Perhaps deep content knowledge did not come during required mathematics courses in a preparation program. Perhaps completing written assignments and videotape analyses had little to do with learning reflection. Perhaps leading a classroom discussion had little to do with techniques from a particular teacher or course. Perhaps four years of learning theories and methods had little to do with the ability to implement them.

Research Questions

1) To what factors or experiences would beginning secondary mathematics teachers from an undergraduate program and an alternative certification program attribute the success of their first year teaching?
2) To what degree were these significant attributes or experiences learned pre-program, during program, or post-program?

Two Populations

Alternative Certification program from LAUSD (Los Angeles, California)
The organization of this program was four weeks of classes during the summer, plus meetings throughout the first year teaching; the field experience time was ~15 days; beginning teachers were typically graduates and career changers; preparation for teaching in LAUSD, Title I schools

Undergraduate program in Texas
The organization of this program was throughout a four year undergraduate degree, majoring in math with eight education courses; the field experiences throughout the program were ~115 days; beginning teachers were typically recent graduates; preparation for teaching at any school

Interview Selection Criteria

1) Nominations from knowledgeable teacher educators;
2) High mathematics GPA
3) Previous leadership experience

Summary of Findings

• Both populations of beginning secondary mathematics teachers, despite different teacher preparation programs, reported similar factors as “most important” for beginning success
  • These indicators concerned the internal day-to-day work of teaching, such as engaging students, managing a classroom, and desiring to grow professionally, as opposed to external feedback, such as students’ performance on standardized tests
  • This result reiterates Fuller and Brown’s (1975) four stages of development for beginning teachers
• Both populations contributed to an understanding of what can be achieved during teacher preparation
  • From the undergraduate program, teachers can learn effective pedagogy, practical tools for the classroom, confidence in teaching, and collaboration
  • From the alternative certification, teachers can learn to contextualize their teaching
• Both populations inform that characteristics such as believing in all students’ abilities to learn and being hard-working were attributes beginning teachers valued for overcoming the challenges associated with the transition to classroom teaching
• Both populations discussed that their development of the mathematical content knowledge for teaching developed not just pre- and during a program, but also post-program, while teaching in the classroom. In particular, they gained different types of content knowledge (each important) during the three time periods.