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Breaking New Ground: Data Systems Transform Family Engagement in Education

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In a landmark study about transforming Chicago's low-performing schools, a sobering lesson emerged: No single reform solution really works on its own. Instead, schools, districts, communities, and families must take multiple actions to address the complex problem of turning around chronically low-performing schools. The study, produced by the Consortium on Chicago School Research at the University of Chicago, found that reform must be systemic. Reform starts with strong leadership from the principal, and includes four interconnected elements: instructional guidance; professional capacity of teachers; school learning climate; and parent, school, and community ties.[1]

Of these four elements, the family–school–community relationship has been, at best, on the margins of education policy. The U.S. Department of Education has pointed out that, "Under current law, family engagement is too often focused on a checklist of activities rather than on driving results, funding isn't always targeted to the most effective practices, and family engagement is treated as a discrete activity rather than as an integrated strategy that should have a place across multiple programs."[2]

However, today's policy environment opens a window of opportunity for deeper and more focused family–school interactions. A new generation of policymakers and education thought-leaders acknowledge that classroom-only reforms are inadequate approaches to closing the achievement gap and preparing students for a global workplace. Children learn everywhere, all the time. New directions in education planning are shifting from school-centered to *student*-centered learning, which focuses on students setting personalized learning goals, learning inside and outside of the classroom, and striving toward mastery of skills for the real world. This shift underscores the many influences on the education of children and youth that need to be mobilized. One of the most powerful influences is family engagement in children's education.

In addition to the current focus on student-centered learning, investments are also being made in student data systems and the use of individualized student data to improve teaching and learning. Not only can student data help districts and schools develop strategies to address the areas in most need of improvement, but the data can also serve as a catalyst for home–school communication. Parents often do not have timely and relevant information about their children and are at a loss to support student learning in specific and practical ways. Parents benefit from having information about key indicators—such as student attendance, growth in learning, and achievement—on which they can have an impact. These data open the door for meaningful conversations with teachers and students. Aggregated student data provide a powerful tool to deepen parents' understanding of the quality of their children's schools so that they can make informed decisions and take action around performance, school climate, graduation rates, and other important issues that affect educational success.

FAMILY ENGAGEMENT IN AN ERA OF DATA-DRIVEN REFORM

The purpose of this issue brief is to establish a vision of family engagement in the context of data-driven education reform. The vision consists of a data pathway that provides families with measureable benchmarks for children's learning, beginning in early childhood and continuing through young adulthood, helping students stay on the right track to graduation and college- and career-readiness. The data can be used for short-term (e.g. helping a child increase vocabulary) and long-term goals (e.g. monitoring a child's progress across grade levels to be on track for high school graduation within four years).

The elements of this pathway include data that families can easily access and understand as they relate to school expectations, academic standards, and continuous improvement. Additionally, the information has to be actionable: parents should be able to turn to data to guide their child's learning goals and to take advantage of school and community resources that can enrich student knowledge or address learning challenges. School-level data provide a solid base for advocating change from within and for reforms that enable each and every student to succeed. Creating accessible, readily understood, and actionable data can jumpstart meaningful communication and partnership between families and schools.

The data pathway concept builds on the principle that data are useful when they are actionable. The Data Quality Campaign points out that there is an entrenched culture of data collection for compliance reporting that needs to shift toward data collection for continuous improvement. Instead of being used as a "hammer" knocking educators down, data should be used as a "flashlight" illuminating what's working and guiding informed decision-making and action.[3] The use of data; however, is not a panacea for today's educational challenges. It is a starting point for communication and action within the complex web of relationships that exists among districts, schools, early childhood programs, families, and community organizations serving children and youth.

Students for the 21st century

The American education system is undergoing a rebirth. Gone are the days of rote memorization, subjective evaluations, learning only within the confines of the school day, and widespread acceptance of average. For the United States to remain economically competitive in a rapidly changing global environment, schools are being challenged to change course and prepare a twenty-first century workforce that is capable of engaging in critical thinking and internalizing the importance of continuous learning and self-improvement.

Learning and growth are central to the success of this new wave of education reform. We are moving toward a new ethos that embraces student-centered learning and a student "growth mindset" that is focused on continuous learning, striving toward mastery, and growing from challenge and error.[4] Student achievement data allow students and families to take ownership of their educational experiences. Data from formative assessments can help teachers, students, and parents internalize the idea that learning goals are within reach and change is possible. The data create an opportunity for parents to participate in student goal-setting and to take the actions—homework help, tutoring, and enrichment activities—that can help children reach new levels of mastery.

Student performance data can also equip parents to participate in decision-making for schoolwide change. Parents recruited to serve on school leadership teams or committees need to understand how data can help them determine priorities and increase school accountability. The wider school community also benefits from access to and understanding of the data, allowing the community to share their concerns with parent representatives. By training parents to understand school-level data, community-based organizations help parents connect the data implications to the work that school leaders need to prioritize. At the Commonwealth Institute for Parent Leadership in Kentucky, a training institute for parent leaders, parents learn how to access and use data on student performance to both hold schools accountable and to develop programs to improve achievement.[5]

Transforming Family Engagement through Data Sharing

According to Education Sector, the real value of data systems lies in using information about teaching and learning to improve student outcomes.[6] Currently, few data systems are able to support classroom-level decision-making, but where such systems exist and where they have been designed to share performance data with families, the results are empowering.

Data sharing with families can transform the way family engagement is organized, helping to keep the focus on those activities that align with student academic progress and achievement. Rather than being a checklist of activities, family engagement becomes systemic and linked to specific educational goals. Rather than being an "add-on" to what teachers already do, family engagement is integrated into teaching and learning by providing teachers with a partner who supports and monitors student learning. Rather than being activity-driven and dependent on time-limited funding, family engagement is more likely to be sustained when it is outcome-oriented and tied to the instructional goals for a student, with specific benchmarks across the school year.

Furthermore, sharing student data with families embodies the principles of family engagement in concrete and practicable ways:

- **Family engagement is a *shared responsibility.*** Through data sharing, early childhood programs, school districts, and schools are all responsible for communicating student development and learning with families. Data sharing is also reciprocal: families have data to share about children, such as their knowledge, interests, and needs, and how they spend their time at home.
- **Family engagement is *continuous.*** As student data become available across grade levels, families are equipped with the information to support academic progress throughout a child's school years. Families can use the data to inform transitions from one program or school to another so that teachers can be cognizant of and build upon the child's unique development and interests.
- **Family engagement *runs across and reinforces learning in the multiple settings* where children learn.** Equipped with student data, families are able to direct their children to resources that support and enrich learning, such as afterschool and homework help programs. School districts that are effectively sharing data with families are also providing them with tips and tools, often through web-based formats, so that parents can help their children at home. Although not all families have computers, schools and community partners are setting up computer kiosks for parents and students in convenient locations, thus enabling anytime/everywhere family engagement.

Creating a Data Pathway: Key Elements

A data pathway follows the progress of children from early childhood through high school, college, and career. This is a challenging proposition as data systems across schools, early childhood programs, and youth-serving organizations are different; states and districts collect different types of information; privacy and confidentiality issues must be addressed; and resources are needed to do the work right. However, the evidence is clear: if we are going to use data systems to drive decision-making and reform, engaging families in this process and looking at data and outcomes over time is critical to its success.

Creating a data pathway that is meaningful for students and families requires a design process that is grounded in their needs and solicits their ideas. Innovative design thinking focuses on products or services that are centered on the ways people think and behave.[7] Breakthrough ideas often come by observing how students and families value education, and what they do about it. Making these ideas—such as data sharing with families—workable, involves piloting, learning, and refinement. Through piloting, innovators uncover implementation challenges (e.g., the fears and discomfort about data sharing) and find ways to enable families, as well as school staff, to gain the confidence to use data systems and to embrace a growth mindset. By working collaboratively with families, schools can build trust so that data sharing is conducted in a spirit of learning and improvement, not blame and inadequacy.

Throughout the country, innovative early childhood programs and school districts are transforming what family engagement looks like by capitalizing on their data systems. Six of these efforts are described in the Case Examples in the next section. They run the spectrum from early childhood programs to college- and career-readiness initiatives. Based on the experiences of these innovative efforts, three central elements have emerged as necessary to effectively share student data with families—access, understanding, and action.

Access. Families benefit from ready access to timely and relevant data about their child. Technology—consisting of e-mail, text messages, and web-based data systems—is making it easier for families to gain access to student data. However, giving access to too much data without any context, as is common with web-based parent portals, is not helpful. Instead, it is important for schools to work together with families and teachers to identify the key indicators against a framework of educational goals that best reflect the student's learning and growth and that can be shared on a regular basis so that families can be fully aware of the progress being made. For example, families should have access to data about attendance, development of reading and math skills (as measured by ongoing formative assessments), and measurement against grade expectations and college and career readiness.

Data should also be shared with families regularly and promptly. Parents want timely notification about attendance and academic information so that interventions can be implemented early. In many schools, this information is already tracked in data systems. It is a matter of recognizing families as key stakeholders who both deserve and need the information, and then packaging the data in a way that will be easy for families to access, understand, and use. When parents are involved in the design process, broad access is more likely to be attained. At the same time, their involvement in planning supports the idea that engagement is a shared responsibility and helps to build trust with families and communities.

Understanding. Providing access to data is not enough. Families must be able to understand the data and know what to do with it. They need to grasp what the data suggest in terms of their child's short- and long-term development and academic progress. Parents want to know if their child is on par with other students at the same grade level. Are there areas where the child is excelling that can be further encouraged at home and school? Does the data suggest that there are potential learning challenges that need to be addressed?

Demystifying the data takes time and regular communication. It begins with training parents, usually face-to-face, so that they understand education terminology and student data within a framework of standards and assessments. In-person training can be followed up by web-based tutorials about what students should know and be able do in the subject areas that are being assessed. Getting to understand student performance data is most meaningful when teachers and other school staff have in-person conversations with families to help them review and discuss the findings about an individual student's learning goals. Parent–teacher conferences are ideal for making student data a centerpiece of conversations during the school year. These meetings become the "essential conversation" for improving student outcomes on the pathway to graduation and college- and career-readiness.

School leaders, teachers, guidance counselors, and parent coordinators also benefit from training about data sharing with families. They need to be comfortable explaining to parents what the data mean within a framework of learning and improvement, feel confident interpreting scores, and support student and family goal-setting with skill and expertise. The Poway School District (San Diego, CA), for example, trains teachers to communicate, in simple language, the differences between formative and summative assessments and to gather a body of evidence that shows a child's progress, including quantitative data, samples of student work, and student reflections. The district personnel train teachers to handle difficult communication, such as what happens when scores go down, and equip them with resource tips and tools to share with parents.[8]

Action. Families benefit the most when programs and schools provide actionable tools that are linked to the data gathered from ongoing assessments. Such tools can give families clear guidance about how to enable their child's strengths to flourish, how to overcome challenges, and how to engage their child in activities and discussions that will support their overall learning and growth. From providing families with recommended activities that they can do at home with everyday materials, to highlighting resources in the community that they can access, schools are able to build effective opportunities for learning that respond precisely to the learning profile of the child.

By gaining useful information, families are likely to value the experience and make checking student data part of their parenting activities. In New York City, experience suggests that parents are creating a demand for data that can inform, if not deepen, communication between families and schools. As Bill Tucker of Education Sector points out, parents will no longer be satisfied with "Fine" as a response to the question, "How is my child doing?" Data change the conversation so that it becomes respectful, engaging, and results-oriented.[9]

With access to data, an understanding of what that data reveals, and actionable tools, families can:

- Support, monitor, and facilitate student progress and achievement in a focused and concrete way that complements learning at school;
- Inform transition from one program or school to another so that teachers can be cognizant of and build upon the child's unique development and interests;
- Engage in ongoing conversations with their child about planning for career and college; and
- Map student skills and interests to available programs/resources in the community such as afterschool programs and summer camps to further enrich learning and growth opportunities.

Beyond supporting an individual student's learning, aggregate data on school performance catalyzes parents to take action to improve their schools. School data can help parents understand their school's standing in relation to schools with similar demographic profiles, to raise questions where performance falls short of school goals, and to work with schools as strategic partners in addressing these issues.[10]

POLICY IMPLICATIONS

A data pathway for families to support student achievement is an idea whose time has come. It connects with current trends in education that focus on 21st century learning and the vital role of technology, and catapults family engagement into this new era of transformation. Education policy can support this idea by helping schools and districts to:

Develop a data pathway from early childhood through high school that acknowledges families as end-users. A data pathway for families would provide an ongoing source of concise data in an easily interpretable format with clear action steps that families could implement to support their child's learning. The ideal data pathway would begin prenatally or at birth and continue throughout the child's education. It would share data not only from schools but also from early childhood programs, afterschool and summer programs, and other sources of learning so that families have a comprehensive picture of their child's development. Data gathered and strategies shared with families would grow over time and be tailored to each child's learning. Aggregate data about school performance also makes it easier for parents to identify areas of strength and needed improvements, and to work with districts and schools to address challenges.

Provide guidelines to ensure that data are accessible, understandable, and actionable. A data pathway enables parents to access vital information about a child's learning within the framework of standards and assessments and the child's individual learning goals. It would also provide opportunities ranging from web-based tutorials to parent–teacher conferences for families to grasp the meaning of the data. By providing actionable information, parents can help their children embrace a mindset of continuous improvement that prepares them for college and career.

Ensure that the family perspective is incorporated in design and implementation. Sharing data with families is likely to succeed when it provides them with a valuable experience. One of the lessons gained from the cases that follow is that school districts always keep families at the center of their work. They involve families in testing data systems, listen to what they know and would like to know, and get input and feedback as they pilot and expand their projects. In doing so, they ensure that their efforts to engage families in student learning are robust and sustainable.

Build capacity at state, district, and school levels. Efforts should be made to encourage educators at all levels to optimize the use of their data systems through sharing student performance data with families. These systems should include individual, classroom, and school-level data about attendance, grades, disciplinary action, and standardized tests, and should capture changes over time. They should also incorporate data about student learning and skill development through out-of-school resources. Across these levels, capacity building—e.g. technical assistance and sharing of effective practices—will be needed to engage educators, families, and communities in data-driven reform.

The capacity to engage families in meaningful conversations about building a pathway to college and career begins with teacher preparation and continues with ongoing professional development. When family engagement is linked to instructional goals and develops organically, it has a greater likelihood to become sustainable.

Help districts understand, design, and implement evaluations of their data sharing strategies. One of the most effective messages that districts can share, both with their communities and with policymakers, is that their efforts are making a difference among families and students. At this time, data regarding access is available and used for formative purposes—such as targeting outreach efforts to those that have not accessed the data system—but there is limited information about how families understand the data and make it actionable. Helping districts develop a strong evaluation strategy will contribute to understanding what works and for which families and under what circumstances.

Case Examples

STUDENT DATA SUPPORT A CONTINUOUS PATHWAY OF ENGAGEMENT

ARIS Parent Link (New York City Public Schools, New York, NY)[11]

The New York City Department of Education's ARIS Parent Link is a web-based system that compiles student K–12 performance data in one place, thus giving parents a continuing record of their child's performance. Beyond providing student attendance and test scores, ARIS offers tutorials to help parents understand the information on their child's performance. More importantly, student data serve as a tool to help parents have a meaningful conversation with teachers and to jointly develop goals to help students succeed at each grade level and across the entire K–12 spectrum.

Access. One of the most effective ways to reach parents is through schools themselves. The district's central team supports all schools each year with personalized materials that schools can send to parents, including usernames and passwords for ARIS Parent Link. ARIS Parent Link is used most successfully in schools that prioritize parent involvement and where parents, teachers, and school leaders all work together. Some especially successful schools have designed unique strategies around the particular needs of families in their communities. For example,

one school with a high number of children from a nearby homeless shelter set up a parent room in the school with a washer-dryer, microwave, mini-library, and computers. Parents are welcome to use this room and, while there, are encouraged to log into ARIS Parent Link and can receive help in understanding their child's academic performance data.

The central team has also engaged the broader community in an effort to connect with public school parents. The team attends local events and visits community locations such as food pantries, libraries, and parks to reach families outside of school. Armed with internet-connected laptops, the team uses these events as opportunities to showcase the ARIS Parent Link system to parents and distribute usernames and passwords to authorized parents so they can log-in immediately.

To improve outreach in underserved areas, in the 2010–2011 school year, the district is providing 128 schools with computers dedicated to parent use and help identifying ways to attract parents to their buildings.

Understanding. The district ensures that the information contained in ARIS Parent Link is understandable to all parents who access it. ARIS Parent Link is currently available in nine languages (and is adding a tenth this fall) so that parents can view data and other supports in the language they feel most comfortable reading. Additionally, because information on test scores, grades, and transcripts is contained in one place, parents have better context to interpret and use test results—in whatever language they use to access the site.

Many parents need training in order to use technology, such as how to use a computer, set up an email address, and log in to ARIS Parent Link. To reach parents citywide, the district trains community-based organizations, school parent coordinators, and school leaders, who, in turn, work with parents. These parent training sessions typically take place in a computer lab where parents can log in and learn, with help, how to use basic computer technology. Short on-screen tutorials help parents interpret the data available for their child. In each tutorial, an animated teacher and parent talk with one another about a recent student assessment, including how to understand the child's specific score and how to help the child progress to the next level.

Action. By tracking site activity, the district is able to understand what information parents are accessing and what pages they tend to use most frequently. For example, parents use the NY State English language arts and math test tutorials most often. As a result, the district is updating those tutorials this fall to make them more valuable for parents. Anecdotally, district staff members are finding that ARIS Parent Link creates a complementary cycle in which teachers encourage parents to use the site and then, as parents log on and have questions about the data, teachers end up logging into ARIS more frequently themselves. In this way, providing parents and teachers with the same information creates a more strongly data-driven, results-oriented school system.

SHARING DATA WITH FAMILIES BEGINS IN THE EARLIEST YEARS

Tools of the Mind (Denver, CO)[12]

Quality early childhood assessment highlights young children's strengths, progress, and needs; and best practice calls for assessment methods that are tied to children's daily activities. However, collecting and using data in dynamic and interactive ways to inform instruction, to identify growth for individual children, and to engage families, is difficult. Too often, early childhood data come in numbers, through a few work samples, or via anecdotal written explanations, and can sometimes feel abstract and subjective to families. By using children's drawings as data, early childhood teachers and parents can track a child's developmental progress. Tools of the Mind[13] (Tools) is an early childhood program designed to help preschool and kindergarten children regulate their social, emotional, and cognitive behaviors. Based at the Metropolitan State College of Denver, the program is implemented in 15,000 pre-K classrooms nationwide.

The main medium through which young children develop their social, emotional, and cognitive skills is mature make-believe play. In the Tools program, every day before children play they create a "written" plan (drawings) for where they will play and what they will do. For example, a child might choose to play in the block area and build a tower, or pretend to be a doctor (considered "dramatic play"). The teacher supports a child's learning by providing the structures to advance to the next level. For example, some children may need assistance forming a complete sentence to explain their ideas while others may need help creating a play scenario that involves their peers. As children create their play plans, teachers simultaneously "rate" the plan according to a rubric designed by Tools that is based on child development principles.

Access. At the beginning of the school year, teachers reach out to families and hold orientations in which they explain the purpose of play plans and how to understand them. Children create play plans daily; each Friday, teachers send home four play plans and keep one play plan from that week for each child's individual portfolio. At the end of every week, parents and children have four play plans that can form the basis for a shared conversation about what was learned at school that week.

Because children create their own play plans, they understand them and can explain them to parents when they come home each week. Thus, the child becomes a critical agent through which parents understand child data. Moreover, teachers write on play plans in pen so that it is clear to parents what their children can do alone and what they can do with adult help; parents can also see what kind of assistance the teacher provides. By tracking their child's growth each week through the child's own words, writing, and pictures, parents are instantaneously involved in children's data from the very start of the program.

Understanding. In addition to the orientation, teachers send home newsletters introducing parents to the play plan rubric and explaining how to interpret their child's work by describing what might typically be expected at different stages of development. The information in the newsletters helps parents to interpret their child's work in the same manner that the teacher might. For example, parents would be encouraged to interpret a word such as "prncss" (princess) written by a child not as an error, but rather as a positive step towards becoming a reader.

Action. Play plans are often used as the foundation for parent–teacher discussions. For example, a teacher can point out changes in a child's ability to represent ideas with symbols and the growth in expressive language skills. But the play plan also allows the teacher to engage the parent in a discussion of the student's ability to sustain attention, work with peers, and carry out plans independently. Play plans allow parents to see their child's progression in very concrete ways, and to visualize their child's next developmental stage. Moreover, play plans are helpful if teachers must talk with parents about evaluation or referrals for developmental delays, because they provide a data trail that touches not only on a child's literacy development, but also on other important abilities such as planning and being able to sustain attention.

STUDENT DATA CAN SHIFT THE FAMILY ENGAGEMENT PARADIGM

Academic Parent–Teacher Teams (Creighton School District, Phoenix, AZ)[14]

The use of student data has helped Creighton School District (K–8) shift the paradigm for how parents and teachers work together. Records of parental attendance at school events for 2008 showed that only 15 percent or fewer of parents showed up in a patchwork of social and educational programs that formed 99 percent of school parent involvement activities across the district. More than 90 percent of parents, however, attended teacher-led activities: parent–teacher conferences and school open houses. This information led to a new way of organizing family engagement and prioritizing the parent–teacher conference through Academic Parent–Teacher Teams.

Access. The Academic Parent–Teacher Teams (APTT) involve two main components. The first consists of three 75-minute classroom team meetings each year. These team meetings are initiated by a personal invitation to the parent by the teacher, and consist of the teacher, the entire class of parents, and a parent liaison. Each meeting includes a review of class and individual student academic performance data, parent–student academic goal-setting, teacher demonstration of skills to practice at home, parent practice, and networking opportunities with other parents.

Children in the district are tested informally on a weekly basis and then formally every quarter with a district-developed standards-based assessment in the areas of reading and math. The APTT meetings are timed to coincide with the release of the quarterly assessment scores.

The second component consists of a 30-minute parent–teacher conference: Once a year, teachers meet individually with parents to review their child's performance data and create action plans to optimize learning. Teachers schedule individual meetings to take place within the first four months of school and hold additional meetings when parents request them.

Understanding. During team meetings, the teachers provide data on aggregate classroom performance. Each parent receives a folder containing his or her child's academic data and is shown how to interpret the child's performance in relation to the rest of the class on standards for reading and math. Over the course of the year, the data also depict how a child is progressing in relation to these standards. Teachers present the data in creative and concrete ways. For example, some teachers make a linear achievement line designating where the "average" child might score at different points in the year and ask parents to chart where their own child falls. Other teachers have parents color in bar graphs to represent areas their children have mastered. Still others show traditional bar graphs as part of a PowerPoint presentation. To give parents additional knowledge and understanding about learning at their child's grade level, teachers present end-of-year grade level objectives or "the big picture." This provides a context for the desired achievement result for all students in the classroom. A "big picture" objective for first grade, for example, would be reading fluency and comprehension by the end of the school year.

Action. The teacher then helps parents set 60-day goals for their child based on academic scores. For example, if the standard for first-graders is to learn 120 high-frequency words by the end of second quarter, a child working ahead of the curve might have a goal of mastering all 120 words by the end of November, whereas a child behind the curve might have a goal of 75.

After families set goals for their children, the teacher models different ways in which parents can support their children's learning at home. Parents are then given an opportunity to practice these activities with other parents. The district has also developed Parent Learning Calendars in reading and math for each grade level. These are academic pacing guides that inform parents what skills are being learned in the classroom and provide practical home activities for each academic skill.

With APTTs, teachers are more efficient and use their time more productively. APTTs require the same number of hours as conventional conferences because the entire group of parents meets together at once, but instead of seeing each other only twice over the course of the school year, parents and teachers have four formal opportunities to meet.

Parents also are empowered. They comment that APTT team meetings offer them a clear window into their child's learning in the classroom, a clear and explicit articulation of what teachers expect them to do to support learning at home, and a timeline for completing the goals. Parents now understand the difference between homework and "studying": Homework is busy-work, while studying is the extended practice of skills that leads to better performance on assessment tests and in meeting grade level objectives such as reading fluency and comprehension in the first grade.

ACCESS TO STUDENT DATA CATALYZES YEAR-ROUND SUPPORT OF LEARNING

Measures of Academic Progress (Poway School District, San Diego, CA)[15]

The benefit of an individualized testing system is that it gives parents insight into specific aspects of their child's learning and guides parents in how they can best support their child through learning activities in the home throughout the year. In Poway, students in grades K–8 are assessed three times a year—fall, winter, and spring—using the Measures of Academic Progress (MAP) assessment. This assessment, developed by the Northwest Evaluation Association, differentiates learning and enables individualized learning goals.[16] Unlike a standardized test that might reveal only that a first-grader is functioning at the 99th percentile, the MAP system illuminates whether this child is at a second-, third-, or fourth-grade level or beyond, and the particular areas of his or her strengths.

Access. At the fall parent–teacher conference, parents receive their child's scores on the MAP assessment taken at the beginning of the school year, as well as their child's self-identified goals and strategies. In the winter and spring, score reports are sent home so that the family can track their child's progress.

Throughout the year, parents are able to access a district website to see the types of academic activities their child is expected to accomplish at the next level of learning, empowering parents to tailor activities that their child can complete in the home for that particular learning level. To avoid the summer slump, parents can identify with the spring data exactly what their child is on the cusp of learning so that learning can continue and be reinforced after school lets out.

Understanding. When the system was first adopted, parents began to inquire how to help their children "pass" the assessment. Administrators worked with families to help them understand that the purpose of this tool was to help children grow and to understand strategies that work best for learning. They began to help parents understand the scores and how they could support good learning at their student's level at home. In virtually all presentations, educators use analogies to help parents and the community understand the purpose of the testing. One analogy commonly used is that *assessments of learning* are like a "medical autopsy" and occur after learning has taken place, whereas *assessments for learning* are like a "check-up" and take place while it's happening.

Moreover, the district has invested in a remarkable amount of professional development for teachers so that they can effectively share data during parent–teacher conferences,[17] feel confident interpreting scores, and support student and family goal-setting with skill and expertise.

Action. Parents use the fall parent–teacher conference to create "family goals" to support their child's learning at home (e.g., setting a limit for time spent playing video games, or creating a time and space for homework and reading). Goal-setting helps children and parents see the connections between what children can do and what they need to do to reach the next level of success.

After students receive their MAP scores, teachers work with them individually to develop goals that will help them reach the next level of learning. For example, a child who struggles with reading comprehension might set the goal of always summarizing the meaning of each paragraph after she reads it. Parents not only review their child's data, but also receive the goals that their child sets so that they can support learning in very specific ways. In some classrooms, parents and children come together to set mutual goals for the student as well as for the family. Beginning this process in kindergarten and first grade sets the trajectory for developing a habit of continuous collaboration and improvement in order to succeed in school and in life.

EMPOWERING IMMIGRANT FAMILIES TO KEEP TEENS ON THE PATH TO GRADUATION

Family–School Partnerships (Washoe County School District, Reno, NV)[18]

For immigrant families, navigating high schools is a formidable experience. Without information about school expectations and requirements of graduation, parents are ill-equipped to support teens' efforts to complete high school and prepare for college and career. The Washoe County School District and the Nevada State Parent Information and Resource Center (PIRC) addressed this issue through a combination of focused outreach and sharing student data with families in 13 high schools.

Access. Washoe County School District uses an online parent portal that allows parents to monitor student data and progress. The parent portal tracks usage, and the district learned that parent accounts were not activated for 72 percent of students in the free and reduced-price lunch program and for 74 percent of parents of Limited English Proficient students. Realizing that this was an untapped resource to help families—especially those with children at risk of not graduating—the PIRC staff began to work with school Parent Involvement Facilitators (PIFs) to reach out and provide training to parents about the online data system. The training was created to help families who had never used a computer before or did not have internet access at home. School computer labs were made accessible for two-hour workshops, and PIFs began inviting families to activate their accounts and learn how to make sense of their child's data. PIFs are resourced through a combination of the district's Title I set-aside for parent involvement and Americorps volunteers.

To further facilitate access to student data, schools installed computer kiosks for parents to use. The Nevada State PIRC and WCSD also worked with community-based organizations such as the county's libraries, Nevada Hispanic Services, and Boys and Girls Clubs to install kiosks in accessible locations throughout the community. Every school in Washoe County School District will have an on-site computer kiosk for parents by the 2010–2011 school year.

Understanding. Workshop facilitators train parents about high school graduation requirements and how to interpret student data. (One student reportedly told his parents that the F he received on a test stood for "fantastico"; the training aims to correct misconceptions such as this.) Facilitators also train parents in the use of academic supports such as Smarthinking.com, a 24/7 online tutorial available free-of-charge to all middle school and high school students in Washoe County.

In the workshops, parents are also connected to community-based organizations that offer afterschool tutoring or to school counselors who can help parents and students take advantage of school-based tutoring resources. Families leave these computer workshops empowered by knowing how to access their child's academic data and where to go for help if there is a problem with attendance or grades.

Action. Showing parents how to access the data is just one part of the equation. When looking at her son's attendance data during one of the training sessions, one parent commented, "I don't understand why it says he's absent; I drop him off at school every day." To address issues like this, PIRC Staff and PIFs connect families to school personnel and to community resources for academic support. The parent in this example was connected to a school counselor who arranged to meet the mother at the front of the school every morning so that she could transfer her son to the counselor and ensure that he made it to class.

USING STUDENT DATA TO PROMOTE COLLEGE- AND CAREER-READINESS

New Visions for Public Schools (New York, NY)[19]

New Visions for Public Schools (New Visions) is a Partnership Support Organization (PSO) contracted by the New York City Department of Education , and is responsible for supporting a group of 76 NYC public schools serving 35,000 students. New Visions has an explicit goal of demonstrating that students in urban schools can graduate in large numbers fully prepared for college and the workplace. An integral part of its work with schools is family engagement.

Access. It is difficult to engage parents in conversations about improving student achievement if they have not been given appropriate information and tools to assess their child's academic progress. To tackle the need for accessible information, New Visions co-designed a number of college readiness publications and data tools with parent coordinators and parents. College-readiness benchmarks are widely disseminated to school staff, parents, and students through a parent-friendly publication, *Is Your 9th Grader on Track to College?*

In addition, New Visions developed The 9th Grade College Readiness Tracker for ninth-graders and their families. This is a simple, four-color student achievement tracking tool: blue for college-ready, green for on-track to graduation, yellow for almost-on-track, and red for off-track. It allows parents to quickly and easily determine individual students' progress in various areas of academic performance. New Visions uses this tool to consistently reinforce and remind parents, teachers, and students of the intended ninth grade benchmarks. The trackers are often mailed with report cards, or distributed at parent–teacher conferences. For 2010–2011, parents will also be able to access the tracker electronically after every marking period (about every five to six weeks).

Understanding. New Visions staff members train teachers, guidance counselors, parent coordinators, and PTA leaders to hold sessions with parents to help them understand graduation and college- or career-readiness requirements. The sessions emphasize the four pillars of ninth-grade success: attendance, high grades, credit accumulation, and passing the New York State Regents exams with a score of 75 to avoid remediation when they enter college. Within this context, families learn to use the tracker tool to monitor students' progress. Additionally, when a ninth-grade student begins to fall behind, a conference is held between the student's family and a team made up of all of the student's current teachers, in order to develop data-driven academic interventions.

The College Readiness Tracker's design itself allows for improved parent understanding of student-level data by providing a quick look at an individual student's credit accumulation, attendance, and state exam passing rates. Colored bars of data are more accessible than data in numeric form. In addition to simply providing the information in a clear format, a crucial component of New Visions' work involves building family and school capacity to ensure true understanding of the data.

New Visions also provides training to school staff so that they can embed college readiness goals and tools for parents into freshman orientation, curriculum night, and parent–teacher conferences. Workshops for educators include effective outreach and engagement strategies for involving parents who speak different languages.

Action. Using the College Readiness Tracker, students set their goals for the term and share them with parents and teachers. The tracker demonstrates the student's progress and provides a foundation for teacher–parent conversations about the action steps needed to ensure continued or improved student performance. New Visions also works with community groups to sponsor a ninth-grade College-Career Resources Fair that directly connects parents and students to resources, programs, and activities in their home communities that help support college- and career-readiness beyond the classroom. The fair includes information on summer jobs, community service, and scholarships and financial aid.

Since 2007, New Visions has reached more than 10,000 parents and students through its publications, and nearly 3,000 parents, students, and teachers through ongoing workshops and direct support. As a result, participating schools are seeing a steady increase in student attendance and credit accumulation in ninth grade.[20]

OVERVIEW OF FOUR SCHOOL DISTRICTS*

District	Number of Schools	Enrollment	Students by Race/Ethnicity	Free/Reduced Price Meals
Creighton School District (Phoenix, AZ)	9	6,582	Hispanic 86% White 5% Black 5 % Indian 3% Asian 1%	91% (2011)
New York City Public Schools (New York, NY) †	1,499	1,029,459	Hispanic 39.7% Black 30.9% White 14.5% Asian/Pacific Islander 14.4% Native American .4%	78.3% (2008–2009)
Poway School District (San Diego, CA)	37	34,000	White 56.7% Asian 15.8% Hispanic 10.7% Filipino 7.2% Multiple or No Response 5.3% Black 3.1% Pacific Islander .7% Native American .4%	10% (2008–2009)
Washoe County School District (Reno, NV)	102	63,333	White, not Hispanic 53.8% Hispanic 33.4% Asian/Pacific Islander 6.5% Black, not Hispanic 3.8% Native American 2.5%	41% (2009–2010)

* District Data for 2008–2009 (except where noted)

† Excluding charter schools.

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APPENDIX

Family engagement in education consists of the ideas, beliefs, and practices of families in promoting their children's education, and the opportunities provided by schools and education-serving organizations to reach out and engage families in building student success. Family engagement is related to a range of benefits for students, including improved school readiness, higher student achievement, better social skills and behavior, and increased likelihood of high school graduation.

Effective family engagement consists of the following principles:

- Family engagement is a **shared responsibility** in which schools and other community agencies and organizations are committed to reaching out to engage families in meaningful ways and in which families are committed to actively supporting their children's learning and development.
- Family engagement **is continuous across a child's life** and entails enduring commitment but changing parent roles as children mature into young adulthood.
- Family engagement runs across and **reinforces learning in the multiple settings where children learn**—at home, in prekindergarten programs, in school, in afterschool and summer programs, in faith-based institutions, and in the community.

As a reform strategy, family engagement should be implemented with the following characteristics:

- **Systemic:** Family engagement is purposefully designed as a core component of educational goals such as school readiness, student achievement, and school turnaround.
- **Integrated:** Family engagement is embedded into structures and processes designed to meet these goals, including leadership, training and professional development, teaching and learning, community collaboration, and the use of data systems for continuous improvement and accountability.
- **Sustainable:** Family engagement operates with adequate resources, including those from public-private partnerships, to ensure meaningful and effective strategies that have the power to impact student learning and achievement.

RESOURCES

For more information about using student data to engage families, please see the following resources from HFRP and the PTA:

- ***Family Involvement Network of Educators (FINE) Newsletter: Using Student Data to Engage Families*** (October 2010). http://www.hfrp.org/FINEOctober2010
- ***Data Driven: Making Student and School Data Accessible and Meaningful To Families*** (August 2010). Webinar 3 in the Achieving Excellence and Innovation in Family, School, and Community Engagement Webinar Series. http://www.hfrp.org/AchievingExcellence-Webinar3
- ***Seeing is Believing: Promising Practices for How School Districts Promote Family Engagement*** (July 2009). PTA and HFRP Issue Brief. http://www.hfrp.org/SeeingIsBelieving

For examples of the data tools used by the school districts discussed in this brief, please visit: http://www.hfrp.org/BreakingNewGround

About Harvard Family Research Project:

Since 1983, Harvard Family Research Project has helped stakeholders develop and evaluate strategies to promote the well-being of children, youth, families, and their communities. We work primarily within three areas that support children's learning and development—early childhood education, out-of-school time programming, and family and community support in education. Underpinning all of our work is a commitment to evaluation for strategic decision making, learning, and accountability.

Building on our knowledge that schools alone cannot meet the learning needs of our children, we also focus national attention on complementary learning. Complementary learning is the idea that a systemic approach, which integrates school and nonschool supports, can better ensure that all children have the skills they need to succeed.

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About National PTA®:

Founded in 1897, the National Parent Teacher Association (PTA) is comprised of more than five million members, including parents, students, educators, school administrators, and community leaders. With more than 25,000 local units, PTA flourishes in all 50 states, the District of Columbia, the U.S. Virgin Islands, and the Department of Defense schools in Europe and the Pacific.

As the oldest and largest volunteer child advocacy association in the United States, PTA's legacy of influencing federal policy to protect the education, health, and overall well-being of children has made an indelible impact in the lives of millions of children and families. Visit PTA.org for more information.

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