COMMUNITY FOR ADVANCING DISCOVERY RESEARCH PREK-12

CADRE: Serving DRK-12 2009-Present

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CADRE Learning Series

Designing Case Study Research

Welcome!

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University of Florida

Hosun Kang
University of California, Irvine

Amy Parks
Michigan State University

Bill Zahner
San Diego State University

Agenda

- Overview of Case Study Research
  - What are the driving logics?
  - How does it contribute to knowledge?
- Case Study Examples from Panelists
- Questions and Answers
- Looking ahead… ☺

Case Study Logics

- **Validity:**
  Accuracy and applicability of research findings to real world

- **Reliability:**
  Quality and trustworthiness of findings

- **Generalizability:**
  Transferability of findings to another context or situation

Case Study Logics

Quantitative Logic

- Representative sample of population under study, mitigating against selection bias (n = 20)
- Data gathering mostly planned in advance
- Generalizability derived from sample reflecting population as a whole
- Uniqueness might mean outliers
- Illuminates issues of *typicality, frequency,* and so on (descriptions of a population)

Qualitative Logic

- Strategic sample of a particular character that needs to be understood (20 cases)
- Some data gathering strategies planned in advance — much is emergent
- Generalizability derived from understanding social location of cases in relation to broader phenomenon
- Uniqueness can be illuminating
- Illuminates issues of *process* and *ontology*

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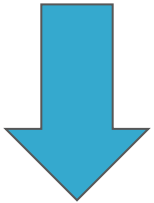
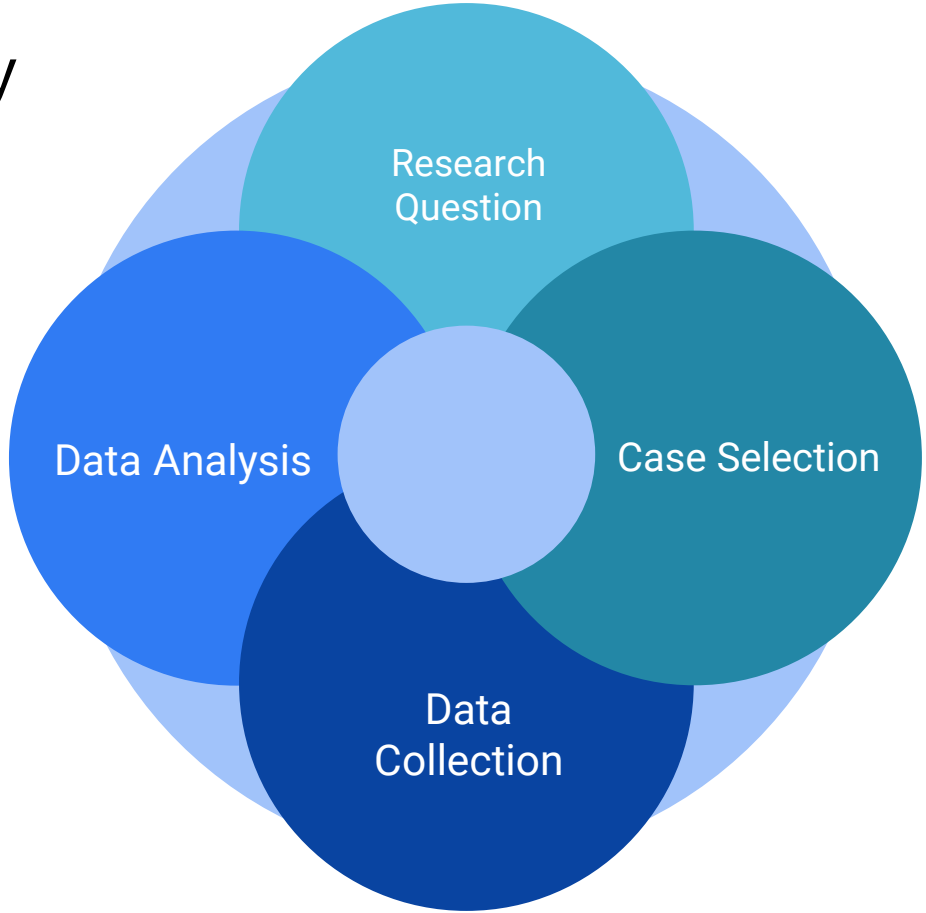
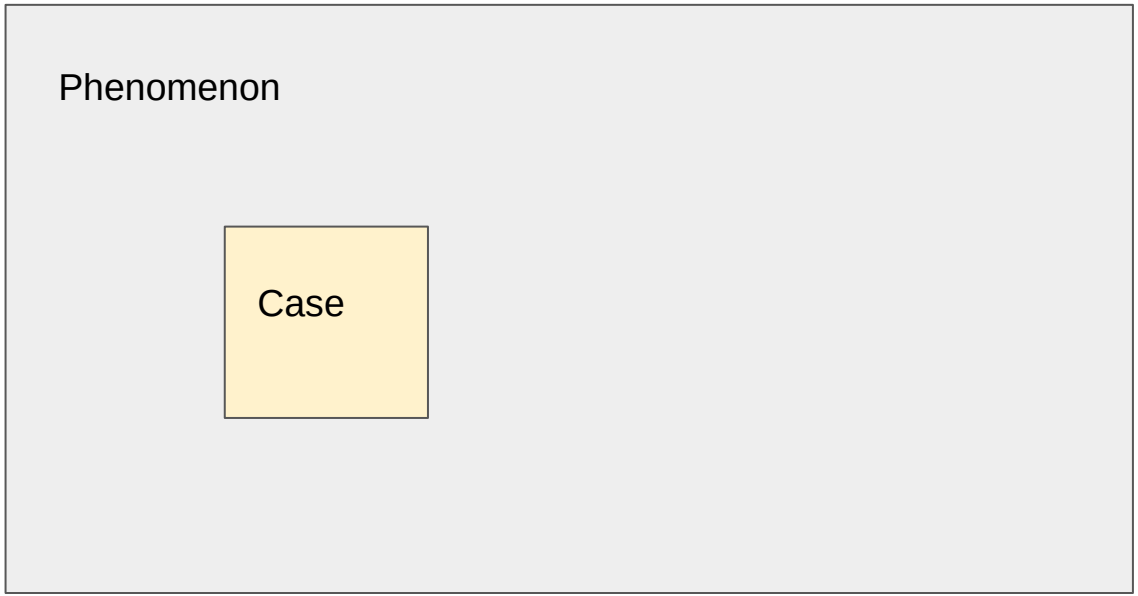


EMPIRICAL CLAIMS

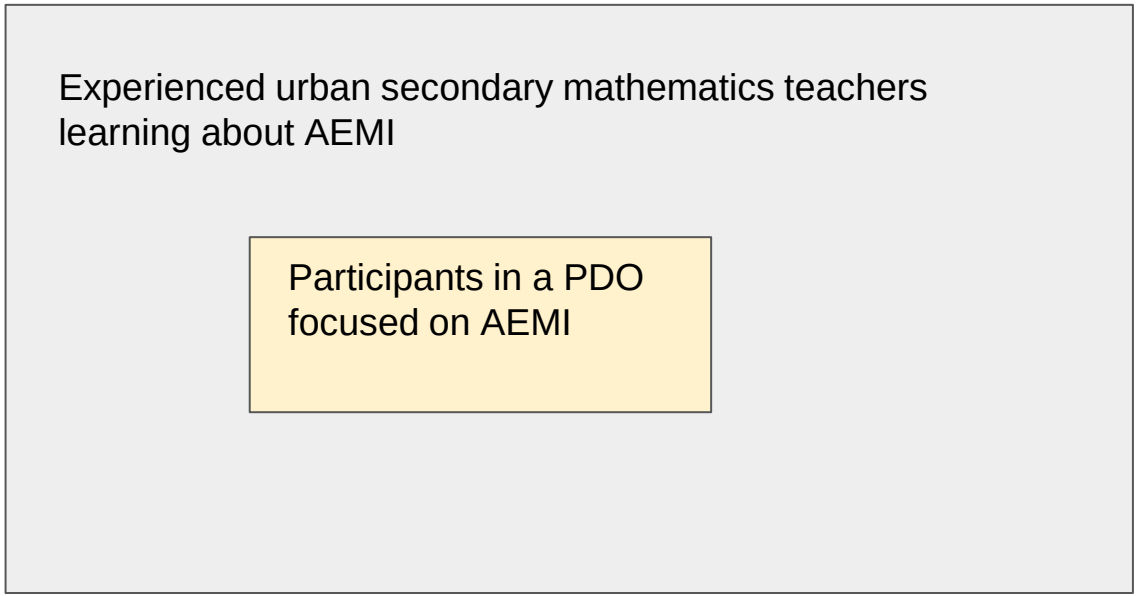
Logic of Inquiry



Research Question



How do experienced urban secondary teachers learn about ambitious and equitable math instruction?



Panelists

1. Hosun Kang, *Using Case Study Research to Transform Science Teaching and Learning in Public Schools*

2. Amy Noelle Parks, *Case Study of Children in Preschool Mathematics*

3. Bill Zahner, *Case Studies of Ambitious Mathematics Programs in High Needs Settings*

4. Zandra De Araujo, *The Case of Flipped Algebra Instruction*