

How Do Teacher Candidates Use Data and Reflection to Inform Classroom Instruction?

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Introduction

This action research project was developed to examine how and to what extent explicit goal-setting and tracking by teacher candidates in their placement classroom impacts student progress. Participants are teacher candidates in an intensive teacher preparation program that blends theory with practice, applying what is taught at the college level directly in the pk-12 classroom. Cycle I, presented here, examined how teacher candidates understand and use data; Cycle II, which is in development, will examine student progress in the classroom and teacher-candidate identity.

Innovative Teacher Preparation Program

- Student-teaching placements are *year-long* (four days per week) and *within school-district cohorts*
- *Embedded coursework*
- *Structured and purposeful orientation* for both teacher candidates and mentor teachers prior to start of school-year
- *Comprehensive performance observation process*, including pre- and post-conferencing, with teacher candidate reflection
- Coursework *emphasizes teacher candidates' use of data* to track pk-12 student progress

Participants & Data Collection

- 54 college seniors in year-long student-teaching placements in three Arizona elementary school districts
 - 31.5% (17) in Special Education teaching placement
 - 68.5% (37) in General Education teaching placement
- 94% Female
- 81.5% White, 11.1% Hispanic/Latino, 7.5% Black or African American or self-reported as "two or more races"
- Age 20 to 49 years old, with the average participant being 24.61 years old

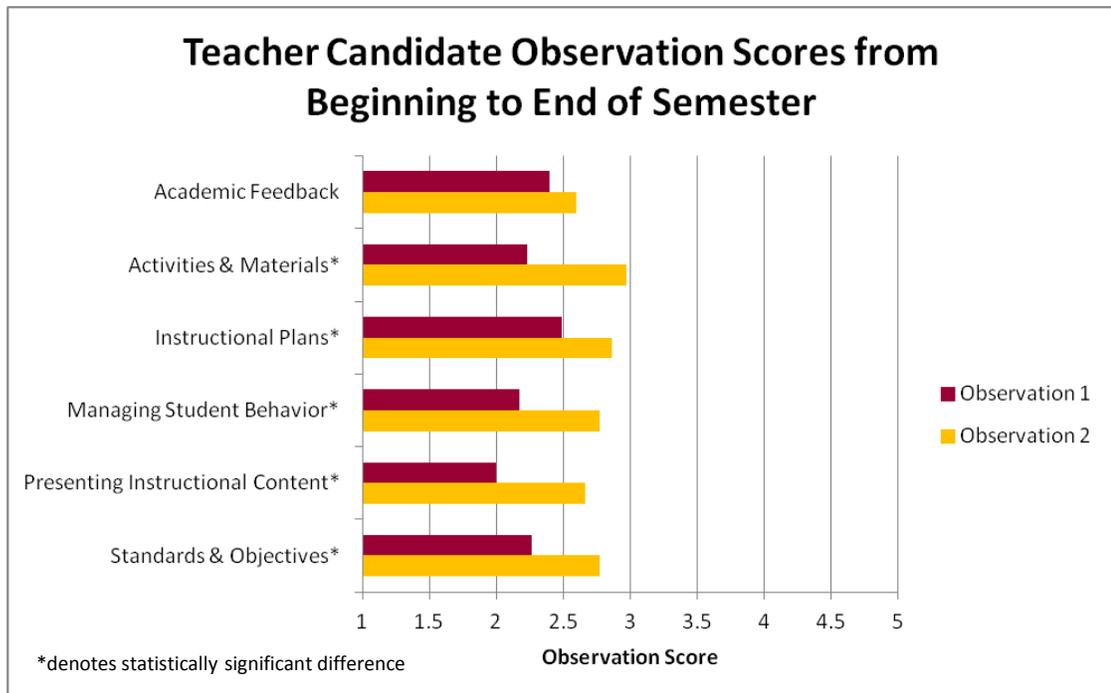
During Cycle I, data were collected from three sources:

- ✓ Focus groups ($n = 54$)
- ✓ Teaching observation scores ($n = 35$)
- ✓ Teacher candidate work samples ($n = 34$)

Cycle I Findings: Teacher Candidate Perceptions and End-of Semester Reflections

- Teacher candidates had a narrow view of data
- Teacher candidates learned how to use data in the classroom from a variety of sources
- Teacher candidates wanted their mentor teacher's support in learning to collect data and through modeling appropriate use of data in the classroom
- Teacher candidates believed that collecting data to inform practice is not realistic, given the demands on a teacher's time
- Teacher candidates felt like "real" teachers, which increased confidence in the classroom
- Teacher candidates expressed confidence in using data through reflections provided in their end-of-the-semester writing assignments

Cycle I Findings: Teaching Performance



Conclusions

- Teacher candidates learned to use data to inform classroom practice from a variety of formal (e.g., university coursework) and informal sources (e.g., family members)
- Although teacher candidates' view of data appeared to be narrow, they do report using data to inform instructional practices in the classroom
- Teacher candidates do believe that they are impacting student achievement in the classroom
- Teacher candidates are increasing their competency in demonstrating effective teaching skills, as evidenced by significant increases in observation scores
- The year-long teaching placement has provided opportunities for teacher candidates to truly “co-teach” and feel a part of the classroom and the school

Implications for Practice

- Train/More clearly communicate to mentor teachers how teacher candidates are being asked to use data in the pk-12 classroom
- Broaden teacher candidates' understanding of what constitutes data (e.g., “data” can consist of more than just benchmarks and standardized assessments)
- Increase awareness of strategies teacher candidates can use to collect a variety of data with the support of their mentor teacher
- Allow teacher candidates to engage in reflection activities to reinforce the transfer of knowledge to actual classroom practice

Next Steps/Cycle II

- Conduct second round of focus groups with same teacher candidates, examining changes over time
- Interview and provide feedback to university clinical professors/site coordinators
- Examine differences between the experiences of teacher candidates in Special Education and General Education teaching placements
- Explore teacher candidates' professional identity development in the year-long residency program