

USING CRITICAL
INCIDENT
METHODOLOGY TO
ANALYZE NEW
TEACHERS' ABILITY TO
IMPACT STUDENTS'
LEARNING AND
DEVELOPMENT

JOYCE MANY

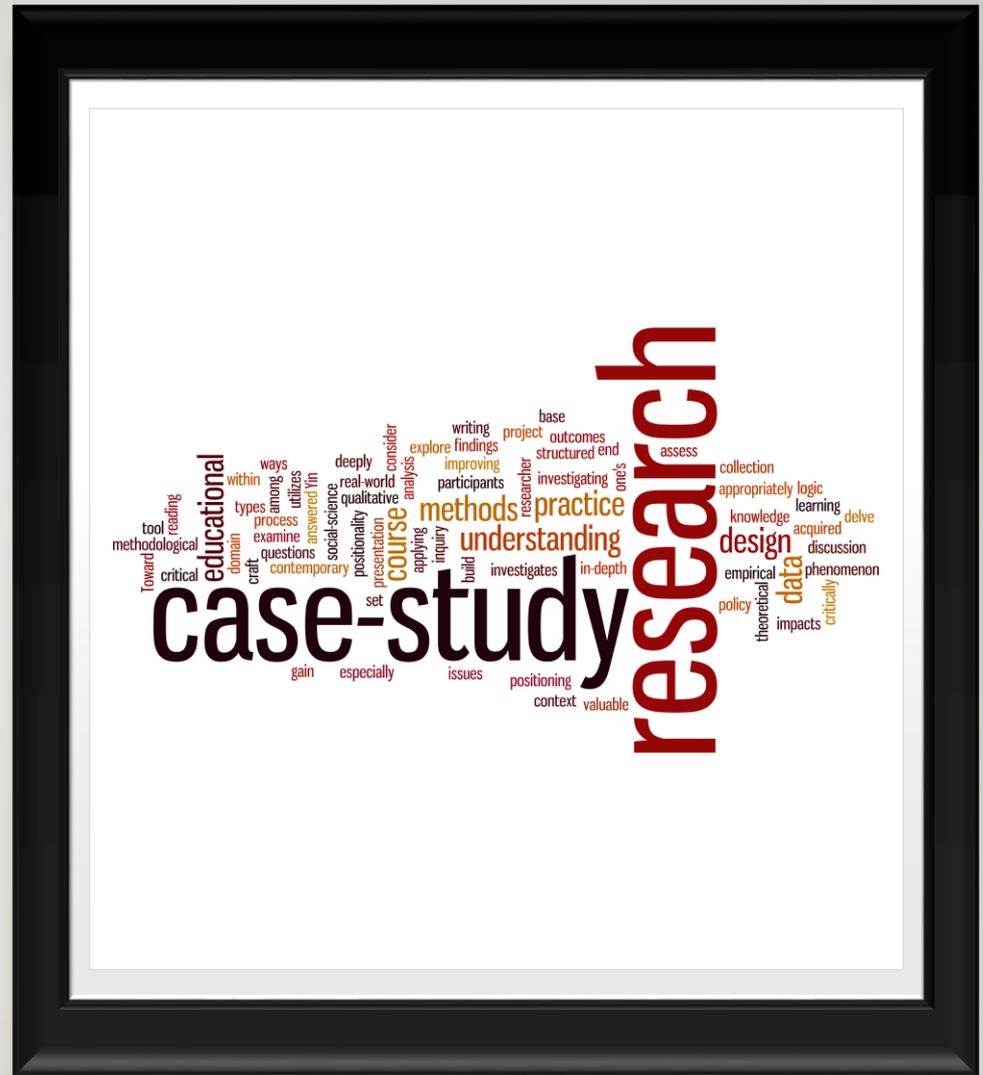
GEORGIA STATE UNIVERSITY



<https://www.gapsc.com/Commission/Media/DocsPresentations.aspx>

PRESENTATION FOCUS

- Using a Case Study Approach to Help Address Standard 4.1
- Designing Case Studies of Completers
- What We Are Learning



USING A CASE STUDY APPROACH TO HELP ADDRESS STANDARD 4.1



STANDARD 4.1

- The provider documents, **using multiple measures**, that program completers contribute to an expected level of student-learning growth. Multiple measures shall include all available growth measures (including value-added measures, student-growth percentiles, and student learning and development objectives) required by the state for its teachers and available to educator preparation providers, other state-supported P-12 impact measures, and any other measures employed by the provider.

CASE STUDY APPROACH



➤ Characteristics of case study

- ✓ **Holistic** (understanding the whole)
- ✓ **Interpretive** (based on human interactions and interpretations)
- ✓ **Empathetic** (receptive to informants' perspectives)

➤ Exploratory case study

- ✓ Uncover the “**how**” and the “**why**” behind the results with in-depth inquiry;
- ✓ Understand “**what can be learned**” from a context-dependent case and to consider further inquiry (Yin, 2014, p. 189)



ESTABLISHING THE BOUNDARIES FOR A CASE STUDY APPROACH

- Issue or Problem
- Geographic Location
- Context
- Participants
- Time

BOUNDARIES FOR GSU'S CASE STUDIES



Issue or Problem

- Completers' impact on student learning and development

Geographic Location

- Metro-Atlanta

Context

- Top two urban school systems hiring the largest numbers of our graduates (and not studied the previous year) and potential participants from other smaller systems

Participants

- Graduates hired to teach in target school systems from across as many programs as possible; Target of 25 participants

Time

- Recent graduates who have completed one-two years of teaching

GUIDING QUESTION

- What helps or hinders new teachers' ability to impact student learning and development in an urban school district when they have completed programs designed to prepare them for this context?



PARTICIPANT RECRUITMENT



IDENTIFICATION OF POOL

- Potential participants identified from database on GAPSC.org.
- Filter by Year and select target year.
- Clean data base to remove duplicate listing.
- Filter by district to identify top 4 districts hiring graduates.

RECRUITMENT

- Email potential participants from target district.
- If, after two reminder emails, the number of participants is lower than desired target, add additional cohort/participants from new district (or from same district in second year of teaching).

PARTICIPANTS: 19-20 CASE STUDY



COHORT 1
DISTRICT C

COHORT 2
DISTRICT D

Participants
District EFG

- GSU graduates in 2017-2018 who completed first year of teaching in 2018-2019
- GSU graduates in 2016-2017 who completed second year of teaching in 2018-2019



CRITICAL INCIDENT TECHNIQUE

The logo consists of the letters 'CIT' in a bold, blue, sans-serif font, centered within a bright yellow square.

- Qualitative research method
- Uses participants' lived experiences to draw insights into real world problems
- A 'critical incident' is any reported occurrence that can be described in specific, behavioral terms
- Focuses on observable events and factors that are seen as helping or hindering a process of interest
- Interview data with multiple individuals are used to create a set of Critical Incidents which can describe and clarify contributing factors impacting performance

DATA SOURCES

- Narratives of critical incidents focused on efforts to impact student learning and development
- Explanation of factors that helped or hindered their abilities in this incident



DATA COLLECTION



- Phone or Skype Interviews
 - 45 – 60 minutes in length
 - Follow up member checks
- CIT Interview Protocol
- Transcription Software: OTTER <https://otter.ai> (free APP)
- Research Team
 - Associate Dean, Faculty member, Assessment Coordinator, Undergraduate and doctoral students taking research internship
- Data collected annually in late spring and early summer



INTERVIEW PROTOCOL – CONTEXTUAL COMPONENT

- As a way of getting started, perhaps you could tell me a little about your work situation.
- Which teacher preparation program did you graduate from? What was it like?
- Where did you do your student teaching? What was that like?
- This study is about new teachers' efforts to impact student learning and development. **What does 'impacting learning and development' mean to you? How would you describe your ability to impact student learning and development?**

INTERVIEW PROTOCOL CRITICAL INCIDENT – HELPING FACTORS



- **Critical Incident**

- Can you think of a particular time where you felt you were very effective at impacting student learning and development? Describe that incident.

- **Helpful Factor**

- What was a factor that helped you in your ability to be effective in that incident? (Anything else?)

- **Importance**

- How was that helpful? Tell me what it was about XXX that was helpful?
- If it is not clear if factor was specifically related to teacher preparation or to a school/system support – probe for clarification

INTERVIEW PROTOCOL CRITICAL INCIDENT – HINDERING FACTORS



- **Critical Incident**
 - Can you think of a particular time where you struggled to impact student learning and development? Describe that incident.
- **Hindering Factor**
 - What was a factor that hindered your ability to be effective in that incident? (Anything else?)
- **Importance**
 - How did XXX limit you? Tell me what it was about XXX that was unhelpful?
 - If it is not clear if factor was specifically related to teacher preparation or to a school/system support – probe for clarification.

DATA ANALYSIS

- STEP 1: Organize data into contextual information, critical incidents (CI), and Helpful/Hindering Factors.
- STEP 2: Insert CI's and related Factors into Excel sheet

Participant ID	Transcript lines	CI Text - (including line numbers of original transcript, if multiple sections from a transcript address this CI - include all sections in one row)	Short Description of CI	Helping (1) or Hindering (2)	Factor transcript lines	Text - describing factor	Short Description of factor	Source of Helping/ Hindering; Program (1), School/district (2)

DATA ANALYSIS

- STEP 1: Organize data into contextual information, critical incidents (CI), and Helpful/Hindering Factors.
- STEP 2: Insert CI's and related Factors into Excel sheet
- STEP 3: Analyze Helping and Hindering factors for themes using constant comparative analysis.
- STEP : Filter data (a) by cohort (school district) to analyze for emphases within districts and (b) by teacher preparation or School context to analyze influences of these areas on helpful and hindering factors.

DATA ANALYSIS



MEMBER CHECKING

- Emerging themes are shared with participants.
- Additional data, clarifications, or corrections can be gathered through the member check.

COLLABORATIVE INTERPRETATION

- Partners from the school district are provided with results and can collaborate on interpreting the data and considering action items for the future.

WHAT WE ARE LEARNING

GSU CASE STUDIES – YEAR 1 AND YEAR 2



2018-2019 CASE STUDIES

1

YEAR

PARTICIPANTS

- 15 in District A and 9 in District B
- Had completed one to two years of teaching
- 12 different areas of certification.

FACTORS THAT MAKE A DIFFERENCE

- Modeling
- Support or Lack of Support
- Program Content
- School Context

2019-2020 CASE STUDIES

2

YEAR

PARTICIPANTS

- 10 in District C, 8 in District D, 4 participants from other districts
- Had completed one to two years of teaching
- 10 areas of certification

EMERGING FACTORS FROM PRELIMINARY ANALYSIS

- Critical Consciousness and CRP
- Need for Program and School Support in Addressing Challenging Behaviors (District C)
- Need for Program and School support for Teaching ELL Learners (District D)
- Importance of Context Specific Preparation even though indications are this may have limited transferability to new induction contexts (to other sites in same district or other districts)

FOR MORE INFORMATION



GSU's Case Study Research Projects Using CIT

- Many, J. E., Bhatnagar, R., & Tanguay, C. (In press). Learning from the experiences of novice urban teachers: Teacher education and induction program factors that influence effectiveness. *GATEways to Teacher Education*, Fall 2019.
- Many, J. E., Tanguay, C., Bhatnagar, R. & Samford, K. (Submitted). Using the critical incident technique to understand the effectiveness of graduates from our urban teacher education programs. Poster submitted as part of a structured poster session at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April, 2020.
- Joyce Many, Georgia State University, jmany@gsu.edu

FOR MORE INFORMATION



Critical Incident Technique Methodology

- Andreou, T. E., McIntosh, K., Ross, S. W., & Kahn, J. D. (2015). Critical incidents in sustain school-wide positive behavioral interventions and supports. *The Journal of Special Education*, 49 (3), 157-167.
- Bedi, R. P., Davis, M., & Williams, M. (2005). Critical incidents in the formation of the therapeutic alliance from the client's perspective. *Psychotherapy: Theory, research, training*, 42, 311-323.
- Butterfield, L. D., Borgen, W. A., Maglio, A.T., & Amundson, N. E. (2009). Using the enhanced Critical Incident Technique in counselling psychology research. *Canadian Journal of Counselling*, 43(4), 265-282.
- Kain, D. L. (2004). Owing significance: The Critical Incident Technique in research. In K. deMarrais & S. D. Lapan (Eds.), *Foundations for research: Methods of inquiry in education and the social sciences* (pp. 69-85). Mahwah, NJ: Lawrence Erlbaum.

QUESTIONS OR COMMENTS?



#GaPSCDrive-In19

LINK TO TODAY'S RESOURCES



#GaPSCDrive-In19

