# **College of Education** Learning Design and Leadership

Exam-Dissertation Sequence: Theory and Methodology Chapter and Preliminary Exam

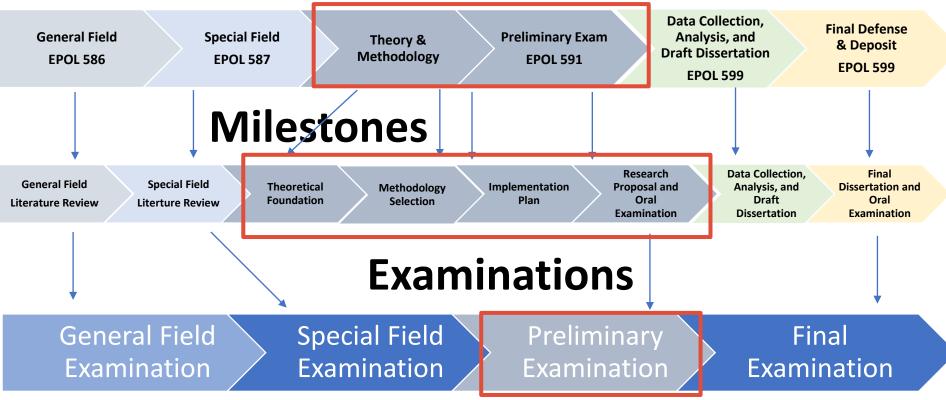
# **EDS Purpose**

This six-step sequence includes a series of seminars and milestones that lead to four examinations and the design and writing of a traditionally, five-chapter dissertation, that is a rigorous, scholarly contribution to research in field of interest.

EPOL 586EPOL 587MethodologyEPOL 591Draft DissertationUnd DefenseEPOL 599EPOL 599
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# Seminars, Milestones, and Examinations

# **Seminars**



# What is/is not Research?

Research IS (research)	Research IS NOT (mesearch)
Disciplined	Editorializing
Systemic	Opinionated
Objective	Subjective
Conclusions based on evidence	Conclusions based on beliefs or conjectures
Scientific observations	Dogmatic
Structured	Unstructured
Seeking to disprove the researcher's assumptions	Seeking to defend researcher's assumptions

Adapted from Dr. Ken Bartlett

# **Research Proposal Manuscript**

# **Chapter 1 and Streamlined Chapter 2**

Chapter 3 is broken into three parts to receive iterative feedback

## Theory

Theoretical Foundation and Research Questions and logic model

## Design

Deep investigation into selected methodology and alignment and rationale for your study

## Implementation

Data Sources and Collection Plan, Analysis, Timeline, IRB, and more

References

Appendix (Data Collection Instruments, IRB Materials, etc.)

# **Chapter 3 Scaffolded Parts**

**Part 1** should examine your chosen **theory or framework** and convey its **underpinning to your research study**. It should conclude with your research questions and an optional hypothesis. *Your logic model will evolve as you move through all three parts* 

**Part 2** includes a deep investigation into your chosen methodology. This involves defining it, along with conveying the strengths and weaknesses. You should also provide a rationale of how this methodology aligns with your research study. This is also where you would identify any limitations as well as how you will address the reliability and validity of

the study. Refer to Chapter 3: Theory and Methodology Structure for Parts 1, 2, and 3 document for full details

**Part 3** is your research implementation plan, including data sources, data collection instruments, data analysis plan, and an implementation timeline. The data collection instruments themselves belong in the Appendix, but within Part 3 be sure to explain them and justify how they will help answer your research questions. You should also have your IRB materials in the Appendix.

# **Chapter 2 vs. Chapter 3 Theory**

# **Recast Chapter 2 to avoid repetition**

## **Chapter 2**

What the **Literature reveals** as theories associated with your general and special fields

- Cite all theories referenced in the literature
- Expound on a few core theories, as discussed by the literature, which may or may not become the foundation of your study

## Chapter 3

The specific theory/ies or framework/s associated with **your research study** 

- Explain the selected theory and its alignment to your study, which may be a theory you have developed or adapted
- Articulate the rationale of why it will underpin your study
- Create a logic model

# Josh Lewyckyj – Theoretical Concept Model

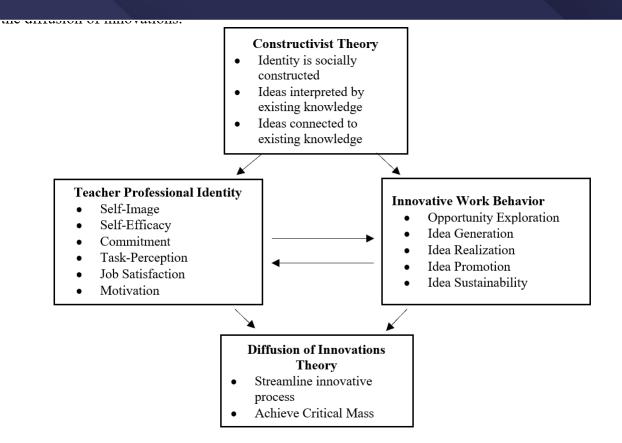


Figure 9: Theoretical concept model: A constructivist approach to understanding innovation diffusion

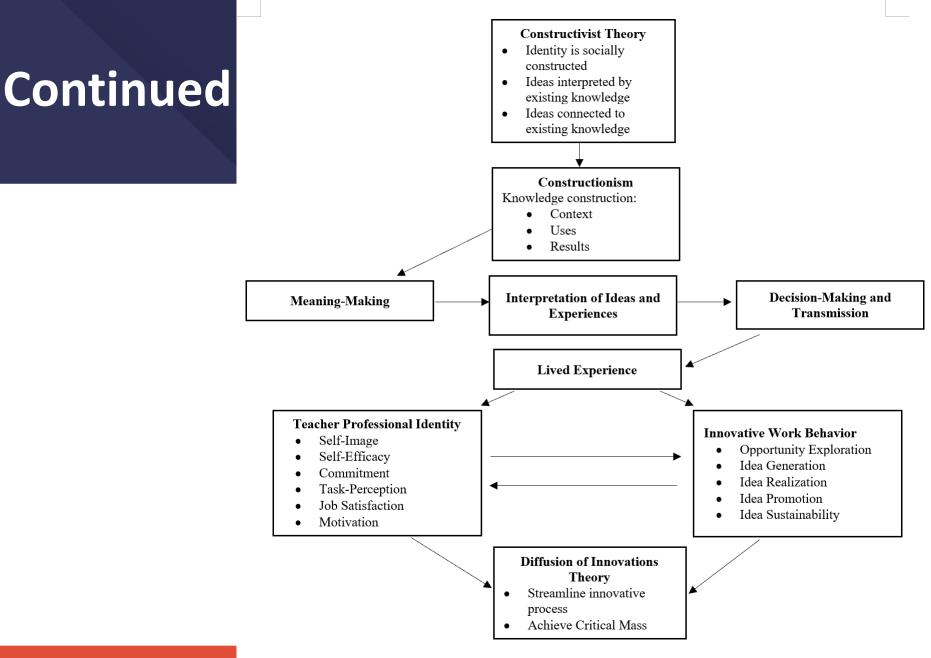
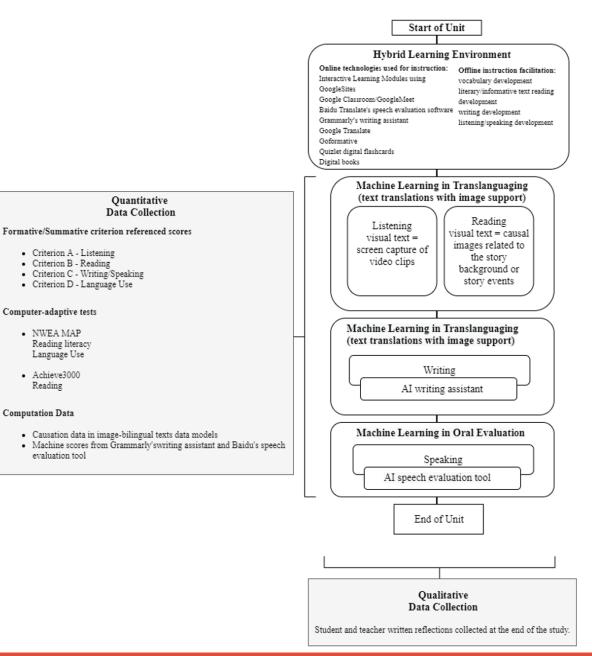


Figure 10: Theoretical concept model: An experiential model of constructionist identity development

#### Figure 3.5

Proposed Flow Chart for Implementing the Proposed Hybrid Intervention



# **Carol Chen**

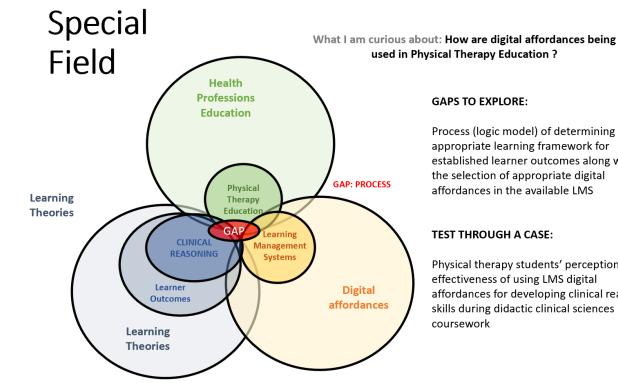
# **Research Question Attributes**

- Avoid Yes/No questions
- Specific and explicit
- Clear relationship between concepts
- Original
- Answerable
- Has theoretical significance or professional relevance
- Addresses a gap in the literature

## Self Assessment

- Passion
- Knowledge
- Feasibility
- Significance

## Anna Len: Process of Arriving at the **Research Question**



Example from Anna Len

Process (logic model) of determining (1) an established learner outcomes along with (2)

Physical therapy students' perception on the affordances for developing clinical reasoning skills during didactic clinical sciences

# Personal Assessment of your Research Question

## Are you passionate about it?

## Knowledge

- What professional knowledge, experience, and skills are required?
- 2. Are you well-grounded in the literature so that you can position yourself in the field?
- 3. Is it within your range of competence?

## Feasibility

- Is it manageable (timeframe, resources, availability of/to data sources)?
- 2. Will you receive the support that you need?
- 3. What time will be required? Do you have the time?
- 4. Can it be answered with evidence?

(adapted from Glatthorn's Writing Winning Dissertations)

## Significance

- 1. Is it significant in theoretical and/or practical terms?
- 2. Will it help you acquire professional knowledge, experience, and skills?
- 3. Is it interesting to your research supervisor and/or prospective employers?
- 4. Will it provide career advancement opportunities?

# Hypothesis or No Hypothesis?

# A hypothesis is not always required

## Yes

When: Seeking to Prove/ Disprove a Theory

- Quantitative study
- Experimental study
- Statistical analysis
- Correlations
- *Research questions are objective*
- When research questions alone are not sufficient to address the problem

## No

When: Seeking Answers

- Written as a prediction
- Stating what you hope to be true
- *Restating your research question(s)*
- *Research questions are descriptive*
- Research questions are exploratory

**RQ**: Is there a relationship between A and B? **Hypothesis** NOT needed

# Logic Models

*Your logic model will evolve as you move through each of the three parts* 

# **Logic Model Overview and Purpose**

## What is it?

• A graphic illustration of the relationship between your theoretical foundation, methodology, data collection, and analysis.

#### Purpose

- Assists you in planning and explaining your study through the model creation process.
- Assists others in quickly understanding how your research study will be deployed.

# **Logic Model Elements**

## Title

## Purpose

Theortetical Foundation Research Questions, Site/Participants, etc.

## Inputs

Activities, Methodology, Data Collection, etc.

## **Outputs**

Data Outcomes\*, Data Analysis, Triangulation, etc.

Include existing literature

Do not predict "study outcomes"

# **Logic Model Elements**

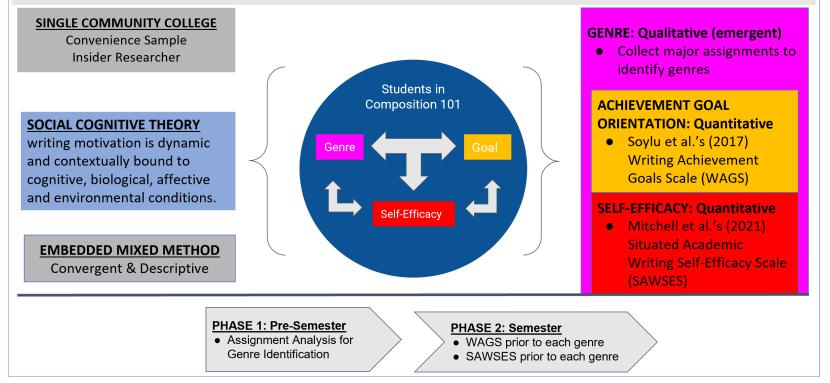
- Brief title of your study
- Research Question(s)
- Research Site and/or Participants
- Methodology Design (i.e. Exploratory Mixed Methods Case Study)
- Data Sources
  - Don't forget to include existing literature
  - Clarity on the instruments and who they are meant for or how they align with the methodology (ie. Interview Faculty; Survey Students)
- Data Analysis Be specific/indicate triangulation
- Outputs not study outcomes or what you hope to prove

## Self Assessment

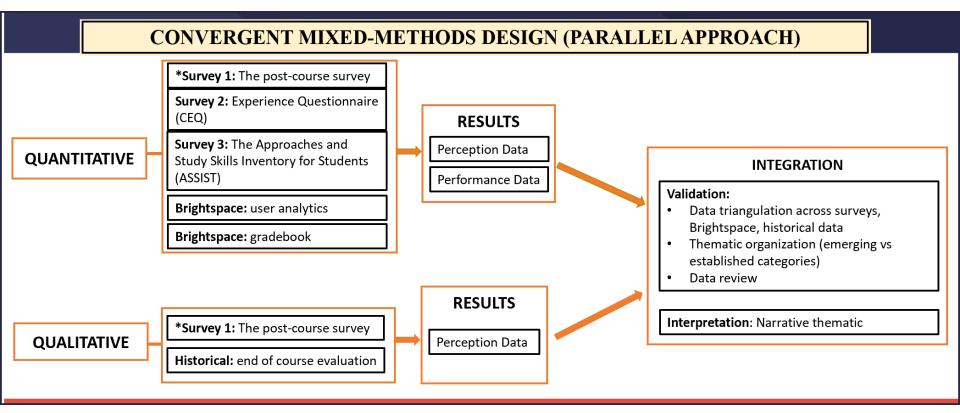
- Visual
- Concise
- Comprehensive
- Easy to Follow
- Could you write about it in more detail?

# **Zach Petrea**

# RQ: Do genres affect student goals and self-efficacy in the community college composition 101 classroom?

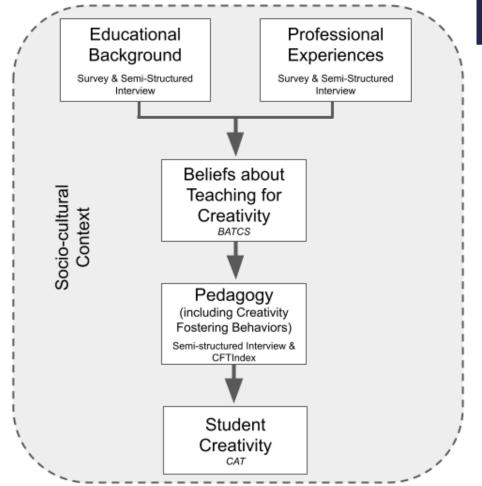


# Anna Len



# Julia Colombo

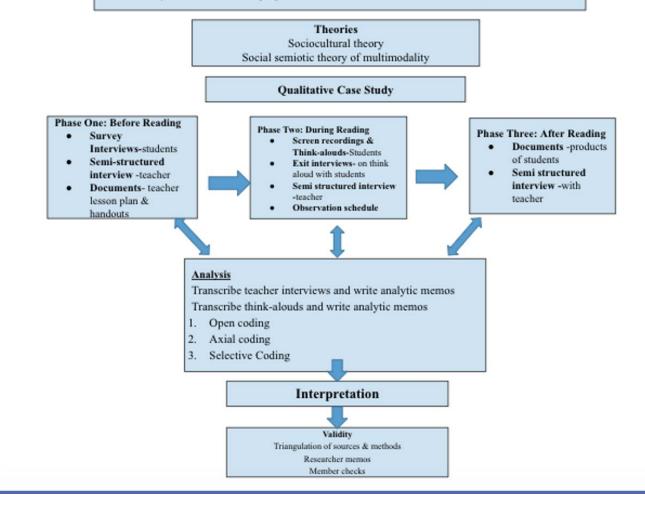
- RQ1: How does the nature of a K-12 art teacher's educational background impact their beliefs about teaching for creativity?
- RQ1a: What is the relationship between a K-12 art teacher's educational background and their creativity fostering behaviors in the art classroom?
- RQ2: How do the professional experiences of a K-12 art teacher impact their beliefs about teaching for creativity?
- RQ2b: What is the relationship between a K-12 art teacher's professional experiences and their creativity fostering behaviors in the art classroom?
- RQ3: What is the relationship between the sources of art teacher knowledge and their competency in developing student creativity?
- RQ4: What is the relationship between developing student creativity and an art teacher's choice of art pedagogy (e.g., units based on medium, element of art, theme, studio habit, etc.)?



# Erin Mills

Logic Model

Central RQ: How do students make decisions about the value and meaning of multimodal sources when reading online for research purposes in a middle school science classroom?



# Methodology Design: Deep Investigation

Cite existing literature, but do not overuse the textbooks from ERAM 550

- Be explicit on the type of methodology, such as the type of case study
- Description
- Strengths
- Weaknesses

Consider this a literature review of your selected methodology that demonstrates your deep investigation and deep understanding of this methodology, including its appropriate way of collecting data, conducting data analysis, and ultimately, presenting your findings

# Methodology Design: Alignment to your Study

- Justification of why this is the appropriate methodology for your study and to address your research question(s)
- Role of the researcher/ Inside Researcher, if applicable
  - Cite the literature on what this means and how to minimize bias or other issues
- Triangulation

# Methodology Implementation: Data Sources

- Be specific about why a particular data source or data collection instrument is appropriate – cite the literature
- Be specific on who the participants are for a particular data source, including recruitment
- Discuss implications regarding participant size and contingency plans
- If your study is interpretive and/or does not include participants, you must still be specific on your data collection strategy and criteria

# NOT a Logic Model: Collecting and Analyzing Data

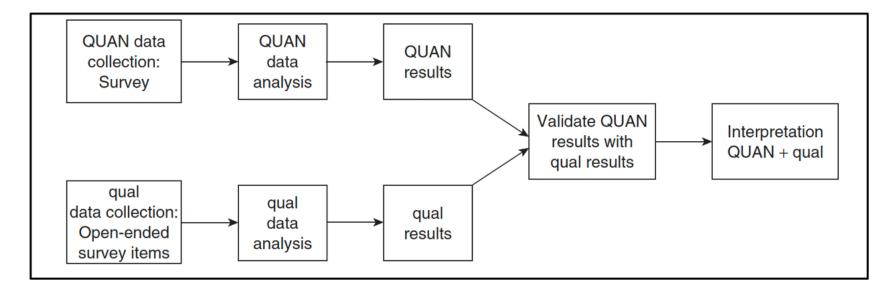


Figure 11: Validating quantitative model: (Creswell et al., 2006, p. 63).

- Submit IRB materials as soon as you can, but not before you are working on Part 3 (implementation plan)
- Check with employer if employer has an IRB office
- Your advisor is the principal investigator for UIUC IRB
- IRB training dates for advisors are on the Google tracker
- You are on the research team (separate form)
- You can always submit an amendment (which needs to be signed by the PI)

# Methodology Implementation: Data Analysis

- Be as specific as possible
- Will you consider demographic data?
- What correlations or data points will you be looking at compared to others?
- How will you triangulate your data?

# Methodology Implementation: Timeline

- When you plan to recruit participants
- When you plan to conduct/disseminate data collection instruments
- Don't include a timeline of your data analysis and writing up your dissertation

# **General Items**

- Do not use "current study" or "present study"
  - instead use "this study" unless there is potential confusion with another study being cited
- Do not use "this/the researcher"; instead use "this study"
- Use discretion when choosing a numbering schema
- Headings should be clearly distinct from the body of the work
- Figure numbers and captions should be distinct from the main text
- Not every work needs a hypothesis

Preliminary Exam Manuscript/ **Research Proposal** and Presentation

# **Chapter 1**

- Chapter 1
- Streamlined Chapter 2
- Full Chapter 3
- References

etc.)

 Appendix (Data Collection Instruments, IRB Materials,

- The significance of this topic and the reasons you selected it
- Your Research question(s)
- Your hypotheses (not required)
- An overview of the theoretical foundation of your study
- Summary of methods and rationale for selection
- High level summary of your research plan

Do not repeat your Chapter 3 – briefly summarize!

# **Preliminary Exam Presentation Tips**

- 15-minute presentation to your committee
  - Peer presentation to practice and receive feedback
  - Committee Presentation scheduled 4 weeks in advance
- 6 to 10 slides
- Do not repeat your written manuscript
- Do not read your slides
- Keep text to a minimum
- Include your logic model; include other visuals, if useful and readable

# **Preliminary Exam Presentation Focus**

## Minor Focus (20%)

- Introduce your topic and the purpose of your research study
- Briefly summarize the literature that led to the selected theory and methodology, and ultimately the research questions and hypotheses
  - Convey the journey of discovery you experienced
- State your research questions and hypotheses
- Articulate how you feel your work will contribute to the field

## Major Focus (80%) Methodology, Implementation, and Next Steps

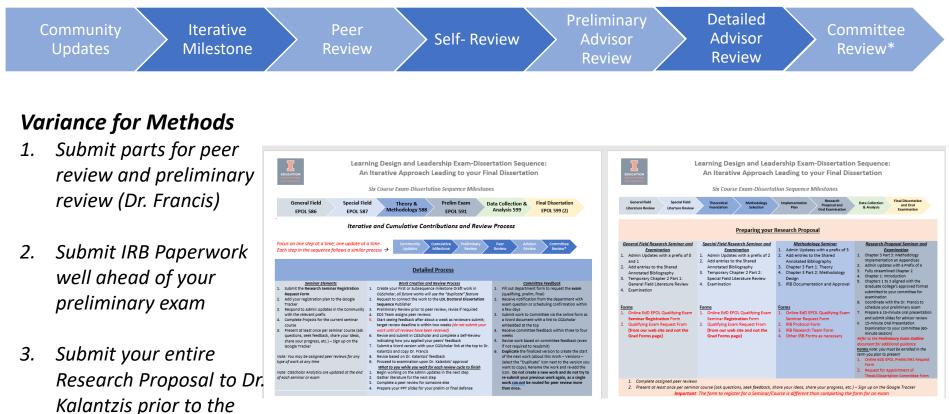


# Self, Peer, and Other Reviews

- Review the requirements and proofread your work multiple times before routing it for peer review
- Complete a self-review according to the rubric & requirements
- Ask a family member or friend to proofread your work
- Proofread your work again before sending for advisor review
- Procure a copy editor before sending for advisor review

# Do not rush the submission process

## Creation and Review Cycle: Deviation from the General and Special Field Process



See full <u>EDS Process PDF</u> on our web site

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preliminary exam

# While you Wait, Keep Moving

- While part 1/2/3 are being reviewed, keep working on the next part
- Submit IRB paperwork
- Streamline Chapter 2
- Format word version of 'works/chapters' to align with the Graduate College dissertation style guide
- Proofread, proofread, proofread
- Apply feedback from peers and copy editor
- Prepare your Preliminary Exam presentation
- Ensure that your change notes are documented based on advisor and peer review feedback
- Complete peer reviews for others

# **FORMS FORMS FORMS**

- Follow the Forms page and the Overview PDF
  - Ensure you fill out the right form at the right time.
    - Do not request your Preliminary Exam until you have been approved to schedule that
    - Possible to enroll in 1 or more credits for 595 or 599, with approval
- Forms are the student's responsibility, but check with the dissertation advisor when you are at this stage

Questions?