Studying Successful Doctoral Students in Mathematics from Underrepresented Groups

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Abstract

● Comprehensive, in-depth, semi-structured interviews with 100 students.

● Studying the experiences, perspectives, and stories of doctoral students and recent PhDs at four stages of success:
  ○ newly accepted students
  ○ early graduate students (pre-qualifying exams)
  ○ advanced graduate students (dissertation level)
  ○ recent PhDs (0-5 years since graduation)

We start by listening to and understanding the voices of graduate students themselves to inform decisions about changing mathematics department cultures and practices.

Goal: moving toward more equitable systems, not searching for characteristics of successful students.

Sample Interview Questions

1. What does success in graduate school mean to you?
2. What would an ideal mentoring relationship look like to you?
3. What systemic issues aren’t being addressed but should be?

Three Takeaways

1. Talk with students individually, one on one.
2. Talk with faculty who are already doing #1, and create collaborative teams to support students.
3. Put yourself in situations where you can hear from students and faculty from historically marginalized groups.

Products

Set of nuanced themes that emerge in the data.

Twelve counterstories disrupting narratives about students’ success in doctoral programs in mathematics.

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