

# *Sustaining Engineering Education Research: Sharing Qualitative Research Data for Secondary Analysis*

## Presenters



Jenni Case, VT

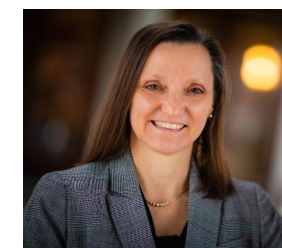


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## Additional Co-Authors



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# *Today's Agenda*



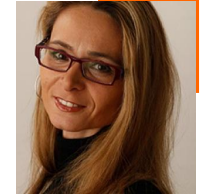
# Understanding SDA

- Working Definition:  
The analysis of a single dataset that has been previously collected and analyzed now is re-used to achieve a new goal or answer new research questions.
  - Same researcher, new question
  - New researcher, new question (our focus here)
- Challenges
  - Human subject protection & participant confidentiality
  - Loss of context
  - Misinterpretation of data
  - Time investment versus rewards
  - Potential for gatekeeping around access
- Possible opportunities
  - Data as product:
    - Designing data for broad sharing (e.g., Design Thinking Research Symposium)
    - Designing data (and human subject documentation) for broad analysis
  - Collaborative SDA: Original researcher plays a role with a new researcher

# *Identifying National Contexts*

Take an index card and answer these questions:

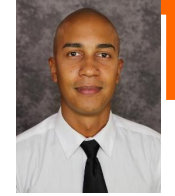
- In what country/ies are you working as a researcher?
- Have you ever done or wanted to do secondary data analysis?
- Is data sharing a common practice? Is data sharing encouraged?
- Is data sharing mandated?
  - If so, under what conditions?



Rachel Kajfez, Ohio State & Zhenya  
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# Collaborative SDA: Pilot Project 1

- Original Researcher
  - Experienced EngE Researcher
  - Research-intensive institution
  - Federally funded project
  - Qualitative interviews
  - Graduate student support
  - Results published
- New Researcher
  - Experienced EngE Researcher
  - Teaching-focused institution
  - Only undergraduate engineering students as research assistants
- Benefits
  - Training of undergraduate students on deep qualitative investigation
  - Further exploration of data
  - Development of new scholarly networks
  - Support of existing findings and exploration of new findings
- Challenges
  - Providing context without findings
  - Learning data for which context is not as present
  - Development of new processes



Shawn Jordan, Arizona State, E. Tyler Young and David Delaine, Ohio State

# Collaborative SDA: Pilot Project 2

- Original Researcher
  - Experienced EngE Researcher
  - Research-intensive institution
  - Federally funded project
  - Qualitative interviews with marginalized population
  - Graduate student support
  - Results published
- New Researcher
  - Emerging EngE Researcher (grad student) + advisor w/o direct expertise in topic of interest
  - Researcher-focused institution
  - Limited access to participants of interest + concerns about overburdening minoritized groups
- Benefits
  - 100+ training hours for PhD student in qualitative analysis methods & work with Indigenous populations
  - Development of dissertation research protocol
- Challenges
  - Original HSP protocol did not allow for SDA - re-consent required
  - Learning data for which context is not as present
  - Development of new processes

# *Lessons learned from pilot projects*

- Context matters: links to the original researcher are key
- Mutual benefit is critical
  - What does the original researcher gain?
- Reflective practice supports engagement and questioning
  - Our pilots used semi-structured reflection questions as well as a log of ongoing questions from the new researcher for the original researcher
- Opportunities for learning on all fronts (from data, as researchers, through collaboration) are significant
- Logistics take time: Human subject requirements, data cleaning, documentation, and communication

## *SHARE: A Framework for Collaborative SDA*

- Stewarding collaborative relationships
- Honoring context of data
- Aligning questions and data
- Responsibly reusing data
- Expanding capacity and ownership

**Preliminary — Not Yet  
Published**



# *Small Group Discussions*



- Form a group of 3-4 participants
- Introduce yourself and your research context broadly
- Then get discussing:
- What existing data sets do you have that could be amenable to SDA?
  - What opportunities does using the SHARE framework offer for that data?
  - What challenges does using the SHARE framework pose for that data?
- How do national regulations and requirements impact your data sharing practices?
- Decide on a rapporteur to share the highlights of this



## *Next Steps: Building a Network*

- How do we build a network of collaborations to support collaborative SDA and ethical data sharing?