step, and then have them build their research work in stages. Fortunately, collaboration between and among faculty in exploring and teaching research tools helped us develop a road map for students.  

To implement this approach to teaching research, we developed a collaborative partnership, exploring research skills that worked, refining our teaching approaches, and establishing a guided student practice component. After several years of an informal relationship, linking academic librarianship to education programs, our collaboration moved to a more formalized relationship with the permanent assignment of faculty librarian, Suzanne Roybal as liaison to the School of Education graduate students and the program director, Madalienne Peters. Community interest in having graduates research locally based projects helped strengthen this connection.  

Now in our fourth year, the collaborative relationship has produced a level of improved scholarship in student research, with increased student understanding of academic research explorations linked to their own research focus. Additionally, students have improved in scholarly writing and citation skills application in their written work.  

Graduate student improvement in research and writing skills is reflected in the increased number of students whose work is accepted by Education Resources Information Center (ERIC) and by professional conferences for inclusion in presentations. Systematic data collection on the effect of this collaboration needs further documentation.  

Persuading students of the importance of producing scholarly work has not been easily achieved. Yet, in a time where documentation is essential, we had to move students in this direction to increase their understanding and appreciation of professional research and writing. The effort continues each semester.  

The purpose of this article is to describe in brief the steps taken over the last four years while moving toward developing student understanding and application of the research process on their individual master’s theses. The particular focus is on assisting students in locating scholarly material in building their review of the literature as part of the graduate thesis.
Review of the Literature

Information literacy skills need to be implemented in a direct way that has an impact on students and reinforces a skill set (Mokhtar & Majid, 2005). In order for graduate students to become involved in the research process, it is important to make the connection between skill set abilities and research interests. Gullikson (2006) studied faculty perceptions of the importance of teaching these skills. While faculty agreed on the importance of the skills, they were vague on when or how this could be part of a planned curriculum. We took a proactive position in embedding skills in a planned curriculum tied to thesis development and finalization.

In our work with Dominican students in the graduate program in education, we have taught this skill set, had students practice the applications as they formulated and developed their theses, and found that student research and writing skills improved over time. Students move away from reluctance to engagement when they see the results as they develop their scholarly work.

Over the course of the development of the thesis in a planned way, students become skilled and increasingly responsible for their own learning. At the conclusion of their research, students generally reflect on the connection between their own improved information literacy and their increased ability to critique sources of information in other areas. They tend to become critical consumers of knowledge. Carr and Rockman (2003) discuss collaboration with academic librarians to integrate information literacy into courses and curriculum. We have taken this component of research and applied it from the beginning of student thesis preparation to the conclusion of student publication.

The following is a brief description of the instructional process:

Steps in Developing a Topic into a Viable Research Focus

Building a Review of the Literature
1. Start with a topic. Consider this topic as a starting point. The visual equivalent is that the initial topic is a 100 pound block of wood. The goal is to whittle it down to the size of a toothpick.
2. Look at a topic, focus in describing it specifically, narrowing down concepts to something manageable.
3. Look at encyclopedia sources for “key words” and focusing the topic, not for information.
4. Use Google “Wonder Wheel” – which demonstrates a concept map for further refinement.
5. Explore the Databases
   a. Look at articles. Within articles, examine subject headings to lead to new articles.
   b. Look at references at the end of the article to lead to deeper research
   c. Examine multiple databases
   d. Gather, review and select articles to further develop the research focus.

Academic Library Search

In working with students, or anyone interested in collecting academic information on a topic, it is important to help people develop a focus for their research. We are in an information revolution. One must learn to discern how to find good information, not commercial or biased
information that is all too easily attainable, especially through the Internet. The information that is available to everyone requires a skill set so that one knows how to discover and evaluate the reliability of that information (Patten, 2002).

Basic Skill Set:
1. Knowing how to use search terms to focus on one’s topic
2. Knowing how to be tenacious in searching for information
3. Knowing how to use the university’s library website to find books and databases
4. Understanding how to search the databases-techniques
   a. knowing how to locate peer reviewed/scholarly articles in professional journals;
   b. learning how to identify peer reviewed/scholarly articles in professional journals
5. Learning how to evaluate the authenticity and the effectiveness in light of one’s research focus
6. Understanding the focus of the information one has found—i.e. read an article to understand the focus the author is trying to convey, assessing what the author is trying to say, compared to the focus of one’s own research, and then thinking critically, and developing a written reflection on the information
7. Using the Internet effectively: finding reliable and authoritative information
8. Understanding the techniques of academic searching in order to teach others how to acquire focused and reliable information.
9. Understanding and Learning citation styles

Academic literature provides a valuable source for obtaining information on any research topic. One also must consider different electronic sources, especially in locating current statistics.

Government Educational Statistical Information
Locating statistical information from government sources helps one set the research question in a larger context. While the focus of the research must be specific, students must take an overall look at their question on local, state and national levels.

LibGuide is a guide for our graduate students to use as they conduct their research. Suzanne Roybal created a specific one that addresses the content and assignments of the graduate classes connected with thesis development. By creating a specially designed LibGuide page, students are able to easily locate reliable websites for their research. Rather than having students just search the Internet, they are instructed to use the guide. The websites have been vetted, first by the government agencies that create them, and second, by a professional academic librarian in partnership with the director of the graduate program.

Internet exploration makes it seem simple for students to locate what they may believe is credible information on a research question. However, they may locate specific information that limits their view of the scope of their question. Setting the research question in historical context is another step in getting the students to step back from their topic and see it in perspective.
Professional Organization
Locate a professional organization that pertains to the topic. Look at the website, journal, professional conferences and workshops. Get information that pertains to the research.

Interview an Expert
Students identify someone within their community of professionals that they believe will offer them information from their seasoned perspective with a focus similar to the graduate student’s research. Students prepare an application to the Dominican Institutional Review Board for the Protection of Human Subjects (IRBPHS), where they identify their approach to contacting their expert, a letter of consent form, and a short list of open-ended interview questions. By completing the IRBPHS, students apply their research skills in identifying the purpose of their research, briefly summarizing a review of the literature, and formulating their research questions. This activity helps students to conceptualize their research, understand the importance of considering ethical research practices in submitting a plan to IRBPHS. Additionally, students gain increased knowledge on their topic that offers a different perspective than they obtain from the research literature.

Reporting: Organizing Research Information According to Categories/Themes
After locating as many sources of information as possible, it is important to review and reflect on these documents and artifacts overall to see if they can be sub-classified into topics. At that point, the next step is reviewing each article within the subtopic, and developing a section that includes key points from source, strengths and weaknesses, ultimately synthesizing the information.

Summary/Conclusions
Currently we are in the process of assessing student outcomes in the graduate program in education as part of our ongoing review. In thinking back over the last four years, we have anecdotally noted the following:

When students first approach the task of searching for information, they go immediately to the Internet, rather than examining library databases. It takes some time for them to understand, or assimilate, the qualitative difference between casual Internet searches and academic databases with peer reviewed articles. This means the faculty team, Madalienne and Suzanne, must allocate time to work with students as a group, for guided instruction, and individual instruction to really understand where people are in terms of their information literacy skills. Essentially it is always important for us as instructors to reinforce the building blocks of information literacy.

Once students reach a level of understanding, appreciation, and comfort with the process, they are typically relieved that they can locate information of quality, using our readily available library resources and trained personnel.

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References


