



# SCHOOL-BASED COACHES PLANT SEEDS OF LEARNING

**A districtwide approach to data analysis promotes job-embedded learning and improved teacher practice**

**By Rachele Hill and Lori Rapp**

**S**chools and districts are inundated with data from a variety of sources. As a result, using data to guide instructional planning can be daunting for teachers and schools. While schools and districts are dealing with shrinking budgets and growing demands for high student achievement, an investment in school-based coaching can provide exponential change in a short time.

In 2007, Lewisville (Texas) Independent School Dis-

trict introduced school-based data coaches to assist teachers in using data and, as a result, increase student achievement. Instead of relying on outside sources for change, the district instituted change from within through school-based personnel who facilitated conversations about multiple sources of data. District administrators have found the initial investment in secondary school data coaches has fueled teachers' professional learning and growth.

#### **THE ROLE OF THE DATA COACH**

Research shows that coaching, teacher collaboration, and teacher reflection are vital components for creating

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change in instructional practice. Schmoker (2004) writes that research supports collaboration as a catalyst for teacher change. Wellman and Lipton (2003) advocate reflective conversations to institute change, but insist on the importance of a conversation facilitator in “intentionally organized opportunities” (p. ix). They write, “The quest for more data-based planning, problem solving, and decision making often stumbles against limited capacities for engaging in thoughtful interactions.” By scheduling meetings and guiding collaborative action supported by data, the school-based data coach bridges the gap between ill-equipped teachers and daunting data.

District administrators used the Texas High School Allotment fund to create the school-based data coach position in order to promote change on individual campuses.

School-based data coaches support teachers in a cycle of continuous improvement by training teachers to use the district’s data management system, facilitating data and curriculum conversations to result in data-driven action steps, and following up with teachers to ensure action steps have been implemented.

Lewisville’s data coaches impact teacher professional practice and, ultimately, student learning through conversations about local formative and summative assessments, standardized student achievement data, and walk-through trend data. At most of the secondary schools, data coaches schedule regular content-specific data conversations about district curriculum-based assessments with teacher teams. During these conversations, data coaches facilitate analysis of student performance on the most recent curriculum-

based assessments, examine students' identified misconceptions, and then create an action plan to strengthen student understanding. Later, data coaches follow up with teachers regarding their action plan and its success. This districtwide approach to data analysis promotes job-embedded learning and improved practice for teachers.

### DATA ANALYSIS IN ACTION

One middle school data coach explored the previous year's science state assessment scores. She created teacher-friendly reports that disaggregated the data according to specific state standards and student group performance. Then the coach facilitated conversations about the data with the school's science teachers. As a result of the conversation, the group formed a

plan to address academic vocabulary, department expenditures, and intervention structures for struggling students. At the end of the year, the school's science state assessment scores increased from 70% of students meeting the passing standard to 92%.

Another middle school data coach uses the previous year's curriculum-based assessments data to engage in proactive curriculum unit conversations with teachers. The data coach meets with the teachers before each unit begins, and the group examines last year's curriculum-based assessment data specific to that unit's learning goals.

Such meetings prompt teacher collaboration on instructional techniques that might improve student learning. As a result, teachers are willing to experiment with new instructional strategies in the classroom. These meetings with the data coach shifted teacher perspectives concerning curriculum-based assessments from district-mandated to local tools for assessing individual student learning.

Another data coach uses discipline, achievement, and attendance data to ensure that incoming 9th graders receive necessary interventions. The data coach, the lead counselor, the assistant principal, and the principal team up to examine all available data on entering freshmen. The team then facilitates conversations with teachers about how to support students who are at risk of dropping out of high school.

In addition to examining state and curriculum-based assessment data, data coaches are also trained to conduct classroom walk-throughs and facilitate trend data conversations. At

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one high school, the data coach encouraged math teachers to collect their own walk-through data by visiting each other's classrooms. As the teachers gather walk-through data on their department, the data coach organizes periodic, reflective conversations examining instructional practices identified in the walk-throughs. The outcome of these conversations establishes a focus for the next round of walk-throughs. Such an approach empowers teachers to reflect on their own practice in a non-threatening way.

### EVIDENCE OF CHANGE

Rapid growth in diversity across the district, a rising dropout rate, and low student achievement scores factored into the need for change. District data indicates that from 2002 to 2006, certain student groups, such as economically disadvantaged and English language learners, grew exponentially. State standardized test scores showed a large gap in math and science between white students and limited English proficient students, and the district had been labeled "academically acceptable" by the Texas Academic Excellence Indicator System.

However, by the end of the 2008-09 school year, the academic gap had begun to close. According to district records, the gap between white and limited English proficient students in meeting the passing standard in math on state assessments decreased from 26% to 15%. The gap between white and limited English proficient students in meeting the passing standard in science on state assessments decreased from 55% to 35%. In 2009-10, the number of limited English proficient students meeting the passing standard on the science assessment increased 43% (Fruge & Lewis, 2009).

The district's dropout rate decreased from 1.2% in 2005-06 to 1% in 2009-10. Moreover, the district's rating on the Texas Academic Excellence Indicator System increased from "academically acceptable" in 2005-06 to "recognized" in 2010-11. These results show that a district focus on curriculum, instruction, and assessment in partnership with data coaches yielded significant progress in student learning.

During year two, administrators and data coaches were surveyed to assess campus fidelity of implementation of the job description. According to administrators, 11 out of 16 respon-

#### Lewisville Independent School District

Lewisville, Texas

Number of schools: **67**

Enrollment: **51,920**

Staff: **6,332**

Racial/ethnic mix:

White:	<b>51.34%</b>
Black:	<b>8.74%</b>
Hispanic:	<b>25.96%</b>
Asian/Pacific Islander:	<b>10.70%</b>
Native American:	<b>0.43%</b>
Other:	<b>2.82%</b>

Limited English proficient: **13.06%**

Languages spoken: **81**

Free/reduced lunch: **27.8%**

Special education: **9.85%**

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dents rated their school-based data coach as extremely effective in conducting classroom demonstrations and visits to empower teachers to change instruction as deemed necessary by data. One principal said, “Our data coach is the nexus between student assessment data and targeted instruction in the classroom. For the first time, instruction is focused on specific objectives that are identified through various student assessments. The data discussions with teachers have dramatically improved the level of instruction in the classrooms.”

In addition, 14 out of 16 administrators rated their data coach as extremely effective in disaggregation and use of data results for student performance accountability to examine instructional efficacy. One high school principal wrote, “The disaggregation of data that [my data coach] does on a continual basis has not only improved instruction in the classroom and increased implementation of best practices, but it has also helped to identify strengths and weaknesses that exist in our classrooms.”

This year, the impact on teacher practice was evident in a survey on the effectiveness of data coaches. A high school math teacher wrote, “While teachers are aware that data is available for their students, they can become so busy with daily activities that they fail to take the time to go over the data and to reflect on how it impacts their own students. Data coaches help teachers take the time to examine their data and then utilize the data in a meaningful way. They also help teachers find ways to help their students based on the data.”

The presence of a job-embedded data coach ensures that teachers find the time for data analysis, which results in professional growth that directly impacts daily instructional practice. Such opportunities transform a school into an adult learning environment, where teachers learn what works best in each other’s classrooms and problem solve around current and real issues rather than waiting to attend a workshop or inservice.

## LESSONS LEARNED

Districts that are considering coaching or are in the early stages of adopting a coaching approach should consider certain lessons learned by Lewisville district administrators. At the outset, administrators hiring data coaches must have a well-defined job description establishing personality characteristics of a successful data coach. Administrators must pay attention to the characteristics of teacher leaders to determine an appropriate school-based coach. School-based data coaches must be able to create relationships with teachers based on trust, honesty, and respect in order to promote change within a school.

Data coaches also should be available to teachers when needed. Initially, some data coaches were still teaching one class, and many middle school coaches currently share test coordination responsibilities. As a result, data coaches are forced to split time between teacher needs and other school duties. Ideally, the coach should be able to address teacher concerns immediately

instead of having to wait until time permits.

When planning for professional learning of the coaches, districts must require school leaders to learn alongside the coach to ensure that the learning translates back to administration as well as the faculty. Typically, after professional learning, the coach was expected to bring new knowledge back to the school. An unintended consequence of this delivery method was some administrators’ dependence on the data coach as the sole instructional leader on campus. In order to create a sustainable model of professional learning at the school level, more than one leader must be involved in implementing the district vision and goals so that crucial instructional conversations can happen even if the data coach is not available.

## AN INVESTMENT IN GROWTH

An initial investment in school-based coaches allows teachers to build capacity for continuous professional learning and growth through data conversations. Wellman and Lipton (2003) write that when educators regularly analyze data, reflect on current practice, and create action steps based on that information, they “plant the seeds of their own professional development. Teachers harvest these seeds in the successes of their students” (p. x). In a time of shrinking resources, it may seem that an investment in a nonteaching position is not feasible, but in the end, the payoff is invaluable.

## REFERENCES

Fruge, C. & Lewis, L. (2009). *Application for recognition for exceptional use of the high school allotment fund*. Lewisville, TX: Lewisville Independent School District.

Schmoker, M. (2004, February). Tipping point: From feckless reform to substantive instructional improvement. *Phi Delta Kappan*, 85(6), 424, 426-432.

Wellman, B. & Lipton, L. (2003). *Data-driven dialogue: A facilitator’s guide to collaborative inquiry*. Sherman, CT: MiraVia.

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