

Building a Data Culture: A District-Foundation Partnership

Debra Vaughan and Kirk Kelly

In Chattanooga, Tennessee, a district and its partner, a local education fund, created a culture where using data for decision making is now the norm.

At the middle school principals' network meeting, the room is abuzz with principals poring over school-level, disaggregated data.

Miles away on the other side of the county, a high school leadership team (composed of the principal, assistant principal, change coach, literacy and numeracy coaches, college access counselor, and department lead teachers) is reviewing, discussing, and learning from their data with central office administrators.

Downtown, at an elementary school student-led parent conference, fifth-grade students are discussing with their parents data that describe their academic performance on state standards.

All across Hamilton County—Chattanooga, Tennessee, public schools are using data to inform instruction, enhance leadership, and motivate students to higher levels of achievement.

Having data is not a new phenomenon. In fact, in the past, schools have been inundated with data, resulting in what is comically known as “paralysis by analysis” – schools had so much data that they didn’t know what to do with them all. But this is no longer the case for Hamilton County—Chattanooga schools. The Hamilton County Department of Education, in partnership with the Public Education Foundation of Chattanooga (PEF), is dedicated to providing schools with data they can use to improve teaching and learning.

Data are used to help schools, teachers, and students improve. Data have become a valuable tool to improve instruction and increase student achievement. Because of this, there has been a culture change – a change in educators’ attitudes toward data. It began with a reluctant acceptance of data. During principal network meetings, principals were given school-level data, disaggregated in a variety of ways, and asked to reflect on the data. Protocols were used that allowed principals to focus on “what the data are saying” about their school in a safe, nonjudgmental environment. These ask:

- What do you see that you expected to see?
- What do you see that you didn’t expect to see?
- How can you use this in your schools?

These meetings served as a “sanctuary” for discussions around data. Principals began to feel comfortable digging into their own data and even sharing stories of success or lack of success, sharing best practices, and seeking advice from each other.

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Building a Data-Driven Culture

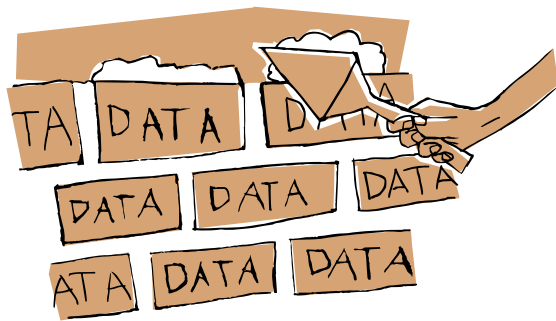
An important key to developing a data-driven culture is choosing metrics that matter. It is rather easy to recognize the metrics that matter to districts: meeting adequate yearly progress, scores on state assessments, attendance rates, graduation rates, etc. But more important are those that matter to principals and teachers: advanced scores on assessments, promotion from ninth to tenth grade in one year, students “on track” for on-time graduation, college readiness, and college matriculation. Teachers and principals really care when the metrics are ones that deeply affect student success. Schools can use these data to make a real difference for their students.

Choosing metrics that matter and sticking with them is important. It sends a clear message. The selected indicators drive our work for the long term; the reform efforts are not to be abandoned, and our direction will not change midway. For example, six years ago, the goals for high school reform were selected, with clear indicators of progress: more ninth-graders are promoted to tenth grade in one year, more students pass the state assessments (Gateway exams) with more students scoring at the advanced level, more students graduate, and more students enroll in college.

These goals and indicators were established at the beginning of the work and still act to guide the reform. As time passes, additional data surface that give us information about attaining our goals; for example, we determined that student attendance was a good indicator of whether students

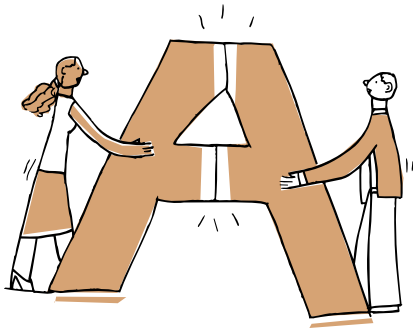
would pass state tests and graduate. These data are shared with principals and teachers as tools to make an impact on their efforts.

To make an impact, the data must be accurate, clear, and meaningful; most important, the data must be timely. For example, in district-led data meetings, each elementary teacher (grades 3–5) receives detailed data for each student currently enrolled in his or her classroom. These data are called “class re-organized” and are based on current enrollment. Class re-organized data include the previous year’s test results by standard performance indicators, the writing assessment score, the attendance rate, an indicator of



whether the student is over age for the grade, and formative assessment scores (such as DIBELS and Think Link) for every student in each class period. The design of this data report allows teachers to easily establish the skill level of an individual student or the entire classroom.

Great effort has been made to provide principals and teachers with data that are simple and easy to use; user-friendly delivery is vital. The district’s department of testing and accountability creates customized data



reports for each school. The reports are designed to provide feedback to facilitate learning. And to help schools use the data effectively, the department holds a comprehensive data meeting at every school. At this meeting, the district and foundation partners sit with the school's leadership team and discuss data. Although this is extremely time intensive, it is well worth the effort for schools. After each meeting, the director of testing and accountability asks: What else can we (the district) do to help you? What do you need that we didn't provide? How can we make these tools more user friendly? All suggestions are considered and, if possible, implemented. The district's central office strives to provide the most appropriate data in the best format to schools.

In addition to delivering the data, the district-PEF partnership has also worked hard to conduct analysis and research. Efforts have been made to go beyond the "what" and discover

the "why." It isn't enough to simply know that some teachers are able to move their students to high levels of achievement; it is vital to understand how that happened. It is the hope that the collection and analysis of data, both quantitative and qualitative, will lead to a greater understanding of what good instruction looks like. By identifying those best practices that are most effective for students, schools will establish a vision of instruction to help more and more students achieve advanced levels of learning.

In addition to teacher practices, student-outcome data are analyzed. For example, the district's analysis of dropout data indicated that a strong correlation exists between a student's tendency to drop out and being over age for grade level. Students who are not successful in elementary and middle schools enter high school and soon drop out. The study did confirm the important role each school has in a child's graduation and success beyond high school. Elementary and middle schools are now more aware of the impact they have on student success in the long run. The district is currently investigating various ways to prevent dropout by focusing on the early grades.

Creating a Focus

Data help to create a focus on target areas. For example, ninth-to-tenth-grade promotion rates are not part of the state's system of accountability and were not on the high school radar screen. Research by the Consortium on

Chicago School Research and others, however, have found ninth-grade promotion to be pivotal for high school student success. In 2003, the district and PEF began to collect and analyze the data on promotion rates.

The results were disappointing. Districtwide, 77.3 percent of first-time ninth-graders met the requirements to be promoted to the tenth grade. The data were shared in the principal network meetings. Some principals were shocked by their data; others were pleasantly surprised. But all principals pledged their commitment to do all they could in their schools to provide support to students and faculty to increase student success in the ninth grade and beyond. The principals returned to their schools and worked with their teams to tackle this issue.

The story of one suburban school illustrates the power of data to influence practice – and results. The principal stunned his staff when he showed them that their ninth-to-tenth-grade promotion rate was a dismal 74.0 percent. The staff were taken aback; they had believed they were doing an excellent job with their students. “So,” he asked, “what are we going to do about this?”

The staff created a plan that included a ninth-grade academy. They shifted teachers in a way that put the best teachers in front of the students that needed them the most in the courses that seemed to be the stumbling blocks for their ninth-graders. As a result, their ninth-to-tenth-grade promotion rate increased to 95.2 percent in 2006. And the percentage of district ninth-graders advancing to tenth grade in one year has increased to 89.1 percent.

Data also help to foster a foundation for professional development. As education beyond high school

has become not only *possible* for all students but, indeed, *necessary*, college-readiness standards have emerged as significant data. Using data from ACT’s Educational Planning and Assessment System (EPAS), schools are discovering where their students are and where they need to be so they are ready for college. Networks looked at eighth-graders’ performance on EXPLORE and tenth-graders’ performance on PLAN and ACT results. Each network examined the EPAS standards and recognized that college success truly does begin in kindergarten.

This recognition became the core of a wave of professional development opportunities for many schools across the district. In a K–12 network, elementary, middle, and high schools began to use the ACT standards to help plan curriculum, from kindergarten to twelfth grade. These schools are developing vertical alignment based on the standards. Elementary schools are collaborating with middle schools, and middle schools with high schools, on data that matter for students. Students and parents are engaged in these efforts, too. Students and parents may not get

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excited about their student's scores on the state assessments, but they get extremely excited about the prospect of their student being prepared to succeed in college.

The college-going data also serve as a great vehicle to engage the public's interest in public education. Chattanooga–Hamilton County has an extraordinarily high percentage of high school students enrolled in private schools (24.5 percent in Hamilton County, compared with 11.2 percent in Tennessee and 9.5 percent in the U.S., according to the U.S. Census Bureau.) This translates, unfortunately, into a public that fails to support and believe in public education. The college-going data help the community see the success of our public schools.

We actually create a visual of that college-going success by geo-coding the many colleges and universities where Hamilton County public school graduates enroll, as verified by the National Student Clearinghouse. For the graduating class of 2006, for example, 70 percent of students enrolled in colleges and

universities in twenty-nine different states, plus Canada and St. Kitts. The resulting map provided clear evidence that public schools in Hamilton County are preparing students for college. This information is shared each year with the public through newspaper and media coverage, as well as presentations to various civic organizations such as the Chamber of Commerce.

Data Delivery

The data collection and analysis would be in vain if it never reached the classroom. Data and analyses are shared with schools in a variety of ways. The district is dedicated to holding data meetings at every school; this is the district's major method of student-level data delivery. The meetings involve the entire leadership team, and current, on-time data are clearly presented and discussed. The district data team leads the discussion and review of school and district goals.

In addition, the foundation facilitates network meetings. Within the district, there are multitudes of networks. Networks of principals (urban elementary principals, middle school principals, and high school principals) meet monthly at PEF in the Ruth S. Holmberg Center for Excellence in Leadership to discuss reform metrics. Assistant principals also have a network; their meetings are designed to parallel that of their principals. The literacy and numeracy coaches' networks meet regularly. College-access counselors and guidance counselors also participate in a network. Furthermore, K–12 networks, comprising schools within feeder patterns, meet to discuss appropriate data and metrics to determine ways that they can collaborate and support each other.

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Throughout the district, networked learning communities gather to learn from their data. The networks provide a strategic forum for discussion among colleagues in like roles. The various network discussions are coordinated, however, in such a way that topics are echoed throughout the multiple levels of a school and district. Thus, networks provide both horizontal and vertical articulation of ideas.

Challenges

Creating and sustaining a data-driven, data-informed district has its challenges. The most critical component of the ability to be data focused is based on having confidence in the accuracy of the data. Therefore, accurate data entry is essential. Much of the student-level data is keyed into the district database by school office staff. This data entry must be accurate, as well as timely. There must be continuous quality checks to ensure reliability.

In addition to high-quality data-entry staff, schools need adequate instructional support. Providing data to inform instruction is not enough. Principals and assistant principals, as instructional leaders of their buildings, need support to develop a clear and conceptual vision of good instruction in the many content areas. For many schools, change coaches provide this type of support to their leadership team. Teachers also need support to interpret the data analysis and incorporate it into their classrooms. Literacy and numeracy coaches provide instructional support to teachers. They help translate data into high-quality instruction.

With the increased reliance on data, it is a challenge, at times, to meet the increasing demand for data and analyses. Between the district and PEF, the combined staff dedicated to the



collection, analysis, and delivery of data and research totals *three individuals*. Budgetary constraints make it difficult to increase the staff and capacity of the organizations at this time.

A Common Vision and Mission about What Matters Most: Students

The partnership between the district and PEF has, however, managed to make the most of their combined resources. The district's director of testing and accountability and PEF's director of research and evaluation work closely together, taking advantage of each other's strengths to maximize their efforts to deliver information to schools, to the central office, and to PEF. The two directors meet frequently to discuss and share various projects, information, and data. Although their individual roles and responsibilities differ, they are joined by a common vision and mission for the students of the district. The work of each complements and supports the other. It is this strong and solid partnership that is responsible for much of the progress made around data collection, analysis, and delivery.

Indeed, data have become a critical tool for the district and its partners for leading reform. Constant review and discussion of data for monitoring and evaluating the implementation and impact of reform efforts allows for programmatic adjustments to be made when necessary. The results of these efforts are astounding. Across the district, elementary and middle school student-achievement scores are up, with impressive increases in many schools in the percentage of students

scoring *advanced*. Careful analysis of the achievement gaps related to gender, ethnicity, and socio-economic status has brought attention to this issue; schools have responded accordingly. Achievement gaps are closing. The dropout rate is down, and the graduation rate is up. More and more students are graduating and matriculating into college. But the data show that there is still much work to be done. With the support of the district and its partners, schools are armed with relevant data. It makes a difference for school leadership teams, for teachers, and, most especially, for students. After all, that's what matters most.