



Perceived Supports and Barriers of Instructors During Emergency Remote Instruction



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Background

- **Emergency Remote Instruction (ERI)** is different from online learning in that ERI is a temporary shift to online learning due to crisis circumstances.¹
- Previous research suggests that online instruction requires a carefully maintained student-centered teaching strategy – something that is hard to maintain in an emergency transition.²
- What practices can we learn to be better prepared for future, similar learning and teaching disruptions?

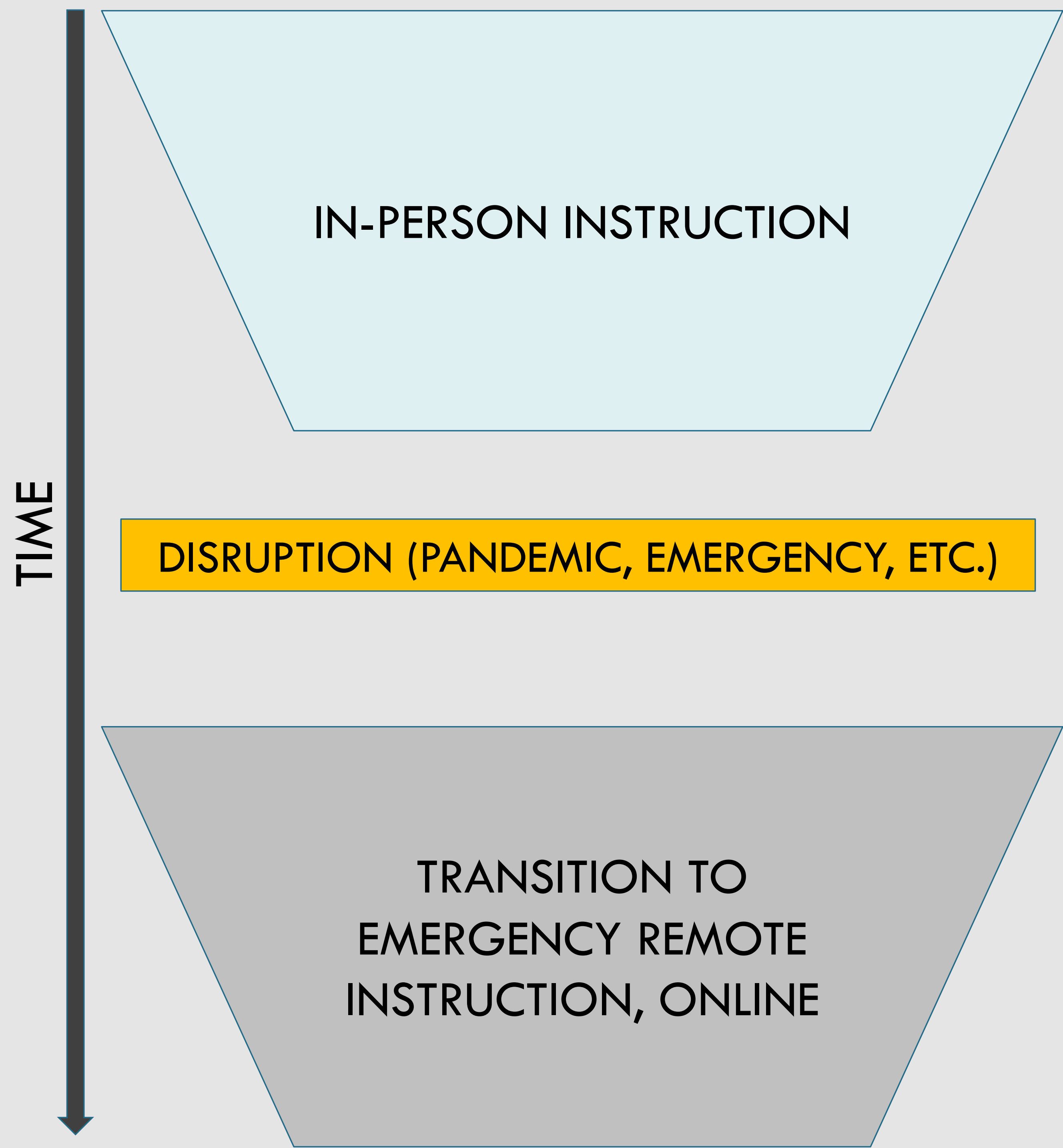


Figure 1. A diagram of how a transition to ERI progresses. The transition to ERI begins with normal, in-person instruction, and the disruption can happen in the middle of a semester or quarter.

Research Question

- What barriers and supports do instructors perceive as they transition to ERI?

Methods

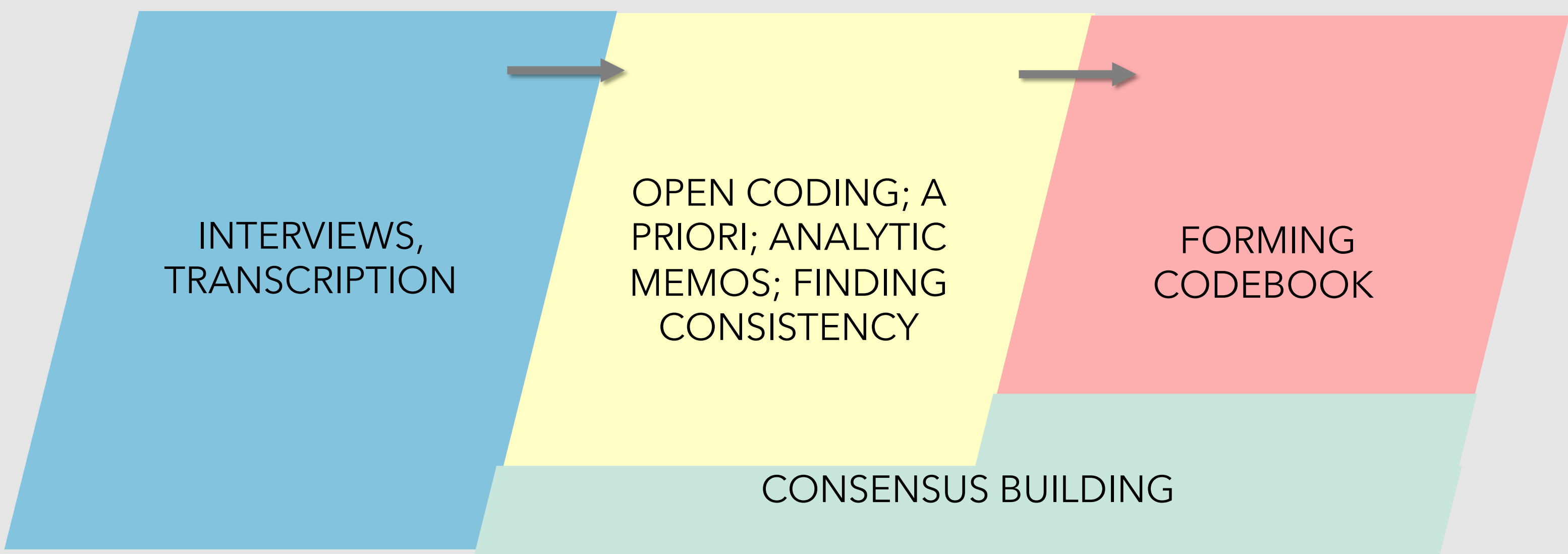


Figure 2. A schematic of how a qualitative codebook was formed from the data.

Teacher Population

- 30 instructors teaching STEM classes in a mid-size research university
 - All classes were taught online

Instructor Interviews

- Instructors were interviewed 7 questions about their experiences with ERI, with 2 questions being about perceived supports and barriers

Data Analysis

- Using about 10% of the data (4 interviews), perceived supports and barriers were given codes during a blind, open code process using grounded theory methods. To ensure validity, open coding was done independently by five coders in parallel. Analytic memos were also written during the open coding process.
- During consensus building, codes that were common among coders were considered consensus codes. These consensus codes were color coded as describing either supports or barriers (green for support, red for barrier).
- Coders then independently decided on what codes of supports and barriers appeared consistently.
- Consistently appearing codes became entries in a codebook.

Results

- Using qualitative codes, we were able to find codes of what instructors perceived as supports and barriers during the transition to ERI.

Code	Detailed Description
Prior videoconferencing technology knowledge and experience	Instructor benefited from previous experience with using technology for teaching
Personal confidence	Instructor exhibits that they have the skills and knowledge to solve the problems (strong belief in self)
Hard to cover all material using videoconferencing	Instructor could not cover all planned material, citing videoconferencing technology as one of the causes
Issues with administration of online quizzes	Administering assessment activities is harder to do online than in person

Figure 3. Excerpts from the codebook of perceived supports and barriers. In these examples, supports are coded as green and barriers are coded as red.

Discussion

- Explore other themes: changes in interactions between teachers and students; desired supports
- How has ERI has affected students from groups that are disproportionately affected by social and health disparities?³
- How can we be better prepared for future transitions?

References

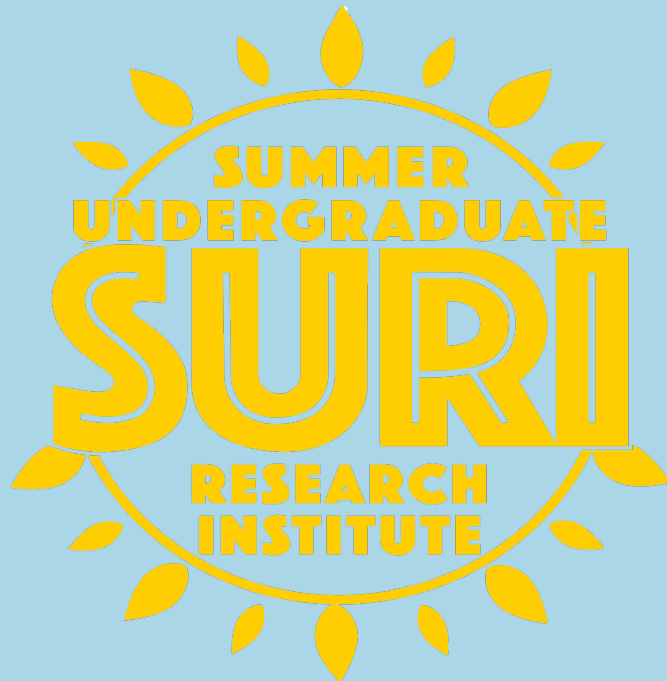
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