Abstract

Title: The Effect of Content-Focused Coaching on Reading Comprehension Instruction: Evidence from Urban and Rural Schools

Topic and Project Type: This proposal addresses the IES Request for Applications for Initial Efficacy and Follow Up projects in the topic area of Effective Instruction.

(2) Project summary
Purpose: Results of national assessments show that a large percentage of students in the United States do not advance beyond basic levels of reading comprehension, and this is especially the case for minoritized students, English learners (ELs), and students living in poverty who are consistently and disproportionately represented within the lowest levels of reading achievement. The purpose of this project is to test the efficacy, implementation, and cost-effectiveness of a web-based professional development program, Online Content-Focused Coaching (CFC), for improving the quality of reading comprehension instruction (text discussion quality) and students’ reading skills in schools serving high numbers of low-income, minoritized and EL students.

Online CFC is a fully developed professional development program that was advanced with support from an IES Development (Goal 2) grant. Pilot study results from our development work, that met What Works Evidence Standards (with reservations) suggest that Online CFC can increase classroom text discussion quality and students’ reading achievement in urban schools. Our proposed study will formally evaluate Online CFC as implemented in a larger sample of similar, urban schools and include coaches who were not part of the original development team. In addition, we will investigate the implementation of Online CFC in a small sample of geographically diverse rural schools in order to generate information that could be used to evaluate and adapt the intervention for use in those contexts. In both cases we will track and price the ingredients to estimate the cost necessary to implement Online CFC and to produce estimated effects on achievement.

Project activities: We will conduct a cluster randomized-controlled trial to evaluate the effectiveness of Online CFC. Comparing Online CFC to business as usual for literacy coaching and professional development in the district, we will measure the quality of classroom text discussions, students’ reading achievement scores, the inputs required to achieve these effects, and their costs. Using similar measures as in the efficacy trial, we also will employ an interrupted time series design to explore the implementation of Online CFC in three geographically and demographically diverse rural school districts.

Products: Products will include evidence of the efficacy of Online CFC for improving teaching and students’ reading skills, including the reading skills of English learners. Our cost-effectiveness estimates will provide school and district leaders with actionable evidence to guide their decisions about allocating resources for improving literacy versus competing initiatives. Other products will include tools and protocols that can be incorporated in coaching programs for professional learning purposes.

(3) Structured abstract
Setting: The proposed project is comprised of two studies: Study 1 will be conducted in a large urban district located in New Jersey. The district mirrors the demographics of large urban school districts across the US. The majority of students (69%) are Latinx; 22% are African American, 6% Asian, and 5% white. About a third (35.6%) of the students are from families with incomes below the poverty line. Nearly 57% of the students speak a primary language other than English, and 8.3% are designated as English Learners (ELs). Study 2 will be conducted in three rural districts that reflect the diversity of rural education in the US. One district, designated as rural fringe, is located in Pennsylvania and serves primarily (97%) white students, relatively few of whom are from families whose incomes are below the poverty line (10%). The second district, designated as rural distant, is in Virginia and serves mostly white (66%) and African American (27%) students, about a third of whom are from families whose income is below the poverty line. The third district, designated as rural remote, is located in South
Dakota and serves students from the Rosebud Sioux Tribe. The majority of students (81%) are American Indian, white (8%), or identify as two or more races. Over half (60%) of the students are from families whose income is below the poverty line.

**Population/Sample:** Study 1 will be conducted with 112 fourth- and fifth-grade teachers in an urban district and their students. Study 2 will be conducted with 21 fourth- and fifth-grade teachers from three rural districts.

**Intervention:** Online CFC is comprised of a six-week online workshop followed by five cycles of remote coaching centered on teachers’ videoed class discussions. Through the workshop and coaching, teachers learn how to apply Questioning the Author and Accountable Talk techniques to increase the rigor and interactivity of their classroom text discussions. To be successful, the intervention requires skilled coaches, access to technology for videos and online conferences, and approximately 30 hours of each teacher’s time.

**Research Design and Methods:** Study 1 in urban schools (years 1 & 2) will be a cluster-randomized trial. Study 2 in rural school (years 1-4) will employ a quasi-experimental interrupted time-series design. Our cost analysis will follow the Ingredients Method; the data collection and research design will parallel the outcomes analysis in each study.

**Control Condition:** The control group (study 1) will continue with the coaching and professional development that is standard practice in the district and will have the option to take the CFC online workshop at the end of data collection in the district.

**Key Measures:** Data sources include multiple videoed lessons, teacher surveys, teacher and coach logs, transcripts of coaching sessions, interviews, and state standardized reading achievement scores. Constructs measured in surveys include beliefs and endorsed practices aligned with dialogic reading instruction including the quality of teacher questions, teacher facilitation to elicit and extend student thinking, and student discussion participation. Implementation quality, participant response, and feasibility of the intervention also will be assessed. Prices of inputs will be measured for our participating districts (representing several states and spending environments) and national averages.

**Data Analytic Strategy:** Analytic methods include descriptive, correlational, multivariate, multilevel and longitudinal analyses. Qualitative methods will be used to analyze transcripts of coach-teacher conferences around teachers’ videoed lessons, and teacher/school leader interviews in the rural schools.

**Cost Analysis:** Researchers will conduct a cost-effectiveness analysis to help schools and districts calculate the cost of implementing Online CFC under different conditions.