

## **CADRE LEARNING SERIES ON CASE STUDY DESIGN**

In the fall of 2022, CADRE hosted a <u>learning series on case study design</u>. Participants joined our DRK–12 researcher-panelists for general discussion and consultations about aspects of the methodology.

## SERIES PART 1 WEBINAR: A recording and slides from the introductory presentations

- Recording of the introductory webinar
- Slides by Dr. Ilana Horn
- Slides by Dr. Hosun Kang
- Slides by Dr. Amy Parks
- Slides by Dr. Bill Zahner
- Slides by Dr. Zandra de Araujo

### SERIES PART 2 CONSULTATIONS: "Aha's" that arose during the consultation portion of the series

#### **Comparative Case Study Group:**

- There is a difference between a logic of inquiry and an order of doing things. We can design comparative case studies as going from design to data collection to analysis to writing up findings, with specific strategies for each stage. But in reality, sometimes the strategies for sense-making happen at different stages. For example, case selection might happen after a wide net is cast to collect more cases than researchers can analyze, especially if they aren't sure about the potential salient dimensions of contrast and comparison across the cases.
- To develop intermediary summary documents of the cases, a template is developed and shared across a research team to help create similarly structured individual case reports. These can then be read across to notice similarities and differences as well as themes.

### **Case Studies of Programs Group:**

- Case studies of programs are situated in a broader social and political landscape. This broader
  landscape shapes what we observe in the individual case sites. A question we considered was how
  that fits into the diagram of the Case Phenomenon and Research Question. An ah-ha was that we
  have to account for this broader context somehow, but without turning our case study into an
  analysis of that context itself. (I wish we had a simple answer of how to do that, but I don't think we
  got there!)
- Consider what the "case" is when thinking of doing work at various levels of scale, for example, a single classroom, a grade level within a school, all of the classrooms in a school, a subset of schools, and a district-wide initiative. Consider different arrangements of what the case is (e.g., classes, schools, districts) and what issues and questions can be addressed with looking at that case.



#### **Case Studies of Students Group:**

- Drawing on multiple kinds of data is a critical feature of case studies. It can be particularly generative to look at overlaps and ruptures between interview and observational data.
- Taking children's perspectives in case studies requires intentionality in both data collection and analysis. For data collection, researchers must distance themselves from adults in the classroom to gain access to child culture, and during analysis, researchers should be cautious about imposing adult categories and frameworks on children's ways of thinking.

## **Case Studies of Teachers Group:**

- One thing to consider in the process of selecting one or multiple case(s) is the meaning of the case(s) in relation to the goals and claim(s) (i.e., what is the case of/about).
- We have a tendency to collect as much data as we can because we don't want to lose the opportunities. One way of deciding the scope and amount of data is conducting a pilot analysis with a small amount of data. This will give some confidence about the scope and amount of data that we need to answer our research questions.
- When we wonder how to handle the differences existing in our cases (e.g., case study teachers teach different grade levels), we should consider whether the differences across the cases are "problems" to be controlled or "aspects" of the context that should be studied.

## **Case Studies of Teaching Approaches Group:**

- Bounding cases is tricky, particularly when you are examining cases of instructional approaches.
- In studying an instructional approach, researchers may inadvertently influence the instruction. This is important to be mindful of as we design studies.
- Studying an instructional approach can be done from many different perspectives. For example, you might investigate how students experience flipped instruction, or you might investigate the variation in teachers' enactment of flipped instruction. Understanding what you want to study is important in helping you to bound your case and determine your data sources.
- There are many existing protocols for observing classroom instruction. Some of these protocols might be best suited for well-defined instructional approaches, whereas others may be useful when you are exploring a relatively new approach.

# <u>RESOURCES FOR CASE STUDY RESEARCH</u>: An annotated bibliography of related resources recommended by the series facilitators

**Creswell, J. W., & Poth, C. N.** (2017). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

This methodology book is helpful for folks who are new to qualitative research and design. The authors provide a clear overview of various approaches, one of which is case study.

**Dyson, A. H., & Genishi, C.** (2005). *On the case: Approaches to language and literacy research* (Vol. 76). Teachers College Press.

A great beginner's guide to thinking about case study research, this book gives clear, worked-out examples with language for explaining researcher decisions about identifying, studying, and learning from educational cases.



**Flyvbjerg, B.** (2006). Five misunderstandings about case-study research. *Qualitative Inquiry, 12*(2), 219–245. https://doi.org/10.1177/1077800405284363

This quick read highlights common objections to case study work and answers them beautifully. The article can be quite useful in responding to reviewers and in talking across methodological lines.

**Merriam, S. B.** (2009). *Qualitative research: A guide to design and implementation.* Wiley. https://www.wiley.com/en-

<u>us/Qualitative+Research%3A+A+Guide+to+Design+and+Implementation%2C+4th+Edition-p-9781119003618</u>

This book is about qualitative research. The sections about the case study are highly useful to understand the logic behind the study design, case selection, and process of analyzing the cases.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook.* SAGE. <a href="https://us.sagepub.com/en-us/nam/qualitative-data-analysis/book246128">https://us.sagepub.com/en-us/nam/qualitative-data-analysis/book246128</a>

This book is not specific to case study methods. However, the qualitative analysis methods presented in this book can be very useful when developing a case. Miles et al. are eclectic in their theoretical approaches, so some scholars may question their methods. However, their overview of methods from start to finish may be especially useful for introducing students to qualitative research methods.

**Saldaña, J.** (2016). *The coding manual for qualitative researchers*. SAGE. <a href="https://us.sagepub.com/en-us/nam/the-coding-manual-for-qualitative-researchers/book243616">https://us.sagepub.com/en-us/nam/the-coding-manual-for-qualitative-researchers/book243616</a>

This book is not specific to case study methods; however, the encyclopedic collection of coding methods is really helpful when trying to describe coding.

**Seawright, J., & Gerring, J.** (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly, 61*(2), 294–308. https://doi.org/10.1177/1065912907313077

Defining the case is often one of the hardest parts in getting started with case study. This article provides a nice overview of how the authors think about case selection and include clear examples.

**Small, M. L.** (2009). 'How many cases do I need?' On science and the logic of case selection in field-based research. *Ethnography*, 10(1), 5–38. <a href="https://doi.org/10.1177/1466138108099586">https://doi.org/10.1177/1466138108099586</a>
A great explainer about the difference between statistical research logics from quantitative traditions and inferential logic from qualitative traditions. This article is specially clear about issues of generalizability.

**Stake, R. E.** (1995). *The art of case study research*. SAGE. <a href="https://us.sagepub.com/en-us/nam/the-art-of-case-study-research/book4954">https://us.sagepub.com/en-us/nam/the-art-of-case-study-research/book4954</a>

This is a classic. It is one of the few "textbooks" that is enjoyable to read. Note Stake's approach to describing the entanglement of theory, epistemology, research, and practice. The book is grounded in a case study that Stake did, which makes reading it very practical. It is interesting that several other examples he cites are from mathematics education research.



Stake, R. E. (2006). Multiple case study analysis. The Guilford Press.

https://www.guilford.com/books/Multiple-Case-Study-Analysis/Robert-Stake/9781593852481

This standard book is cited by many scholars who employ a multiple case study approach. It covers different approaches to conducting cross-case analysis with or without losing the situationality of the findings and the need to think critically about the underlying epistemology in taking different approaches.

**Yin, R. K.** (2018). *Case study research and applications: Design and methods.* SAGE. https://us.sagepub.com/en-us/nam/case-study-research-and-applications/book250150

This is one of the most cited books on case studies in mathematics education. Yin, in general, describes a much more technical approach to case study research than Stake does. In this sense, it is a good complement.