

**“Practice into Research, Research into Practice”
Syllabus**

The purpose of this professional development program is to enhance and extend the research approaches of those who are practicing librarians and hold a master’s degree in library science. It is a self-directed online learning experience incorporating a variety of learning resources, assignments, and assessments. The anticipated outcome of the program for each participant will be the development of a research proposal (a plan for conducting a research study).

Program Coordinator and Mentor:

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Other mentors include:

Dr. Penny Beile, Associate Director, Libraries Information Services & Scholarly Communications, University of Central Florida
Dr. John Weiner, Adjunct Professor of Bioinformatics, Vanderbilt University

Successful completion of the program depends on allocating sufficient time to benefit from the learning activities. Therefore, participants should:

- Allocate time regularly each week to the program
- Set a timetable and deadlines for yourself
- Consider making plans to submit your proposal to a funding agency by watching for calls for proposals or discussing possible funding sources with a mentor

Textbook:

This textbook provides clear, concise explanations. There are many other research methods textbooks that do the same and could be substituted.

Barbara M. Wildemuth, *Applications of Social Research Methods to Questions in Information and Library Science*. Westport, CT: Libraries Unlimited, 2009.

Mentoring:

Ideally, you should work with a mentor who will provide you with feedback on your work. You may contact the program coordinator to identify a mentor for you, or you may identify someone yourself. You can work with a small group of colleagues who are participating in this program. You should provide the mentor with a timeline for your work so that s/he can plan accordingly. Mentors do not receive any compensation for this activity.

Assessment:

This is a new approach to enhancing research methods for practicing librarians. Therefore, it is important to learn whether this method and the content are effective in helping you achieve the program goal. The primary indicator of the success of this program and what you learned is your completion of a research proposal that is implemented and receives funding and/or is published in a peer-reviewed journal. There is a pre-assessment; formative assessments are

within the program modules. Finally, there is a survey which asks about your gains in learning and for comments on the program itself. Please let the program coordinator know if you have suggestions for additional learning resources.

MODULE 1: WHAT WILL I STUDY? FORMULATING A RESEARCH QUESTION.

Outcome: Participants will formulate a research question.

LEARNING RESOURCES:

“Selected Sources of Ideas for Research” (This is a handout posted after the “Syllabus” on the web site for this course)
Wildemuth, Chapter 2, “Designing a Research Question”
Wildemuth, Chapter 3, “Questions Originating in Library and Information Practice”
“Examples of Research Questions in Library and Information Science” (This is a handout posted after the “Selected Sources of Ideas for Research” handout on the web site for this course)
Boote, D.N. & Beile, P. 2005. Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher* 34(6):3-15
Maxwell, J.A. 2006. Literature reviews of, and for, educational research: A commentary on Boote and Beile's "scholars before researchers." *Educational Researcher* 35(9):28-31.

ASSIGNMENT:

- ✓ Select a topic for your research. If you need help identifying a topic, you can use the Learning Resource, “Selected Sources of Ideas for Research,” which is posted after the Syllabus on the web site for this course, to help you select a topic.
- ✓ Draft a literature review, summarizing the literature about your topic.
- ✓ Draft your research question.

ASSESSMENT: Prepare a written response to the following questions. Submit this to your mentor.

- ▶ What are the criteria for a good research question presented in the learning resources? What is your research question? Does your research question meet those criteria?
- ▶ Do you clearly build a case for proposing your research question, based on existing evidence?
- ▶ Is your research question innovative? Is it confirmatory? Is it feasible?
- ▶ Please discuss your research question with your mentor. You and your mentor should come to agreement on the research question that will be the foundation for your research proposal.

MODULE 2: HOW WILL I ANSWER MY RESEARCH QUESTION? SELECTING A METHODOLOGY.

Outcome: Participants will select a method for studying their research question.

LEARNING RESOURCES:

“[Types of Research and Research Design](#)” (YouTube video—please don’t pay attention to the page references on the slides depicted...)
“[Qualitative vs. Quantitative Research](#)” (YouTube video)

QUESTIONS FOR REFLECTION. Please submit your written responses to these questions to your mentor:

1. What types of investigation do the video indicate are best suited to a qualitative research method?
2. What types of investigation do the video indicate are best suited to a quantitative research method?
3. Some of the blog comments accompanying this video criticize it for biases. What are some of those possible biases?

These are Learning Resources on specific types of research methods. Scan each to determine which method could best answer your research question. Then study the chapters related to the method you select.

Wildemuth, Chapter 7, "Case Studies"

Wildemuth, Chapter 12, "Experimental Studies"

Wildemuth, Chapter 16, "Historical Research"

Wildemuth, Chapter 20, "Direct Observation"

Wildemuth and Jordan, Chapter 25, "Focus Groups"

Wildemuth, Chapter 26, "Survey Research"

["Survey Design"](#)

["Creating Good Survey and Interview Questions"](#)

[Survey Sampling Methods](#)

["The Variables Song"](#) (YouTube video)

ASSIGNMENT:

- ✓ Select several of the research questions on the handout "Examples of Research Questions in Library and Information Science" (handout posted on course web site). What design do you think would be the most appropriate for answering each question? Why?
- ✓ Select a method that will answer your research question.

ASSESSMENT:

- ▶ Justify your choice of method for answering your research question. Will the information gathered specifically answer your research question?
- ▶ Please review your methodology with your mentor and come to agreement.

MODULE 3: HOW WILL I ANSWER MY RESEARCH QUESTION? PLANNING YOUR STUDY.

Outcome: Participants will develop a detailed methodology for their projects.

LEARNING RESOURCES: See Module 3.

ASSIGNMENT:

- ✓ Write a detailed plan to answer the research question you developed. This will form the "methods" section of your proposal. The methods section should provide sufficient detail so that others could replicate your study.

ASSESSMENT:

- ▶ Does your design include:
 - Recruitment of participants?
 - Baseline measures?
 - Intervention measures (if applicable)?
 - Outcome measures?
 - Analytic strategy?
 - Proposed reports?
- ▶ Does your methods section include:
 - Data to be collected?

Information anticipated from each measure/observation (variable)?
Statistical models to be used? (Matching Discrete or Continuous Variables)
Anticipated outcomes?

- ▶ Please ask your mentor to critique your methodology section.

MODULE 4: HOW WILL I ANALYZE AND INTERPRET MY RESULTS?

Outcome: Participants will understand fundamental concepts in analyzing study data using chosen methodology; interpreting study results.

LEARNING RESOURCES:

Wildemuth, Chapter 29, "Content Analysis"

Wildemuth, Chapter 30, "Qualitative Analysis of Content"

User documentation for qualitative analysis software

Van Epps, "Librarians and statistics: Thoughts on a tentative relationship. *Practical Academic Librarianship* 2(1), 2012

Wildemuth, Chapter 33, "Descriptive Statistics"

Wildemuth, Chapter 34, "Frequencies, Cross-tabulation, and the Chi-square Statistic"

Wildemuth, Chapter 36, "Correlation"

User documentation for quantitative analysis software

ASSIGNMENT:

- ✓ Do your interpretations of the findings portray a clear path from question to answer?
- ✓ Will your method provide insights and/or understanding of the problems posed in your research question?
- ✓ What new issues might be revealed as a result of your study?

ASSESSMENT:

- ▶ Please ask your mentor to critique the responses to the assignment questions and come to consensus.

MODULE 5: HOW WILL I COMMUNICATE MY RESULTS?

LEARNING RESOURCES:

[Springer Author Academy](#)

[How to Publish in an Elsevier Journal](#)

ASSESSMENT

- ▶ Does your manuscript deal with a real, interesting, unanswered question?
- ▶ Did you justify the importance of your research question in your literature review?
- ▶ Do you present a clear, understandable, replicable description of your methods?
- ▶ Do your interpretations of the findings portray a clear path from question to answer?
- ▶ Did you include new issues that could be explored based on your study findings?

YOU WILL RECEIVE A CERTIFICATE UPON SUCCESSFUL COMPLETION OF THE PROGRAM, ONCE YOUR MENTOR APPROVES YOUR RESEARCH PROPOSAL.

Developed by Sharon Weiner, in collaboration with John Weiner and Penny Beile

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