

Instructional Coaching and Student Outcomes: Findings from a Three Year Pilot Study

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Abstract

Teachers and teaching are at the forefront of the school reform agenda. There is a consensus that in addition to better teacher preparation, a stronger curriculum, better diagnostic tools and assessments, and significant changes to accountability systems, effective professional development is one key to improving the quality of instruction in schools. Instructional coaching is one approach to professional development that is of particular interest in many schools and school districts across the country.

This study focuses on a coaching model designed by the Pennsylvania Institute for Instructional Coaching (PIIC), a project supported by the Annenberg Foundation and the Pennsylvania Department of Education (PDE). The PIIC model emphasizes the simultaneous use of four strategies: one-on-one teacher engagement; evidence-based literacy practices applied across the curriculum; data analytics; and reflection on practice.

Taking advantage of an unusual opportunity, this study broadly glimpsed the effects of coaching, looking for relationships among coaching, teaching, and student outcomes as reflected in student performance on statewide assessments in reading (PSSA). We were able to identify a treatment school where all teachers, at all grade levels in the school were coached, and we were able to obtain individual level student standardized test results for students at that school. For comparative purposes, we also identified two schools, each with similar demographic and performance profiles to the treatment school, but without a coaching program.

We posed three research questions—one related exclusively to student outcomes on the reading PSSA within the treatment school where teachers were coached; and two involving multi-year comparisons of student outcomes between the treatment school and two comparison schools, where teachers were not coached. These were the research questions:

How have students at the treatment school performed on PSSA reading, as compared with predicted estimates from the state value added assessment (PVAAS), during the time the school had a full-time coach working with teachers at all grade levels?

From grade level to grade level, over a three year research cycle (pre-coaching, first year of coaching—the base year—and the following year), how do changes in the performance of students on PSSA reading in the treatment school compare with the performance of students in the comparison schools? Do incoming 3rd, 4th, and 5th graders, etc. show increasing proficiency in the treatment school where teachers were coached compared with students in the same grades in the comparison schools which did not have coached teachers?

For each grade cohort, over a three-year period, how do changes in the performance of students on PSSA reading at the treatment school vary as students progress from grade to grade, compared with the performance of students in the comparison schools?

Data were gathered over a period of three years from two sources—the Pennsylvania Value Added Assessment System (PVAAS) and the Pennsylvania Standardized Student Assessment (PSSA). Individual unit record data were available for students in the treatment school and aggregate data for students in the comparison schools.

On all three research questions, there was evidence to improvement in PSSA reading results at the treatment school at rates often exceeding results at the comparison schools. This was true for some grade levels more than for others and for some student cohorts, including economically disadvantaged students, more than for others. But taken as a whole, the results offer some positive indications as to the efficacy of instructional coaching as a professional development initiative.

Instructional coaching is not a practice that can be viewed in isolation. At its best, it supports a quality instructional program in a school. The strategic delivery of coaching over time can have an impact on teachers' instructional practice and, in turn, this can help change the nature of teaching in ways that lead to improved student learning.