

**Evidence of the Effects of a Practice-Based Reading Comprehension Professional
Development on Teachers' Knowledge of Reading Comprehension**

Ashley M. Stack¹, Kausalai Wijekumar¹, Marianne Rice², Debra McKeown¹, Hope Gerde¹, Wen
Luo³, and Pui-Wa Lei⁴

¹Department of Teaching, Learning and Culture, College of Education, Texas A&M University

²Department of Theory & Practice in Teacher Education, College of Education, Health, &
Human Services, University of Tennessee – Knoxville

³Department of Educational Psychology, College of Education, Texas A&M University

⁴Department of Educational Psychology, Counseling, and Special Education, College of
Education, Penn State University

Funding: The research reported here was supported by the U.S. Department of Education, through grants U423A180074 (Supporting Effective Educator Development, SEED) and S411A0021 (Education Innovation and Research, EIR) to Texas A&M University. The opinions expressed are those of the authors and do not represent views of the U.S. Department of Education.

Abstract

Teachers' knowledge matters to student achievement. The present studies establish the efficacy of a reading comprehension professional development on teachers' content knowledge, pedagogical knowledge, and self-perceived efficacy for teaching reading comprehension strategies. In randomized controlled Study 1, teachers who participated in the two-day online practice-based professional development for the Knowledge Acquisition and Transformation Framework scored statistically significantly higher on the Main Idea Quality post-test ($ES = 1.11$, $p = .002$) and self-perceived efficacy at post-test ($ES = 0.34$, $p = .002$) compared to teachers in the control group. In Study 2, teachers who participated in the in-person professional development also scored statistically significantly higher on the Main Idea Quality post-test ($ES = 0.88$, $p < .001$), but not on self-perceived efficacy at post-test ($p = 0.251$) compared to the control group. Independent samples t-tests revealed there were no statistically significant differences between the pre- to post-change score means between the online and in-person professional development. The results suggest that reading comprehension professional development improves teachers' content knowledge of reading comprehension on a proximal measure and improves teachers' self-perceived efficacy for teaching reading comprehension strategies. The results also suggest the current online and in-person professional development formats were not significantly different at improving teachers' knowledge of reading comprehension instruction.

Keywords: teacher knowledge, professional development, reading comprehension