WEBSINAR 2: METHODS IN BIOETHICS EDUCATION RESEARCH

Bioethics Education Resources (BEdR): Webinar Series
A Project of Cambridge Consortium for Bioethics Education: USA Working Group
Welcome

Dr. Claire D. Clark, PhD, MPH
- Assistant Professor, Behavioral Science, University of Kentucky College of Medicine
- Co-Director, USA Working Group, Cambridge Consortium for Bioethics Education

Dr. Marin Gillis PhD, LPh
- Professor and Chief, Division of Ethics, Humanities, and the Arts (DEHA) FIU Herbert Wertheim College of Medicine, Miami, Florida
- Director, USA Working Group, Cambridge Consortium for Bioethics Education
About Us

Cambridge Quarterly of Healthcare Ethics & the Cambridge University Press

Cambridge Consortium for Bioethics Education

International Working Groups

USA Working Group

Bioethics Education Resources (BEdR)
What is the Cambridge Consortium for Bioethics Education?

- A network of international bioethics educators that meets in Paris for 3 days each year to:
  - Discover promising practices
  - Develop international and national networks for collaborative research, publishing, and grants

- Upcoming: 9th Edition of the Cambridge Consortium for Bioethics Education
  - July 3, 4, & 5, 2019
  - Reid Hall, Columbia University Global Centers, Paris
Our mission is to:

• Develop and promote standards and best practices in ethics, humanities, and arts education in the health professions

• Equip educators from varied disciplinary backgrounds and expertise with the resources and training for a scholarly approach to teaching ethics, humanities, and the arts in the health professions and to make contributions to the scholarship of teaching and learning
BIOETHICS EDUCATION RESOURCES (BEdR)

- www.bedr.education

- Open-access collection of peer-reviewed teaching resources that have cross-institutional promise in partnership with Florida International University

- Webinar series for ethics, humanities, and arts educators teaching in professional settings in partnership with Oakland University William Beaumont School of Medicine
Bioethics Education Resources (BEdR) Webinar Schedule

• August 7, 2018: Getting started in bioethics education research
• October 2, 2018: Methods in bioethics education research
• December 4, 2018: Publishing your bioethics education research
• February 5, 2019: Funding for bioethics education research
• April 2, 2019: Collaboration in bioethics education research

All webinars will be held at 1pm Eastern (US) time
Register: ceme@oakland.edu
Webinar 2: Methods in Bioethics Education Research

Presented by: Dr. Claire D. Clark
By the end of this session, attendees should be able to:

• Define and identify qualitative, quantitative, and mixed methods research on bioethics education
• Describe the strengths and weaknesses of qualitative, quantitative, and mixed methods approaches to bioethics education research
• Formulate an original research question for a qualitative, quantitative, or mixed methods study on bioethics education
Bioethics education research is the empirical study of teaching and learning in bioethics and medical humanities, including the evaluation of content, instructional methods, curriculum design, assessment, and impact.
Is what we’re teaching working well?

We can answer that question using research methods.
Qualitative methods
• The systematic analysis of non-numerical data
• Approaches: Phenomenology, Grounded theory, Ethnography, Case Study, History
• Data Collection Methods: interviews, participant observation, close reading of literature

Quantitative methods
• The analysis of numerical data, often using statistical techniques
• Approaches: Descriptive, Correlational, Quasi-experimental, Experimental
• Data Collection Methods: surveys, pre-test / post-test, controlled trial

Mixed methods
• Using both qualitative and quantitative methods in order to produce a broader perspective than either method can used alone
• Approaches: Triangulation, Embedded, Explanatory, Exploratory
• Data Collection Methods: combination of methods listed above
You have recently launched a new scholarly concentration in the medical humanities in an undergraduate medical school curriculum.

You are interested in studying the effectiveness of the scholarly concentration.
TYPES OF QUALITATIVE RESEARCH

- Phenomenology
- Ethnography
- Grounded Theory
- Case Study
- Historical
FLOW CHART

Are you studying...

an experience?

A Phenomenology

a social process or phenomena?

Do you want to formulate a new theory about it?

Absolutely! Grounded theory

Not necessarily. Ethnography

an individual, event, organization, or institution?

Does it exist in the past? Is it historically relevant?

Not necessarily. Case Study

Absolutely! History
EXAMPLES OF QUALITATIVE RESEARCH QUESTIONS

- **Case Study**: What can educators at other institutions learn from our experience building a scholarly concentration in medical humanities?
  (Data collection methods: analysis of program materials and interviews)
- **Grounded Theory**: How do the ways in which students understand the medical humanities influence their beliefs about professionalism?
  (Data collection method: interviews with students)
- **Phenomenology**: How do the students with training in the medical humanities experience their clerkships?
  (Data collection methods: analysis of 3rd year students’ journal entries and interviews with students)
- **Ethnography**: In what ways does the “culture” of the medical humanities scholarly concentration support or undermine the “hidden curriculum” in medical school?
  (Data collection methods: interviews with students and faculty and observation)
- **Historical**: In what ways is the medical humanities scholarly concentration similar to and different from some of the earliest and most established programs in medical humanities?
  (Data collection methods: analysis of archival materials about the programs and program curricula, oral history interviews)
Types of Quantitative Research

- Descriptive
- Correlational
- Quasi-experimental
- Experimental
FLOW CHART

Is there an educational intervention?

- No
- Yes

Is the primary purpose the examination of relationships?

- No
- Yes

Descriptive Design

Correlational Design

Quasi-experimental Design

Experimental Design

Is it tightly controlled by the researcher?

- No
- Yes

EXAMPLES OF QUANTITATIVE RESEARCH QUESTIONS

• **Descriptive**: Has the number of students enrolled in the scholarly concentration increased over time?
  (Data collection methods: Student enrollment data)

• **Correlational**: Is participation in the medical humanities scholarly concentration correlated with scores on the Jefferson Empathy Scale?
  (Data collection methods: Survey of all fourth-year students using JES)

• **Quasi-experimental**: Do students who complete the scholarly concentration in medical humanities score higher on the Jefferson Empathy Scale than a comparison group participating in another scholarly concentration at graduation?
  (Data collection methods: Survey of medical humanities students scholarly concentration and a comparison group such global health scholarly concentration students using JES)

• **Experimental**: Do the students who are randomized to participate in the scholarly concentration score higher on the Jefferson Empathy Scale than those who are randomized to read a textbook on medical humanities?
  (Data collection methods: JES survey of students randomized into the medical humanities scholarly concentration and a control group)
MIXED METHODS RESEARCH

- Triangulation
- Embedded
- Explanatory
- Exploratory
CHARTS

Source: John Creswell and Vicki Plano Clark, *Designing and Conducting Mixed Methods Research*
Examples of Mixed Methods Research Questions

- **Triangulation**: Are students who complete the scholarly concentration satisfied with the training they receive?
  
  (Data collection methods: Quantitative evaluations and exit interviews)

- **Embedded**: Are students who complete the scholarly concentration satisfied with the training they receive?
  
  (Data collection methods: Survey with both closed and open-ended questions)

- **Explanatory**: Our student data suggests that students in the medical humanities scholarly concentration are more likely to go into primary care. Why?
  
  (Data collection methods: Data analysis followed by interviews with students)

- **Exploratory**: Students in the scholarly concentration tell us that they feel it helps support their wellness. Do the students score better than their peers on measures of burnout and depression?
  
  (Data collection methods: Interviews followed by survey data)
## Strengths of Each Methodological Approach

<table>
<thead>
<tr>
<th>Good for….</th>
<th>Qualitative</th>
<th>Quantitative</th>
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<tbody>
<tr>
<td>Exploring phenomena inductively</td>
<td>x</td>
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<tr>
<td>Investigating subjective experiences and different points of view</td>
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<td>Measuring concepts that exist in reality</td>
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<td>x</td>
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<tr>
<td>Producing a “rich description” of an understudied phenomenon</td>
<td>x</td>
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<td>Investigating the relationship between clearly defined variables</td>
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What do you want to study?
How?
Why?

Identify your overall goals and objectives for the study
Narrow the focus to an answerable question in a single study
Plan for what you want to do with the results
Your research question will help you identify appropriate methods
You decide to conduct research on the efficacy of a scholarly concentration in medical humanities in supporting the development of students’ capacity for empathy and reducing burnout.

What research methods might you use, and why?
- Survey of students’ scores on the Jefferson Empathy Scale and Maslach Burnout Inventory
- Participant observation in clinical encounters
- Focus groups and interviews with students
- Analysis of students’ reflective writing/journal entries

Pros and cons for each choice – validity, availability, accessibility, cost, recruitment
**Formulate a Research Question & Choose Your Approach**

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<tr>
<th>Qualitative</th>
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<th>Mixed Methods</th>
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<tbody>
<tr>
<td>Case Study</td>
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<td>Historical</td>
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- Qualitative
- Quantitative
- Mixed Methods
What question and methods did you choose? Why?
**RESOURCES IN BIOETHICS EDUCATION RESEARCH**

- Bioethics Education Resources (BEdR) Collection of peer-reviewed resources: [www.bedr.education](http://www.bedr.education)

- Cambridge Quarterly for Healthcare Ethics publishes an education segment:
  - [https://www.cambridge.org/core/journals/cambridge-quarterly-of-healthcare-ethics](https://www.cambridge.org/core/journals/cambridge-quarterly-of-healthcare-ethics)
BEdR FUTURE

- CFP: Fall 2018
  www.icmbioethics.com
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American Society for Bioethics and Humanities Annual Conference

- 8 am - noon
- October 18, 2018
- Anaheim, California
- www.asbh.org
Director: Marin Gillis, PhD, LPh, FIU Wertheim College of Medicine, Miami, FL
Co-Director: Claire Clark, PhD, MPH, UK School of Medicine, Lexington, KY
Co-Director: Amy DeBaets, PhD, ThM, MDiv, MA, Oakland University William Beaumont School of Medicine, Rochester, MI
Design Director: Kendra Kirchmer, BArch, MFA FIU Wertheim College of Medicine, Miami, FL
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