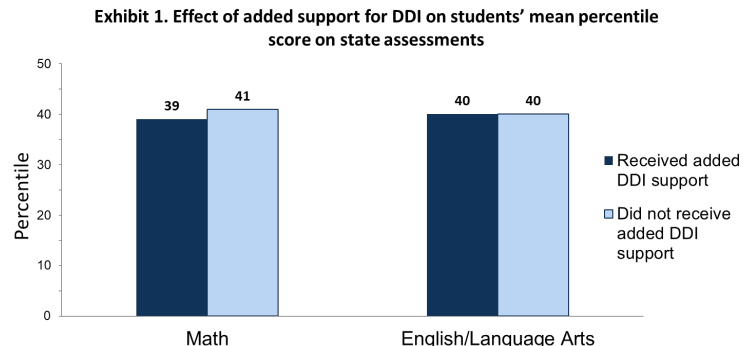


Evaluation of Support for Using Student Data to Inform Teachers' Instruction

Most districts help teachers use data to improve student learning, often supporting this effort with federal funds.¹ But many teachers feel unprepared to use student data to inform their instruction² – referred to as data-driven instruction (DDI) – and there is little evidence of whether it improves student achievement. We recruited 102 elementary schools to participate in a study to better understand the potential of providing support for DDI. Half of the schools were randomly assigned to receive funding for a data coach of their choosing as well as intensive professional development for coaches and school leaders on helping teachers use student data to inform their instruction. All of the schools selected for the extra support hired data coaches, and most of the coaches and school leaders attended the professional development and met regularly with teachers. However, it was also not uncommon for teachers in schools which did not receive the extra support to engage in data-related activities or work with a data coach. Comparing the classroom instruction and student achievement in schools that received the extra support versus those that did not provides evidence on the effectiveness of this specific approach to providing support for DDI.

KEY FINDINGS

- **The study's DDI coaching and professional development did not increase teachers' data use or change their instructional practices.** Prior research has suggested specific ways teachers can use data to improve student learning – for example, by using it to monitor student progress or to plan individualized instruction.³ The support offered in this study was intended to boost collaboration among teachers to analyze student data and tailor their instruction in response. However, teachers in schools who received additional DDI support reported using data and data-driven instructional approaches in largely the same ways as teachers in schools not receiving extra support.
- **The study's support for DDI did not improve students' achievement.** On average, students had similar achievement in math and English/language arts whether they were in schools that received extra DDI coaching and professional development or not (Exhibit 1). Students in each group scored near the 40th percentile on their state assessments in each subject.



Findings from recent studies have raised questions about DDI's effectiveness, and this study found that support for DDI did not affect teacher practice or result in improved student achievement. But implementation findings from this study could also suggest possible avenues for improving how DDI is supported and implemented in the future. For example, schools in the study all hired data coaches that were experienced educators, but it was rare for them to have previously worked as a data coach. Perhaps inexperienced data coaches need more than the study's 40 hours of DDI-related professional development to be effective. In addition, most DDI support programs, including the one evaluated in this study, emphasize interpreting data more than offering specific guidance on what teachers should do next. Future efforts to provide DDI support might place greater emphasis on helping teachers identify and select appropriate instructional practices based on their data analysis.

¹ Troppe, et al (2017). *Implementation of Title I and Title II-A Program Initiatives: Results from 2013-14* (NCEE 2017-4014). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

² Ibid.

³ Hamilton, et al (2009). *Using Student Achievement Data to Support Instructional Decision Making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.