

How One Elementary School Uses Data to Help Raise Students' Reading Achievement

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If you are a classroom teacher or a school administrator, chances are you are inundated with all sorts of data, including student demographic information, reading and writing test scores, and an array of formative assessment data used for documenting and promoting student reading and learning. The key question here is, What are the factors that contribute to effective uses of data to help raise students' reading achievement? In this column, we share collective reflections from two literacy specialists and one school administrator in one Midwestern U.S. elementary school, which highlight the value of using data collaboratively to bring about instructional change and to improve student reading achievement.

School Setting

Westwood Elementary School was established in 1989 in Ankeny, Iowa, a suburb of Des Moines. It is affiliated with the 10th largest district in the state, Ankeny Community Schools, which currently serves 7,500 students in eight elementary schools, two middle schools, and one high school. Westwood has an enrollment of 638 kindergarten to fifth-grade students with 78 teachers and support staff. The demographic profile of the students shows that of the 638 students enrolled, 49% are female and 51% are male. Ethnicities represented include Asian (1.6%), Hispanic (0.8%), African American (0.8%), and Caucasian (96.8%). The percentage of free and reduced-cost lunch rate is 7.8% compared with the district's rate of 8.4%.

Annual performance reports indicate that while Westwood student reading performance scores have

been above average, they have remained flat for many years. Over the past several years, subgroups of students on Individualized Education Plans (~7%) placed the school on the No Child Left Behind (NCLB) watch list for underperforming in reading. It was evident that these students' reading performance needs were not being met adequately and that some changes were in order.

As a result, during the 2006–2007 school year, the school administration—led by 19-year veteran school principal Jim Ford—instituted a professional development initiative with the goal of significantly increasing the reading performance of all students, paying special attention to students whose performance was two or more grade levels below expectations. The professional development initiative began with the establishment of a schoolwide professional learning community, inspired by DuFour and Eaker's (1998) *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement*. This provided school personnel with an organizational framework for ongoing discussion, collaboration, and action, which focused on enhancing reading instruction, teacher learning, and school performance.

Documentation of Improved Reading Achievement

A review of Westwood Elementary School's data two years following the establishment of the professional development initiative shows significant improvements in student reading performance across all

grades. A sampling of the data describing improvements in student reading performance includes the following:

- Ninety-six percent of kindergartners ended the 2008–2009 school year able to read at or above grade level, with only marginal differences among races and income groups.
- The percentage of first-grade students who achieved a proficient score on reading comprehension rose to 94% in the spring of 2009 from 87% in the fall semester of 2008.
- The percentage of second-grade students who achieved a proficient reading comprehension score rose to 88% in the spring from 61% in the fall semester.
- In third grade, about 92% of the students tested proficient or advanced in reading on state tests compared with only 84.8% in the previous year and 81% for the district.
- In fourth grade, about 95.1% of the students tested proficient or advanced in reading on state tests compared with only 89.6% in the previous year and 89.1% for the district.
- In fifth grade, about 94.5% of the students tested proficient or advanced in reading on state tests compared with only 79.6% in the previous year and 91.4% for the district.

With remarkable results such as these, Westwood was officially off the NCLB watch list for underperforming schools. We invited Jennifer Thoma, second-grade teacher and coauthor of this article, literacy leader Sara Muller, and Principal Ford to provide a context of such improvements and to reflect on the factors that may have contributed most to the significant changes in student reading achievement. Principal Ford noted that although the students' reading improvements are quite impressive when compared with results of the previous years, and the results of similar schools elsewhere in the district, the school has much more work left to do.

Principal Ford and his teacher team agree that addressing the reading and learning needs of all students within the school must begin with establishing a culture of continuous school improvement. Although there are no universal foolproof solutions to improve students' reading performance, the group pointed to three critically important factors they

suspect contributed most to the creation and maintenance of such a culture of school improvement: (1) employing specialized reading professionals who are qualified and committed to carry out the school reading improvement goals, (2) establishing professional learning communities focused on improving reading achievement, and (3) putting in place systems that support student, teacher, and school performance.

Employing Specialized Reading Professionals

It is critical that schools hire teachers who are appropriately credentialed in their area of expertise. Appropriately credentialed reading specialists and coaches have the knowledge and skills that support the high-quality reading instruction in schools as expected by the profession (International Reading Association, 2000; National Institute of Child Health and Human Services, 2000). Research insights gleaned from the study of schools with exemplary reading programs indicate that effective and expert teachers are what matters most in teaching children to read (Allington, 2006; Allington & Johnston, 2001; Darling-Hammond, 2006; Pressley, Allington, Wharton-MacDonald, Collins-Block, & Morrow, 2001; Reutzel, Cooter, & Blake, 2008; Taylor, Pearson, Clark, & Walpole, 2000). The appropriate credentialing helps teachers develop the advanced expertise necessary to support and maintain effective reading instruction in schools (Bean, Swan, & Knaub, 2003).

Allington (2006) further noted that effective and expert teachers are, in fact, much more important than particular reading materials, pedagogical approaches, or proven reading programs. At Westwood and across the district, reading specialists and coaches are appropriately credentialed. They are highly qualified individuals who know how to create the classroom conditions under which all children can and should become independent and proficient readers.

Establishing Professional Learning Communities Focused on Improving Reading Achievement

With respect to use of data for instructional decision making, research tells us that teacher engagement in ongoing collaborative data review and reflection

leads to substantive changes in reading instruction, which can, in turn, result in significant improvements in student reading achievement (e.g., Reutzler et al., 2008; Ronka, Lachat, Slaughter, & Meltzer, 2009). At Westwood Elementary School, the principal and teacher teams have created the conditions that support collaborative data analysis and use, including routine meeting times, opportunities to learn data management skills, and group norms that foster collaboration and relational trust among school staff. Grade-level teachers meet in teams on a regular basis to explore data from a range of sources, focusing not just on reading achievement outcomes but also on effort and improvement. This provides teachers with the opportunity to review and reflect on the data, then respond with strategies that will enhance classroom reading instruction.

When reviewing data, teacher teams organize their discussions by focusing on specific questions related to student reading and learning needs (e.g., what are the characteristics of students who achieve reading proficiency and those who do not?) and issues (e.g., where are we, as a school, making least or most progress in closing the achievement gaps?) rather than on the data alone. By focusing on important questions that drive the dialogue about student reading performance, teacher teams report finding it easier to identify and use the different types of assessment data in order to answer those questions. The information is then translated into priorities, instructional goals, and strategies that are linked to school curriculum planning and decision making. An example of translating information gained from data at Westwood includes the creation of a daily 30–40-minute enrichment time period, which focuses on providing supplemental reading instruction to small groups of students and individual students experiencing reading difficulties.

Putting in Place Systems That Support Student, Teacher, and School Performance

Principal Ford plays an important leadership role in keeping teachers focused on student learning through collaboration and support. By providing the

tools that support teachers and school staff in their daily work, he empowers them to become the driving force of school improvement efforts. To enable teachers to collaborate on data analysis and interpretation, Principal Ford arranged for substitute teachers to cover classes for two hours while teachers and staff work collaboratively to examine and interpret student reading performance data. The school district supported this effort by providing Teacher Quality funds to compensate for the extra hours teachers were working. Teachers and administrators carved out time to meet every week focusing specifically on student data and teacher professional development. Finally, instructional leaders were added to each elementary building to support these areas. To facilitate collaborative data analysis, teachers use weekly late-afternoon grade-level team meetings to review specific needs, refine lessons, analyze student work, or discuss peer observations they conducted the previous week. Throughout this process, the principal serves as an instructional leader whose role is to set expectations, provide time for team meetings, model engagement in the process, monitor the process and end products, and recognize and reward teachers' accomplishments. Future plans include a built-in time for teacher meetings during late-start Wednesdays and during common planning times among grade-level teachers.

Final Thoughts

Teachers at Westwood Elementary School are generally pleased with their accomplishments relative to increasing student reading achievement. They praise the school administration for establishing professional learning communities within the school, focusing on improving student reading achievement. They concur that functioning as a learning community enabled them to create a culture of collaboration that highlights the value of using data to bring about instructional change and to improve student reading achievement, and they are pleased with the results achieved thus far. Educators and researchers who have studied and helped schools create a culture of collaboration focused on data (e.g., Boudett, City, & Murnane, 2005; Boudett & Steele, 2007; Steele & Boudett, 2009) highlight significant advantages to examining data collaboratively for teachers in particular and for schools in general.



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First, the collaborative analysis and use of data for instructional decision making enhances organizational learning and “gives teachers a safety net for taking risks and improving their craft” (Steele & Boudett, 2009, p. 57). A 1996 report by the National Educational Association Foundation on high-quality professional development concluded that “when teachers spend time analyzing and discussing instructional practice and the resulting samples of student work, they experience some of the highest caliber professional development available” (Renyi, 1996, p. 2) Second, there is a collective feeling among teachers within the school that the deliberate process of exploring data and taking collaborative action promotes a sense of accountability and shared responsibility by helping teachers and staff see their work as part of a larger effort to serve students more effectively. Finally, teachers are appreciative of the school academic and administrative supports, which extend teacher learning and foster greater collaboration. Such a collaborative culture within the school enables teachers and staff to look more deeply at the data, focusing on clearly defined questions, to guide the school’s continuous reading improvement efforts.

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