MSED 406: Research and Analysis in Teaching and Learning I: Discussion, Question Development, and Research Methodologies  
Fall 2015  
Thursday, 6:00-9:00 PM  
Annenberg G21

Joseph Senese, Instructor  j-senese@northwestern.edu  
Miriam Sherin, Instructor  msherin@northwestern.edu  
Andrew Hirshman, Coach  
Katie Hollerbach, Coach  
Martha Keller, Coach  
Melanie Woodward, Coach

SYLLABUS

OBJECTIVES AND OVERVIEW OF THE COURSE
The overall objective of the course is to introduce a model of teaching and learning that is known in our School of Education and Social Policy (SESP) as “inquiry,” and in so doing help you to define a question for your Master’s Project. Inquiry is a model that is useful in most settings where learning and teaching take place; it is a model that is useful in conducting research. Indeed, you will find that methods of inquiry are used in most of the courses that you take in the MSED Program and in SESP. In 406, inquiry makes use of discussion, reading, observation, and interviews about educational issues. Questioning is the foundation of inquiry. Hence, 406 will focus on the highly complex topic of questioning. To help you engage in meaningful questioning and to cultivate a question for your Master’s Project, the course has specific objectives:

1) To learn to question the meaning of educational issues through discussion with others and in so doing, to ponder the relation(s) between educators and students in social/cultural contexts;
2) To develop genuine questions related to the aims and modes of educating human beings;
3) To refine a question of interest until you discover the point of doubt that you care most to resolve. That point of doubt will serve as the basis for the Master’s Project question (MPQ);
4) To clearly articulate the MPQ so that procedures for resolving it are laid open;
5) To review literature related to the question for the Master’s Project;
6) To identify modes of observation, interviewing, data collection, and data analysis that help to clarify the question and develop a plan to resolve it;
7) To articulate the question for the Master’s Project to others so as to engage them in dialogue about it and about procedures for addressing it.

All students will be members of a small coaching group. In general, students remain in the group for the duration of the Master’s Project sequence. In 406, we will be engaged in building communities of learners. As members of such communities, we question and refine questions through discussion with others. Students will see that collaborative discussion helps the formation and exploration of questions for the Master’s Project. Indeed, it is an interactive mode of teaching and learning that may be used in K-12 settings where a variety of disciplines and
topics are pursued. We will ask you to participate actively in many discussions related to your question for the Master’s Project.

**COURSE REQUIREMENTS**
1) Attend all classes, and for the duration of each class. If you must be absent for a family emergency or illness, please contact your coach as early as possible and make arrangements to complete additional work so that continuity in the course is preserved.
2) Complete all readings and written work on time—before the class for which they are assigned.
3) Bring the written work assigned for each class to the session. It must be word-processed and, at times, must be emailed to your coach. (Note: coaches will identify deadlines by which written work is to be submitted and in what format.)
4) Participate actively in class discussions to cultivate speaking and listening skills.
5) Prepare for and lead discussions related to your question for the Master’s Project.
6) Final MSED 406 MPQ Summary due Thursday, December 3.

**NOTE:** Two mandatory sessions designed to assist your data collection process will be held during the winter term from 5:00 – 7:00 PM on Thursday, January 21, and Thursday, February 11.

**GRADING**
Course requirements are listed above. Serious, careful work submitted on time is necessary for success in this course. Those who attend all classes, submit all assigned work on time, and participate actively are candidates for A’s and B’s.

**CANVAS**
Canvas is the Learning Management System that we will make use of in the course. Canvas allows students to continue reflections that are begun in class and to communicate about topics related to the Master’s Project. You are encouraged to visit the site often. Intelligent use of Canvas will greatly enhance your experience in 406 as well as your understanding of technology in the field of education: professional use, application of technology in instruction, and information access. (NUCF 1.5)

**COURSE MATERIALS**
Master’s Project Description and Chronology (on Canvas)
Various materials found online (see individual assignments for URLs)

Mertler, the only text you need to buy, will be used in 407 as well as in 406.

In addition to the readings, the following website will be useful when applying APA style: http://owl.english.purdue.edu/owl/resource/560/01/

All written assignments should be processed in 12-point font, Times New Roman, 1” margin all around.
**Week 1: September 24, 2015**

**OBJECTIVES**
1) To gain an overview of the course.
2) To begin reflecting upon student/educator relations in social/cultural contexts as well as the topics of questioning and discussion.

IPTS 9A, 9D, 9K, 9N, 9O

**Week 2: October 1, 2015**

**OBJECTIVES**
1) To begin to identify the criteria of a “good” research question.
2) To learn the process of conducting teacher action research.
3) To become familiar with the Master’s Project sequence.
4) To introduce APA style.
5) To gain insight into how questioning can be used to cultivate a question that one cares to resolve.
6) To discover the elements of exact description and its role in conducting action research.
7) To learn ways to discover relevant articles about a proposed topic of research including creating domains.
8) To interact with teacher researchers who have recently graduated from the MSED Program.

**ASSIGNMENTS**
1) Read: Master’s Project Description and Chronology. (on Canvas)
2) Read: Mertler, Introduction to Action Research, pp. 3-33, and Overview of the Action Research Process, pp. 35 -50.
3) Write: On Canvas Discussions by September 29, 5:00 PM at the latest, post 2 to 3 questions to ask alumni of the MSED program about finding a research question, conducting action research, or taking the research sequence.
4) Write: In no more than one-half page, state a question or questions, or at minimum, an area of study, for your Master’s Project. Try to describe your point of doubt clearly - the thing you do not know but wish to resolve.
5) Write: In no more than two pages, answer one of the following questions about your beliefs concerning teaching and learning:
   - How do I believe students learn?
   - How do I know when and what students have learned?
   - How and what can teachers learn from their students?

IPTS 9D, 9K, 9N, 9O

**Week 3: October 8, 2015**

**OBJECTIVES**
1) To use literature to reflect upon and refine the Master’s Project question.
2) To engage in discussion that helps others refine Master’s Project questions.
3) To use the action research technique of observation to obtain a perspective on a potential research question.
4) To prepare for an exploratory interview related to a potential research question.

ASSIGNMENTS
1) Read: Mertler, Planning for Action Research, pp. 53-75, Observational Case Studies and Observational Studies, pp. 91-95, and Observations and Interviews, pp. 127-134.
3) Read: Find two articles in the literature about the topic you are considering for your MP.
4) Write: Summarize the most important information that came from each article in about one page each OR outline the article OR devise your own way to make the article meaningful to you. You will want to use APA style to record the citation. You will also want to pull out pertinent quotations for use in your final MP paper. For each article devise one discussion question for your peers to use in discussion groups and one statement or question about how the article relates to your MPQ.
5) Write: Spend 30-40 minutes in your practicum setting observing closely what is taking place. You won't be able to pay attention to absolutely everything that occurs but try to observe what the teacher is doing, what students are doing, how people interact with each, how the lesson proceeds, and what evidence there is of student learning. Other aspects of the classroom may stand out to you, too. Pay attention to those as well (or instead of). In approximately 2 pages describe your observation in objective terms. In other words, provide a narrative of what you observed in the classroom without evaluation or commentary. Then in one more additional page, address any of the following questions: What did you find most interesting? What surprised you? What issues surfaced for you as you observed the lesson? Where do you stand on those issues? On what evidence are you basing your ideas/opinions? Conclude by discussing how your observation might inform a possible area for research.

IPTS 9D, 9K, 9N, 9O

Week 4: October 15, 2015

OBJECTIVES
1) To participate in a Collaborative Assessment Conference using student or teacher work as an action research technique.
2) To use literature to reflect upon and refine the Master’s Project question.
3) To engage in discussion that helps others refine Master’s Project questions.
4) To prepare an interview protocol to use as a possible data source as an action research technique.

ASSIGNMENTS
1) Read: Mertler, Interviews, pp. 130-134.
2) Read: Find two articles in the literature about the topic you are considering for your MP.
3) Write: Summarize the most important information that came from each article in about one page each OR outline the article OR devise your own way to make the article meaningful to you. You will want to use APA style to record the citation. You will also want to pull out pertinent quotations for use in your final MP paper. For each article devise one discussion
question for use in discussion groups and one statement or question about how the article relates to your MPQ.

4) Write: Prepare an interview protocol (a set of questions used to conduct an interview) to discuss in class and submit to your coach. Use the guidelines described in the Free Management Library article (see above). NB: An interview protocol is different from the discussion protocols we are using in class. See examples in Mertler, pp. 130 – 134.

IPTS 7B, 7E, 7G, 7I, 8C, 8F, 8K, 8L

**Week 5: October 22, 2015**

**OBJECTIVES**
1) To investigate video as an action research technique.
2) To continue to discover the uses and techniques of conducting action research.
3) To engage in discussion that helps others refine Master’s Project questions.
4) To use the research technique of observation to obtain a perspective on a potential research question.

**ASSIGNMENTS**
4) Write: Spend 30-40 minutes in your practicum setting observing closely the classroom through a particular lens that you have selected. The lens can be as broad as classroom discourse, student engagement, or teacher explanations, or as narrow as using primary texts or reading aloud. As you observe, focus on those aspects of the classroom that relate to your selected lens. Consider how the actions and comments of the students and the teacher as well as the developing lesson relate to the lens that you have chosen. In approximately 2 pages describe your observation, in objective terms, as it relates to your selected lens. In other words, provide a narrative of what you observed in the classroom without evaluation or commentary. Then in one more additional page, address any of the following questions: What about your lens did you find most interesting? Most surprising? What questions surfaced for you as you observed the lesson through this lens? What concerns do you now have and where do you stand on those concerns? Conclude by discussing how your observation might inform a possible area for research.

IPTS 7A, 7B, 7E, 8L, 9N, 9O, 9T

**Week 6: October 29, 2015**

**OBJECTIVES**
1) To learn coding as an action research technique.
2) To reflect on your personal passion for your MP topic.
To use literature to reflect upon and refine the Master’s Project question.

To engage in discussion that helps others refine Master’s Project questions.

To use the research technique of interviewing to obtain a perspective on a possible MPQ.

ASSIGNMENTS
2) Read: Find two articles in the literature about the topic you are considering for your MP.
3) Write: Summarize the most important information that came from each article in about one page each OR outline the article OR devise your own way to make the article meaningful to you. You will want to use APA style to record the citation. You will also want to pull out pertinent quotations for use in your final MP paper. For each article devise one discussion question for use in discussion groups and one statement or question about how the article relates to your MPQ.
4) Act: Use the protocol that you wrote to conduct a face-to-face interview in your practicum site/workplace to obtain a broader understanding of the MPQ or area of research that you are interested in pursuing. Consider your interviews in the next few weeks as one way of investigating the issues that you are interested in (and possible sources of data).
5) Write: Summarize your interview, emphasizing your perspective and point of doubt. (1 - 2 pages)
6) Write: State your MPQ as it now stands. This time ask yourself and answer the question, “Why do I find this MPQ of interest?” to help discover your passion for resolving the question. Explain your personal connection to this issue. (2 -3 pages)

IPTS 7A, 7B, 7D, 7G

Week 7: November 5, 2015

OBJECTIVES
1) To learn test results analysis as an action research technique.
2) To explore how surveys may be a useful action research technique.
3) To use literature to reflect upon and refine the Master’s Project question.
4) To engage in discussion that helps others refine Master’s Project questions.
5) To learn how triangulated data strengthens qualitative research.

ASSIGNMENTS
1) Read: Find two articles in the literature about the topic you are considering for your MP.
2) Write: Summarize the most important information that came from each article in about one page each OR outline the article OR devise your own way to make the article meaningful to you. You will want to use APA style to record the citation. You will also want to pull out pertinent quotations for use in your final MP paper. For each article devise one discussion question for use in discussion groups and one statement or question about how the article relates to your MPQ.
3) Write: Revise or write a new interview protocol. Prepare to discuss it in class and submit it to your coach
(NOTE: No need to read Selecting Your Sample and Interviewing Methods. Concentrate on Questionnaire Design.)

5) Read Qualities of a Good Question (online) (4 pp.) Survey and Questionnaire Design
   http://www.statpac.com/surveys/question-qualities.htm

6) Read Mertler, Quantitative Data Collection Techniques, pp. 137-150.

IPTS 7A, 7B, 7C, 7D, 7E, 7G, 7I

**Week 8: November 12, 2015**

**OBJECTIVES**
1) To participate in a Slice Protocol using student or teacher work as an action research technique.
2) To experience an action research method to conduct an interview or focus group called Q-sort.
3) To use literature to reflect upon and refine the Master’s Project question.
4) To engage in discussion that helps others refine Master’s Project questions.

**ASSIGNMENTS**
1) Read: Find two articles in the literature about the topic you are considering for your MP.
2) Write: Summarize the most important information that came from each article in about one page each OR outline the article OR devise your own way to make the article meaningful to you. You will want to use APA style to record the citation. You will also want to pull out pertinent quotations for use in your final MP paper. For each article devise one discussion question for use in discussion groups and one statement or question about how the article relates to your MPQ.

IPTS 7B, 7E, 7G, 7I, 8C, 8F, 8K, 8L

**Week 9: November 19, 2015**

**OBJECTIVES**
1) To construct a rationale for why your MPQ is important to resolve in a broader educational context.
2) To consider the kinds of data that might be collected to resolve the MPQ.
3) To prepare a data collection plan.
4) To use the research technique of interviewing to obtain a perspective on a possible MPQ.
5) To reflect on the ethical considerations of conducting action research.
6) To engage in discussion that helps others refine Master’s Project questions by use of a round robin approach.

**ASSIGNMENTS**
1) Read: Mertler, Notes about Ethics and Data Collection, pp. 150-151.
2) Act: Use the revised (or a new) protocol that you wrote to conduct a second face-to-face interview in your practicum site/workplace to obtain a broader understanding of the MPQ or area of research that you are interested in pursuing.
3) Write: Summarize your interview, emphasizing your perspective and point of doubt. How has this interview deepened or changed your understanding? (1 -2 pages)
4) Write: State your MPQ as it now stands and write a rationale for your MPQ, addressing why it is important to resolve the question given the research and the current state of our understanding. In contrast to week 6’s assignment (passion), this assignment should be about the educational significance of your MPQ topic and not about you. (2 pages)

IPTS 7A, 7B, 7C, 7D, 7E, 7K, 9O, 9T

Week 10: December 3, 2015

OBJECTIVES
1) To experience presentations of completed Master’s Projects from MSED alumni.
2) To interact with alumni of the MSED program and their research.
3) To share progress on the MP in like groups.

ASSIGNMENTS
1) Write: Submit the Master’s Project Question Summary to your coach. (See syllabus p. 10.)
2) Upload a copy of the MPQ Summary to Canvas by 6:00 PM.

IPTS 9D, 9K, 9N, 9O, 9T

Important Note: Although you may not have all your data collected by the time MSED 407 begins, for activities in that class you will need several examples of student or teacher work, a data source that can be coded, in addition to your three data sets for analysis. Ideally each of these data sources should be connected to your MPQ.

THE NORTHWESTERN UNIVERSITY CONCEPTUAL FRAMEWORK, TEACHING STANDARDS
As active participants in the field of education, our candidates will strive for improvement and innovation, based on inquiry that is grounded in reflection and research. The candidates will have

A Vision of Learning that focuses on:
1.1. understanding student thinking about the subject matter;
1.2. reflection and research as a means of learning;
1.3. learning as a social practice, which encourages collaborative learning in which people clarify doubts, examine beliefs and work together to address questions and concerns;
1.4. authentic experience, where class sessions and assignments are designed to engage students’ interests and to have implication for the student beyond the classroom; and
1.5. the use of technology to extend learning opportunities and thinking.

A Vision of Learners that focuses on:
2.1 lifelong learning and development shaped by social contexts; and
2.2 student diversity as a resource for the educational community.

A Vision of Teaching that focuses on:
3.1 connection of theory to practice, where the candidates understand that theories suggest questions and ideas about practice, and practice suggests modifications of theory; and
3.2 professional conduct that is responsible and ethical.

Dispositions (as implied by the NUCF):
1. Willingness to systematically reflect on one’s own practice. (NUCF 1.2, 3.1)
2. Commitment to understanding students’ thinking about the subject matter. (NUCF 1.1)
3. Belief in the value of seeing students as individuals. (NUCF 2.2)
4. Enthusiasm for learning and teaching through collaboration. (NUCF 1.3)
5. Willingness to take the risks associated with engaging students’ interests through real world experiences. (NUCF 1.4)
MSED 406 emphasizes several tenets of our Conceptual Framework, particularly: diversity as a resource (NUCF 2.2, Disp. 3); understanding student thinking about the subject matter (NUCF 1.1, Disp. 2); authentic experience (NUCF 1.4, Disp. 5): learning as a social practice (NUCF 1.3); and connecting theory to practice (3.1). It also portrays teaching as grounded in reflective research (NUCF 1.2).

Each class session features discussion and dialogue. Individual perspective, history, and interests are drawn out in discussion and are indispensable to its success (diversity as a resource) (NUCF 2.2; Disp.3). In focusing upon discussion and dialogue, the course places emphasis upon understanding student thinking about the subject matter (NUCF 1.1, Disp. 2). Students prepare for class by writing questions about the meaning of the texts under discussion. Their questions, as well as the questions cultivated throughout the course that become the Master’s Project Question, are grounded in student interests. Most have implications for their development as educators. Thus, the course emphasizes authentic experiences (NUCF 1.4, Disp. 5). The focus on questioning and discussion/dialogue helps students to understand learning as a social practice (NUCF 1.3). Discussion of texts in relation to experiences in field settings helps students relate theory to practice (3.1). It also portrays teaching as grounded in reflective research (NUCF 1.2) Finally, use of Canvas helps use technology to extend student thinking (NUCF 1.5). In focusing upon these tenets of the NUCF, the course should help students to develop the dispositions implied by them.

The course also explicitly addresses several of the Illinois Professional Teaching Standards (IPTS).

**Standard 1 - Teaching Diverse Students** – The competent teacher understands the diverse characteristics and abilities of each student and how individuals develop and learn within the context of their social, economic, cultural, linguistic, and academic experiences. The teacher uses these experiences to create instructional opportunities that maximize student learning.

**Standard 2 - Content Area and Pedagogical Knowledge** The competent teacher has in-depth understanding of content area knowledge that includes central concepts, methods of inquiry, structures of the disciplines, and content area literacy. The teacher creates meaningful learning experiences for each student based upon interactions among content area and pedagogical knowledge, and evidence-based practice.

**Standard 3 - Planning for Differentiated Instruction** – The competent teacher plans and designs instruction based on content area knowledge, diverse student characteristics, student performance data, curriculum goals, and the community context. The teacher plans for ongoing student growth and achievement.

**Standard 4 - Learning Environment** – The competent teacher structures a safe and healthy learning environment that facilitates cultural and linguistic responsiveness, emotional well-being, self-efficacy, positive social interaction, mutual respect, active engagement, academic risk-taking, self-motivation, and personal goal-setting.

**Standard 5 - Instructional Delivery** – The competent teacher differentiates instruction by using a variety of strategies that support critical and creative thinking, problem-solving, and continuous growth and learning. This teacher understands that the classroom is a dynamic environment requiring ongoing modification of instruction to enhance learning for each student.

**Standard 6 - Reading, Writing, and Oral Communication** The competent teacher has foundational knowledge of reading, writing, and oral communication within the content area and recognizes and addresses student reading, writing, and oral communication needs to facilitate the acquisition of content knowledge.

**Standard 7 - Assessment** – The competent teacher understands and uses appropriate formative and summative assessments for determining student needs, monitoring student progress, measuring student growth, and evaluating student outcomes. The teacher makes decisions driven by data about curricular and instructional effectiveness and adjusts practices to meet the needs of each student.

**Standard 8 - Collaborative Relationships** – The competent teacher builds and maintains collaborative relationships to foster cognitive, linguistic, physical, and social and emotional development. This teacher works as a team member with professional colleagues, students, parents or guardians, and community members.

**Standard 9 - Professionalism, Leadership, and Advocacy** The competent teacher is an ethical and reflective practitioner who exhibits professionalism; provides leadership in the learning community; and advocates for students, parents or guardians, and the profession.

**Academic Integrity**

Students in this course are expected to comply with the policies found in the booklet, “Academic Integrity at Northwestern University: A Basic Guide.” All papers submitted for credit in this course must be sent as email attachments as well as delivered in printed form. Your written work may be electronically tested for plagiarized content. For details regarding academic integrity at Northwestern, visit: http://www.northwestern.edu/uacc/. If you need a copy of the brochure visit the SESP Student Affairs Office.
Accommodations for Students
Any student requesting accommodations must register with AccessibleNU.
(http://www.northwestern.edu/accessiblenu; 847-467-5530) and request an accommodation notification for his/her professor, preferably within the first two weeks of class. All information will remain confidential.

MSED 406 Master’s Project Question Summary
(approximately 10 – 12 pages maximum)

Upload a copy to Canvas by Thursday, December 3, 2015, 6:00 PM.

Before uploading to Canvas, save this file in portable document format (pdf). Name this file with your last name and first initial of your first name followed by a ‘.’ and ‘summary’ (e.g. Joseph Senese would send the MPQ Summary in a file named senesej.summary.pdf.

The MSED 406 Master’s Project Question Summary contains the following information:

1) The research question whose resolution you will pursue with the Master’s Project.

2) The rationale for the question, which includes discussion of:
   • Why it is important to resolve the question, given the research and the state of our understanding;
   • Why you feel passionate about resolving the Master’s Project Question;
   • How the MPQ and your thinking about your topic developed over the ten weeks;
   • Why you believe that pursuing its resolution will help you to improve your practice;
   • What assumptions or biases you have about this question as you enter the research process.

3) An annotated bibliography of pertinent literature in which you briefly (1/2 page each) summarize eight to ten pieces of literature that have informed your thinking about the questions in your Master’s Project. (Use APA style.)

4) A preliminary data collection plan in which you describe the kinds of information that you will need to gather to address the questions in your Master’s Project and the procedures you plan to follow in order to gather evidence.
Note: As you are about to begin your fieldwork, ask yourself: what data in the field site will I gather in order to address the questions in my Master’s Project?
Master’s Project Outline
(approximately 25 - 30 pages maximum)

Introduction to the master’s project and research question (2 - 3 pages)
• Reason(s) why you choose to pursue this question for your research
• Importance of the resolution of this question

Data collection and ethics statement (4 pages)
• Overview of sources and description of school/informants
• Overview of methods/instruments used
• Ethical issues considered

Data analysis and interpretation (with at least two graphical representations) (20 pages)
• Analysis (describe and organize the data)
• Interpretation (explain the meaning of the data)
• Integration of data and relevant literature

Conclusion (3 - 4 pages)
• Resolution of the MPQ
• Lessons learned
• Limitations of the study

References

Appendices (optional)
• Data collection instruments
• Sample data

In short, the Master’s Project paper should answer the following questions:
• What did you do?
• Why did you do it?
• How did you do it?
• What did you learn?