# How on-the job learning affects teacher practice in elementary school

Teacher Learning and Instructional Change: How Formal and On-the-Job Learning Opportunities Predict Change in Elementary School Teachers' Practice

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### Overview

This study examines the links between elementary school teachers' formal and on-the-job learning opportunities and changes in their classroom practice in mathematics and English Language Arts (ELA). Specifically, researchers wanted to know: What are the relative effects of teachers' formal and on-the-job learning opportunities on their changes in instructional practice? Are these relationships affected by teachers' perceptions of their schools' organizational conditions?

# Study approach

This study is a mixed-method evaluation of a leadership development program in all 30 elementary schools in a mid-sized urban school district in the southeastern U.S. The sample for this study was limited to self-contained kindergarten through 5th-grade classroom teachers responsible for both math and ELA instruction.

Teachers responded to a survey that included questions about their formal and on-the-job learning opportunities, perceptions of their schools' organizational conditions, and individual characteristics.

The descriptions of on-the-job

learning opportunities were "Collaborative Discussion," "Peer Observation and Feedback" and "Math and ELA Advice Seeking." The measures of organizational conditions were "Professional Learning Community" and "Principal Develops Goals."

The data were pooled into a sample of 1418 observations, and five ordinary-least-squares multiple regression models were computed for changes in math and ELA teaching practice.

### **Selected findings**

The correlations between the dependent variables — changes in math and ELA teaching practice — and teachers' formal and on-the-job learning opportunities were low to moderate, ranging from .08 to .25. Collaborative discussion had the strongest positive association with changes in both ELA and math, at .23 and .25, respectively. Finally, nearly all of the correlations between variables were significant at the p < .01 level.

Analysis of the data confirmed that formal professional development and on-the job opportunities, specifically collaborative discussion and advice seeking, remained statistically significant predictors of teacher change in math and ELA teaching practice, although the coefficients were small. Furthermore, that relationship was unaffected by teachers' perceptions of their schools' organizational conditions.

## Implications for school leaders

These findings suggest that the learning opportunities in which teachers



engage within their school buildings are at least as predictive of change in teacher practice as are subject-specific formal professional development sessions they attend. Principals may want to consider:

- Ways to promote teacher discussion about new learning and student challenges and to more time available for such learning and advice seeking. What would it take to make such time a regular part of the schedule?
- Whether teachers are losing opportunities for more effective learning with the school's overemphasis on formal or traditional professional learning. What are ways to explore this further and determine what changes, if any, to make if we discover a problem?

While other studies emphasize the importance of organizational conditions for effective teacher learning, this study suggests that organizational conditions do not inhibit job-embedded collaborative learning opportunities. (9)