Linking Teacher Quality and Preparation

Mary T. Brownell
Center on Personnel Studies in
Special Education

Collaborators

- Anne Bishop, Co-Principal investigator
- Janette Klingner
- Diane Haager
- Randall Penfield
- Russell Gersten
- Joseph Dimino
- Mary Dingle

Demands of Current Policy Context

 NCLB and IDEA have raised questions about what it means to be a highly qualified teacher in special education. Some argue that subject matter is paramount while others argue that knowledge of evidence-based pedagogy should define effective special education teachers. Unfortunately, such arguments are not founded in research on teachers, making it difficult to advocate for responsible policies for preparing and developing special education teachers.

Challenges to Teacher Quality Research

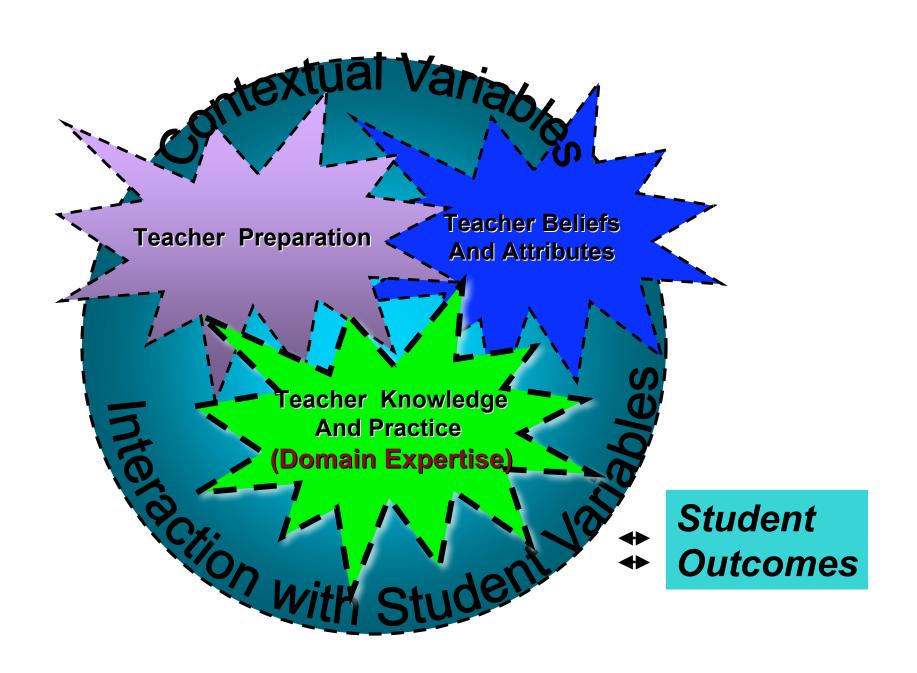
- Essential to establishing linkages between teacher quality and student achievement are valid and reliable dependent measures
 - Dimensions of special education teacher quality are not wellconceptualized and potentially vary considerably
 - Valid assessments of those dimensions are not available
 - Student assessment is inadequate for comparison across groups of student with disabilities and most standardized, group administered tests are insufficiently sensitive to gauge gains
 - Students with disabilities served by multiple professionals, introducing significant sources of error

Our Attempt

 Focused mostly on understanding some key dimensions of teacher quality, for both beginners and experienced teachers, and to a lesser degree, the contextual and preparation factors that seem to support quality

What did we do?

- Quantitative studies of 33 beginning teachers and 62 of varied experience (Colorado, Florida, California)
- In-depth, qualitative studies of selected beginning and experienced teachers involving both interviews and observations



Quantitative Analysis

- Hierarchical linear modeling used to determine the relationships between student achievement and overall classroom reading practice, classroom management, general instructional environment, instructional practice, decoding practice, and comprehension
- Regression analyses used to determine relationships between knowledge for teaching reading and classroom practice
- Rasch analysis used to compare special education to elementary education teachers

Quantitative Findings

- Special education teachers:
 - demonstrated strong classroom management practices
 - demonstrated less sophistication when it came to some aspects of reading instruction
 - demonstrated knowledge for teaching reading that was comparable to experienced elementary teachers with extensive professional development in reading
 - were better able, if they were more experienced, to enact their knowledge for teaching reading, particularly in the area of decoding

Quantitative Findings

- Classroom management practices and ability to engage students in intensive, continuous instruction (general instructional environment) predicted moderate portions of variance in oral reading fluency, word identification, and comprehension performance
- Decoding practices contributed a moderate portion of variance to word identification gains
- Comprehension practices contributed a moderate portion of variance to comprehension scores after controlling for initial oral reading fluency scores

Qualitative Findings: Beginning Teachers

- Knowledge of special education and knowledge of reading pedagogy are both important, and most beginners feel unprepared to teach reading
- Opportunities to apply and practice teacher education content influences sense of efficacy and classroom practice
- Preparation in classroom management influences a beginners' ability to deliver instruction

Qualitative Findings

- Access to curriculum and relevant training influences instruction
- Service delivery model influences ability to provide instruction
- General administrative and collegial support plays a necessary, but not sufficient role in supporting beginners

Conclusions

- Domain expertise appears to be an important component of special education teacher quality.
- Effective special education teachers have domain knowledge and know how to enact it using effective pedagogy
- Beginning teachers demonstrated a need to strengthen reading instruction

Conclusions

- The nature of preparation in reading seems to matter--good experience is necessary
 - Findings supported in studies of general teacher education
- Curriculum seems to play a role in supporting beginning special education teacher practice
 - Findings supported in studies of general teacher education
- Uneven practice of beginners suggests a need for coherence between preparation and induction

Questions to Consider

- Given the dramatic shortages of special education teachers, and our subsequent need to prepare teachers broadly, how can we help special education teachers develop the domain expertise they need to teach reading well?
 - Or, the domain expertise they are likely to need to teach other subject areas well?