



From Data to Success

**Using Early Warning Indicators
to Shape Interventions for
Students in the Middle Grades**



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From Data to Success:

Using Early Warning Indicators to Shape Interventions
for Students in the Middle Grades

Commissioned by:

The National Forum to Accelerate Middle Grades Reform

Prepared by FHI 360

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Executive Summary

This report describes FHI 360's¹ *Indicators for Success*² framework, with a focus on lessons learned from five middle schools around the country that have put the framework into practice. AED/FHI 360 developed the *Indicators for Success* in 2007 to support schools through the design and implementation of an early warning and response system that helps identify middle grades students at risk of becoming dropouts and effectively guides them back on track to high school graduation. These case studies provide much insight into the importance of schools customizing the *Indicators for Success* implementation, while maintaining the core aspects and validity of the model.

FHI 360's initial *Indicators for Success* work in 2007 concentrated on helping schools set up systems and strategies for creating Early Warning and Response System (EWS) student data reports that identified students who were at risk for a difficult transition to high school based on their attendance, behavior, and academic data. This early work also stressed the need to use data in ways that humanized rather dehumanized students, and thus emphasized the importance of truly getting to know students (through strategies such as surveys, advisory programs, etc.) in order to view the data as one part of a 360 view of the student. With time, the *Indicators for Success* work incorporated protocols for developing tiered interventions and

supports to proactively keep all students on track in each indicator area, and strategies for matching struggling students with the most appropriate supports for their particular needs. In addition, because the *Indicators for Success* work was launched in schools with high numbers of students at risk in attendance, behavior, and/or academics, the work has highlighted the importance of developing interventions that could serve the highest number of students possible.

These case studies compare the implementation of the framework in five U.S. schools, which reside in four states in four different regions of the country. The report begins with a look at two New

¹ We use AED/FHI 360 when referring to activities conducted by the FHI 360 team before 2011, since that was prior to the AED/FHI merger. We use FHI 360 for all work conducted from 2011 on. We use the term "FHI 360 team" to refer to work conducted under both organizational arrangements.

² Until 2014, *Indicators for Success* has also been known as ISIS, which was the acronym for the program's full name, "Indicators for Success: Interventions and Supports." In the interviews and site visits, some of the sites informally used the acronym to discuss their programs. Readers are advised that any reference to ISIS pertains to *Indicators for Success*.

York City Schools—one in East Harlem and the other in the Kingsbridge section of the Bronx—and explore how these featured schools took the lessons and tools of *Indicators for Success* and the early warning indicator research to customize solutions and student support strategies that are uniquely their own. Rounding out these case studies are narratives from three schools that were among 18 schools in three states—California, Illinois, and North Carolina—that received school improvement strategies and coaching support from the Schools to Watch® Transformation Network (STW) an initiative launched by the National Forum to Improve Middle-Grades Reform as part of a five-year Investing in Innovation (i3) grant from the U.S. Department of Education.³

WHAT IS “INDICATORS FOR SUCCESS”?

The use of EWS was informed by research conducted by Dr. Robert Balfanz and his team at Johns Hopkins University. The Johns Hopkins University researchers found that at-risk students can be identified as early as the 6th grade through four early warning indicators: (1) attending school less than 80 percent of the time; (2) receiving a poor final behavior grade in two or more courses; (3) failing math; and (4) failing English language arts.⁴ They found that the earlier students identified as having problems in any one of these indicators are provided with supports to address their needs,

the greater the likelihood of their future success in high school and beyond. *Indicators for Success* was designed as a systemic implementation model with five phases, or components:

1. **School Structures:** School, district, network, and/or state personnel must address the necessary systems and structures for supporting the implementation of *Indicators for Success*.
2. **Data Analysis:** Using local data systems, schools/districts compile the student data into reports to easily and readily identify which students are on track and which students exhibit one or more of the at-risk early warning signs, and to get information at the school and network levels to inform necessary professional development and support.
3. **Tiered Supports and Interventions:** The schools use these reports to design three tiers of support that reflect a Response to Intervention (RTI) public health approach of prevention and intervention (Fuchs et al., 2003; Fuchs et al., 2006). More specifically:
 - Tier 1: Whole-school (or whole-grade) preventative measures help to keep approximately 70 percent to 80 percent of middle grades students on track to high school graduation.

³ As per FHI 360's Human Subject Protection requirements, neither the schools nor any of the individuals involved will be named. To maintain confidentiality, schools will be identified by location. The NYC PSO case study schools will be referred to as East Harlem and Kingsbridge, and the National Forum schools as i3 schools. Roles will be indicated by title: principal, assistant principal, teacher, aide, coach, and such.

⁴ Balfanz, R., Herzog, L., & Mac Iver, D.J. (2007). Preventing Student Disengagement and Keeping Students on the Graduation Path in Urban Middle-Grade Schools: Early Identification and Effective Interventions. *Educational Psychologist*, 42, 223–235.

- Tier 2: Targeted interventions for those approximately 10 percent to 20 percent of students who require more specific or customized supports.
- Tier 3: Intensive interventions aimed at approximately 5 percent to 10 percent of students who need more concentrated, individualized supports.

4. *Matching Students with Interventions:*

Teacher teams work together to match each off track student with the most appropriate supports and interventions.

5. *Ongoing Data Analysis and Continual*

Improvement: Schools establish the practice of using data as part of an inquiry process and commit to reflective review and continual improvement.

CASE STUDIES

The two New York City schools selected for the case studies were part of the FHI 360 team's Partnership Support Organization (PSO). These schools—one in East Harlem and the other in the Kingsbridge section of the Bronx—had several important common characteristics: they were located in low-income areas of New York City, they served predominantly non-white populations, and many of the students' families were born outside of the United States. Both middle schools had principals who were strong leaders, highly equipped to implement evidence-based innovative change strategies.

Case Study #1: East Harlem School— Carrots over Sticks

The catalyst for rethinking how this school used data was a less than stellar grade on the annual New York City Department of Education (NYCDOE) Progress Report. The Progress Report measures academic achievement, school environment, absences, and each school receives a letter grade ranging from A to F. In 2009–2010, this school scored a C on its Progress Report. As one teacher described it, “When we got our first C grade, that made us motivated to look at the data and figure out what systems can be put in place to address the issues at hand.” This led to a series of improvements that included establishing a team called The Cabinet, members of which held leadership roles in the other school teams (the Parent Teacher Association (PTA), Wellness Team, Content Area Teams, Grade Level Teams, and Special Education Teams), and implementing the Data Decision Instructional Tools (DDIT) program, which required teachers to fill out a template for their students to plan and chart their areas of focus.

As a result of the data analyses, the school felt that students needed encouragement to take greater ownership of their learning, which required a school-wide strategy for the sake of efficiency but also for visibility. Thus, in 2014, the school initiated The Merit Games. The Merit Games was a reward system that used merits and demerits as incentives for improvement. It was targeted to all students, and not just those who were struggling. As important as it was for students to know the consequences of poor behavior, it was

also important for them to see that good behavior also had consequences (other than the absence of bad consequences). The school felt that it was important that the rewards were visible and frequent.

The changes in school culture came quickly. The Merit Games generated friendly peer competition among the students for rewards. A teacher reflected, “Whether they know it or not, the students’ behavior is being modified through this positive encouragement.” The merit system made it easier for the teachers and school leadership to identify students in need of intervention. It made them wonder why some students were still getting demerits even as they saw how good behavior was rewarded. These struggling students, they concluded, were the ones that needed the most intervention. Rather than see these students as behavior problems, or tag them as lazy or disengaged, the teachers shared the mindset that these demerits signified lagging skills, and it was the school’s job to identify the challenge and provide interventions to help support students in getting back on track.

Case Study #2: Kingsbridge School—Overall Systems Thinking and Systems Changes

The principal, who was very knowledgeable about early warning systems, knew that to improve student performance, she and her staff had to become more intentional in using data to target the supports and interventions that would make students attend school regularly, be positively engaged, and succeed in all classes, particularly math and English language arts (ELA). One of the things that made the Kingsbridge School so successful in their implementation of EWS is that

they integrated these new supports and resources into their existing student support framework, so much that the resulting program was one that the school could call truly its own. This integration involved a restructuring of roles among staff, and a focus on the root causes of poor academic performance.

Changing the Role of the School Counselor:

Perhaps the most critical change was the expansion of the role of the school counselors. The school restructured its guidance program to allow for three guidance counselors, renamed “school counselors,” to provide ongoing support for all students, and targeted support for off track students. Expanding the counselor role was key to their successful implementation of EWS because the counselors, more than the other adults in the school, were trained to deal with the whole child. Once the counselor role was expanded to include academic skills development, they were given considerable leverage in managing the relationships between teachers and students.

Data Collection: Getting at the Root Causes: In the first month of school, the counselors at the Kingsbridge school interview all students and fill out a Social Emotional Learning (SEL) Student Survey. The Survey is a four-page paper-based tool that helps students talk with the counselor about their families, their background, their home/community life, attitudes about school and life, and to self-assess their own academic progress, interests, stresses, and strengths. The school uses these student surveys to shape the focus of their advisory programs, and to inform the counselors and leadership team in designing the best support and intervention plan for each student.

SCHOOLS TO WATCH® TRANSFORMATION NETWORK I3 CASE STUDY SNAPSHOTS

In 2010, the U.S. Department of Education awarded the National Forum a four-year Investing in Innovation (i3) grant to introduce the principles and practices of *Indicators of Success* to schools in its Schools to Watch® Transformation Network. These coaches were associated with the National Forum's lead partners in the Schools to Watch® program in each state—Association of Illinois Middle Schools (AIMS), California League of Middle Schools (CLMS), and North Carolina Middle School Association (NCMSA).

North Carolina: Professional Learning Communities as Drivers of Change

The Schools to Watch® coach for this snapshot school repeatedly and consistently identified her school's professional learning community (PLC) as the driver of change. This school's PLC comprised faculty, school leadership, and coaches. Together the members of the PLC were responsible for the key decisions regarding data collection and analysis, the selection of interventions and strategies, and the monitoring thereof. Although the teachers remained the most important arbiter of programming (particularly at Tiers 2 and 3) and intervention success, they were supported by the PLC. This coach believed that the *Indicators for Success* framework would play a large part in improving academics and attendance moving forward, and that the PLC in particular was key to the model's sustainability: "We have been using the professional learning community framework and ISIS [*Indicators for Success*] to implement data-based interventions for a few years and I believe it is firmly established in our school."

Illinois: Focus on Behavior Development and Family Engagement

Most of the Illinois snapshot schools' efforts went into planning for Tier I interventions because many of the problems regarding attendance, behavior, and grades were widespread. This approach was entitled the Universal Middle School Intervention. To the students, it was presented as the Three Bees: Be responsible, Be respectable, Be safe. According to one of the regional Schools to Watch® coaches, the data team often examined the data and determined the thresholds that would trigger an intervention. For example, for general Tier 1 interventions, the threshold could be "a low overall attendance rate below 95 percent school-wide, or students missing more than 10 days with unexcused absences." A Tier 2 intervention involves groups of students who need additional motivation and incentive. In these cases, the school draws up a contract among the family, student, and the school. Interventions at Tier 3 resembled an individualized education program (IEP), in that every aspect of a student's learning experience was planned and monitored frequently. Often, these interventions involved parents, either voluntarily or as a result of a visit from the school. Family support was a crucial part of the process: these were needy families, and the school provided bus cards and referrals to family support services (including housing and health care), as needed.

California: Programming and Teaming for Success

As in the case of the East Harlem school, the California snapshot school used a merit system as a Tier 1 intervention. It was called Triple A: Attitude, Attendance, and Academics. Student attendance and tardiness, grades, and behavior data were used

to identify those students who did well enough to be eligible for rewards, or, according to the principal, “[fulfill] their end of the bargain of being good students.” The results have been both tangible and intangible. Among the tangibles were reductions in truancy. Among the intangibles was the change in students’ perceptions of themselves as learners; over time, students developed an intrinsic drive to do their best not just because of a reward, but because doing a good job was a reward in and of itself. According to the teachers at this school, having common prep time and teaming to examine the data and determine interventions were critical to success. According to one teacher, “It’s allowed us to really collaborate and do what’s best for our students, and to effectively communicate with parents and with each other.” Another teacher felt that this process helped all of the teachers get to know all of the students. “Together, we know all of these kids. So, we can ask each other, ‘what’s your best practice?’ ‘Why is this kid acting up in my class and not in yours?’”

COMMON CHARACTERISTICS OF THE IMPLEMENTING SCHOOLS

The Ways School Teams Organize, Undertake, and Assess Their Work

Creativity in Identifying Off Track Students and Expanding on Data Sources: The NYC-based case study schools developed their own systems and tracking mechanisms to identify off track students. As discussed earlier Kingsbridge used the SEL Student Survey to elicit information about a student’s home life. In the East Harlem School, the DDIT, which included not only a student’s grades but also plans for improvement, if needed, was used alongside grade data. Apart from the reports,

in whatever form, identifying off track students was a full-time job for the teachers and other adults in the building. Thus, through the *Indicators for Success* framework, schools were compelled to think about the root causes of an off track status, rather than as something that was solely the fault of the student. For example, needing to care for younger siblings; having exemplary scores in all but one class, indicating that perhaps the student might have difficulties with a particular teacher; or a death or incarceration of a loved one in the family are all factors beyond a student’s control that may cause him or her to be off track.

The Ways in which School Teams Make Decisions about Interventions and Supports, and Their Own Professional Development

Building a Professional Learning Community:

Across all of the schools, the following staff members were always at the table: the principal, at least one assistant principal, a content area teacher, and a grade-level teacher. A school counselor was an important addition, though this role wasn’t included in the PLC in all schools. In addition, a parent was sometimes included, though this was less frequent. Thinking of the work as part of a PLC implies that in the process of using data to determine interventions, much learning is simultaneously taking place for the PLC members.

Knowing the Literature: Another commonality is that the EWS teams, which most often includes instructional leaders and teachers, work hard to ensure that all members are knowledgeable on the latest literature on interventions, particularly pertaining to literacy and math, as well as engaging instruction and positive youth development.

The Kinds of Interventions and Supports the Schools Chose to Address Students' Needs, and the Effects They Had On Students' Progress

The Importance of a Caring Adult: All of the schools mentioned in this report shared the common intervention of ensuring that each student had at least one adult responsible for his or her academic and social emotional well-being. At minimum, all students were assigned a mentor to help them navigate various demands and challenges, problem solve, and support progress toward established academic and behavioral goals.

"Lifting all Boats": In thinking about economies of scale, the schools highlighted in this report shared a common hope and expectation that whole-school, proactive interventions would have the effect of "lifting all boats," which would, in time, reduce the number of students who need targeted or intensive interventions. In the language of EWS, schools relied heavily on Tier 1 supports to drive the changes.

CONCLUSION

Early warning systems (EWS) were a natural fit with ongoing school reform efforts taking place in all of the study schools (and beyond), and, more importantly, they were practical. The following were advantages of EWS.

- These indicators (attendance, behavior, ELA and math grades) were stronger predictors of successful high school completion than any of than any of the other indicators such as standardized test scores, race/ethnicity, and socioeconomic status (SES) status.
- The predictors are behavioral factors that are directly "actionable" through targeted interventions and close performance monitoring by schools.
- Using data to create and guide supportive, non-punitive structures of accountability for student learning invites all adults in the school to engage in critical self-reflection and make the essential connections between student engagement and student learning.
- Schools at any point of development can integrate an early warning indicator approach into its school goals and improvement efforts. EWS strategies have multiple entry points (subject area and interdisciplinary teams; leadership, data, inquiry teams; one grade or whole-school) and are designed to be flexible enough for each school to customize and adapt.

No school would say that it had "arrived" at the solution to dropout prevention, and they all felt that there are more questions to be answered through the data and more strategies to be implemented. For example, which interventions, or constellation of interventions, produce the best results? Rigorous research might be able to answer this question. But, perhaps it goes beyond that. What schools want to know is, to what extent can this data-driven program produce the kinds of changes that will, ultimately, move all students not only from failing to on track but from on track to exemplary, and prepared for high school and beyond? And, are the systemic changes to the schools culture and infrastructure worth the effort? We will need data to answer the former question. To the latter question, schools would answer with a resounding "Yes."

CHAPTER I

INTRODUCTION

Methods: School Selection and Data Collection

I. Introduction

Over the past 20 years, “data driven” has become an overused and under-defined phrase to characterize effective school reform. Teachers and principals are expected to be “data literate” (Stringfield, Wayman, & Yakimowski, 2005; U.S. Department of Education, 2009, 2010; Wayman & Stringfield, 2006), but not much is known about *how* educators can use the data to inform improvement strategies.

This report aims to contribute to ongoing efforts by educators, researchers, and key stakeholders to give meaning to the term “data driven” through the perspectives of two middle grades schools in New York City, and selected Schools to Watch® Transformation Network districts/schools in Illinois, North Carolina, and California (funded through an award from U.S. Department of Education’s i3 initiative to the National Forum to Accelerate Middle-Grades Reform¹). Each school had a unique adaptation of a professional development and coaching model designed by the Academy for Educational Development (AED), which became FHI 360 in 2011,² called *Indicators for Success: Interventions and Supports*.

Indicators for Success was based on the early warning systems (EWS) research first introduced by Dr. Robert Balfanz and his colleagues at Johns Hopkins University (JHU) and the Philadelphia Educational Fund. This research isolated the warning signs that are exhibited by students, often as early as the 6th grade, when they are at risk of eventually dropping out of school: attendance, behavior, and course grades in English language arts

“Before early warning indicators, we had triage but not treatment.”

– PRINCIPAL, KINGSBRIDGE SCHOOL

“What distinguishes an ISIS school from others is not just that it is ‘data-driven’: it’s how the data is being used.”

– INDICATORS FOR SUCCESS COACH

“The kids don’t realize how much time we’ve spent looking at these data elements to help them.”

– TEACHER, EAST HARLEM SCHOOL

“Teaching is my passion, and I’m a data-driven person. Show me the data – what’s the story?”

– TEACHER, ILLINOIS i3 SCHOOL

¹ AED was a founding member of the National Forum and, at the time of writing, remains a member as FHI 360.

² We will use AED when referring to activities conducted by the FHI 360 team prior to 2011, FHI 360 thereafter. We use the term “FHI 360 team” to refer to work conducted under both organizational arrangements

³ Until 2014, *Indicators for Success* has also been known as ISIS, which was the acronym for the program’s full name, “Indicators for Success: Interventions and Supports.” In the interviews and site visits, some of the sites informally used the acronym to discuss their programs. Readers are advised that any reference to ISIS pertains to *Indicators for Success*.

(ELA) and mathematics (Bruce, Bridgeland, Fox, & Balfanz, 2011). Balfanz and his colleagues found that these indicators were better predictors of high school graduation than demographics or test scores.

Using demographics and test scores to design interventions had two basic flaws: first, it was of little use those school systems where the vast majority of students shared the same demographic characteristics; and, second, it resulted in the creation of supplemental services delivered to students that did little to harness the capability of teachers, administrators, guidance counselors, other school-based personnel, and external community partners to embed systems of support into the fabric of daily school life (see Kennelly & Monrad, 2007; and Allensworth & Easton, 2005). However, using early warning systems offered several advantages.

- Since these indicators (attendance, behavior, English language arts and math scores) were stronger predictors of successful high school completion than factors like standardized test scores, race/ethnicity, and SES status, schools could actually use the data to impact change. Students exhibiting these early warning signs can be directly supported through targeted interventions and close performance monitoring by school staff.
- Struggling students could be identified as early as grade 6, opening the door for early intervention and greater success.
- Using data to create and guide supportive, non-punitive, structures of accountability for student learning engages all adults in the school in critical self-reflection and in making essential connections between student engagement and student learning.
- Schools at any point of development can integrate an early warning indicator approach into its school goals and improvement efforts. EWS strategies have multiple entry points (subject area and interdisciplinary teams; leadership, data, inquiry teams; one grade or whole-school) and are designed to be flexible enough for each school to customize and adapt.
- EWS puts the focus on directly teaching the habits and skills students will need to succeed in high school and beyond. This is in contrast to the less successful prevention models that focus on teaching students to avoid bad behavior.

The FHI 360 team's initial *Indicators for Success* work focused on helping schools set up EWS and strategies for creating student reports to identify students who were at risk for a difficult transition to high school based on their attendance, behavior, and academic data. *Indicators for Success* incorporated protocols for developing tiered interventions and supports to proactively keep all students on track in each of the indicator areas, and strategies for matching struggling students with the most appropriate supports for their particular needs. The *Indicators for Success* professional development helped schools realize the importance of truly getting to know students, and encouraged student surveys, advisory programs, and other means of gathering student background information. Because *Indicators for Success* was launched in schools with high numbers of

students at risk of failure in attendance, behavior, and/or academics, the work focused on the development of interventions that could serve the highest percentage of students possible.

Indicators for Success was malleable enough to enable schools to adopt and implement only what they needed to keep their students on track, which was critical given the resource limitations each school faced. As will be discussed, some developed programs that they no longer considered as *Indicators for Success*, and others used the *Indicators for Success* data reports to shape their interventions. However, all of the schools featured in this report adopted an early warning system that was consistent with the research of Balfanz and colleagues, whether or not they called it *Indicators for Success*. It can be said that the FHI 360 team developed *Indicators for Success*, but *Indicators for Success* was shaped by the implementing schools.³

We will explore two New York City schools' experiences with implementation: one in East Harlem and the other in the Kingsbridge section of the Bronx. Our exploration will focus on how these schools that use the early warning indicator data to understand and address student engagement in school can pinpoint individual students' lagging skills in any of the four indicators and address the warning signs in a timely way. The case studies contain narratives of the successes and challenges of implementing an EWS over several years, variations in implementation, and lessons learned as schools evolve and develop in their understanding of the indicators, and related dropout prevention strategies that typically include a tiered system of interventions and supports in each of the indicator areas. As will be shown, each of these featured schools took the lessons and tools of *Indicators for Success* and the early warning indicator research to customize solutions and student support strategies that are uniquely their own.

Rounding out these case studies are snapshots from three schools that were among 18 schools in three states—California, Illinois, and North Carolina—that received school improvement strategies and coaching support from Schools to Watch (STW®), an initiative launched by the National Forum to Improve Middle-Grades Reform as part of a five-year Investing in Innovation (i3) grant from the U.S. Department of Education. The Schools to Watch® Transformation Network, an i3 grant initiative, seeks to improve student achievement in low-performing middle grades schools by providing a vision for high performing schools using the STW® criteria. As part of the supports and strategies, the National Forum partnered with AED in 2010 to introduce the *Indicators for Success* framework into the STW® Transformation Network Project. Through this partnership, the FHI 360 team provided initial training, supporting protocols, and additional EWS resources to the school-based coaches and project leadership to embed EWS into the larger STW® school reform initiative. The STW® Transformation Network has used this introduction, the larger body of research, and other resources to customize and adapt the model to best fit within the STW® methodology.

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METHODS: SCHOOL SELECTION AND DATA COLLECTION

School and District Selection

Data collection for this report began in the early spring of 2014. FHI 360 identified two schools that had been using the *Indicators for Success* for about five years. The schools were chosen primarily because they each successfully developed systems and strategies that transformed the research and tools into practical reality that exemplified their school culture, leadership team, and the unique qualities of their teaching team. The early warning indicator framework fit within their existing commitment to provide students with supports and interventions to keep them engaged and to promote their healthy academic and social/emotional development. The schools had several characteristics in common: they served the middle grades; they were in low-income areas (one in East Harlem and the other in the Kingsbridge section of the Bronx); and their student bodies were predominantly African American or Latino/a. To capture the story of the i3 program we worked with the National Forum and the each state's i3 representative to select districts, coaches, and schools ("snapshot schools" hereafter), that were the most knowledgeable about the work.

Data Collection

In the spring and summer of 2014, FHI 360 conducted at least one site visit per New York City case study school, supplemented by telephone conversations and emails, as well as documents that were shared as a part of professional development, coaching, and technical assistance. For the non-NYC schools, principals (or individuals recommended by the state i3 representative) were afforded the opportunity to either complete a telephone interview or an online questionnaire; in all cases the latter was chosen (although, for Illinois, we were able to supplement the online data with an interview of a data coordinator from one of the schools). We also gathered information from materials collected from Schools to Watch® meetings, hosted by the National Forum; this included a video that contained vignettes from a school in California.

As per FHI 360's Human Subject Protection requirements, neither the schools nor any of the individuals involved will be named. To maintain confidentiality, schools will be identified by location. The NYC Partnership Support Organization (PSO) case study schools will be referred to as "East Harlem" and "Kingsbridge," and the National Forum schools as "i3 schools." Roles will be indicated by title: principal, assistant principal, teacher, aide, coach, and such.

Remainder of the Report

Chapter II provides a comprehensive overview of *Indicators for Success*: history, components, and research base. Chapter III contains full case studies of the two New York City schools, with a reflection on the underpinnings of these schools' experiences. Chapter IV contains brief descriptions of how the EWS work is implemented in the i3 districts, followed by a brief discussion of preliminary findings from a third party evaluation. Chapter V contains a synthesis of the common practices among the featured schools and districts. The report ends with a conclusion that summarizes the findings and explores possible next steps to deepen our understanding of the efficacy of early warning systems in improving teaching and learning.

CHAPTER II

BACKGROUND: THE GENESIS AND EVOLUTION OF EARLY WARNING SYSTEMS AND INDICATORS FOR SUCCESS

Indicators for Success in Practice

BACKGROUND:

The Genesis and Evolution of Early Warning Systems and Indicators for Success

The genesis of FHI 360's connection to EWS and the development of *Indicators for Success* can be traced to 1995, when AED, in collaboration with the W. K. Kellogg Foundation and other partners, created Middle Start, a national school reform initiative that provided direct support to middle schools around the country through technical assistance, professional development, and assessment. Middle Start was grounded in four principles and practices of highly effective middle grades schools that were and continue to be supported by research: (1) reflective review and self-assessment (Chappuis, 2005; Stiggins, 2008; Wood & Freney, 2007); (2) small learning communities (Cotton, 2001; Bernstein et al., 2008); (3) rigorous curriculum, instruction, and student assessment (Burris et al., 2008; Matsumura et al., 2008), and (4) distributed leadership and sustainable partnerships (Jackson & Davis, 2000; McEwan, 2003; Elmore, 2006). These eventually became the foundation for a set of rubrics, called “Middle Start Principles and Practices,” that guided not only the work of Middle Start but also the development of the early warning system framework that would later be called *Indicators for Success: Interventions and Supports*. (See Appendix I.) Through trained coaches, Middle Start provided on-site support for whole-school improvement of teaching and learning and built regional networks that included all participating schools in a district, state or region, and a partnership of other organizations—service agencies, universities, advocacy groups, and other educational institutions—that worked together to support each school and to build capacity for continuous improvement.

In 2007, the New York City Department of Education (NYCDOE) awarded AED a contract to become a PSO under the NYCDOE's School Support Organization division, which replaced the community school districts. In the same year, AED was awarded a grant from the JP Morgan Chase Foundation to create and implement a middle grades leadership and professional development initiative to improve outcomes for middle grades students using the EWS model. The initiative, which would later be called *Indicators for Success*, coupled Middle Start's principles and practices with EWS tools and protocols that enabled its PSO schools to identify students at risk of failing and provide them with the appropriate interventions. Components of *Indicators for Success* were piloted in two PSO schools in 2007–2008, and in 2009 the entire PSO school network was introduced to the *Indicators for Success* framework and methodology.

The use of EWS was informed by research conducted by Dr. Robert Balfanz and his team at JHU, who found that at-risk students can be identified as early as the 6th grade through four early warning indicators: (1) attending school less than 80 percent of the time; (2) receiving a poor final behavior grade in two or more courses; (3) failing math; and (4) failing English language arts (Balfanz et al., 2007). They found that the earlier students who are identified as having problems in any one of these indicators are provided with supports to address their needs, the greater the likelihood of their future success in high school and beyond.

The FHI 360 team focused on developing a middle school infrastructure that could support an early warning system in its PSO schools that combined the framework developed by Johns Hopkins researchers with its experience in implementing whole-school reforms through Middle Start. In each school, an *Indicators for Success* coach, trained by the FHI 360 team, worked with the school leadership and staff to provide the following professional development:

1. **Protocols/Supports** (using data and understanding students): early warning systems research and *Indicators for Success* model training; early adolescent development training; social and emotional competency training; data collection and analysis training for *Indicators for Success* leadership team members; programs to support effective strategies for addressing student conduct; and introduction of strategies for translating data findings into effective supports and interventions.
2. **Organizational Structures:** guidance on distributing responsibilities for analyzing data and responding to findings; coaching

INDICATORS FOR SUCCESS

TIMELINE

- 1995** 1995: AED* develops and implements Middle Start, a comprehensive middle grades reform initiative
- 2007** 2007: AED is contracted by the NYC Department of Education as a Partnership Support Organization (PSO), and begins a concentrated focus on supporting struggling middle grades schools in low-income neighborhoods.
- 2008** 2008: AED's EWS, called Indicators for Success: Interventions and Supports, is implemented in two pilot PSO schools.
- 2009** 2009: Indicators for Success is implemented in a cohort of schools in Newark, NJ and expands to the other schools in the NYC PSO network.
- 2010** 2010: The U.S. Department of Education awards the National Forum a four-year grant to implement an EWS as part of its Schools to Watch Transformation® Network. AED/FHI 360 is selected as a partner.
2010, October: The National Forum and AED commence their professional development and support efforts for STW coaches and school leadership teams from California, North Carolina, and Illinois.
- 2011** 2011: Indicators for Success is introduced to the middle schools in three states as part of the National Forum's i3 project (California, North Carolina, and Illinois).
- 2012 TO PRESENT** 2012–present: Indicators for Success is introduced to more schools nationally, including schools and districts throughout the Northwest, North Dakota, and others.
- * AED was acquired by FHI in 2011 and became FHI 360.

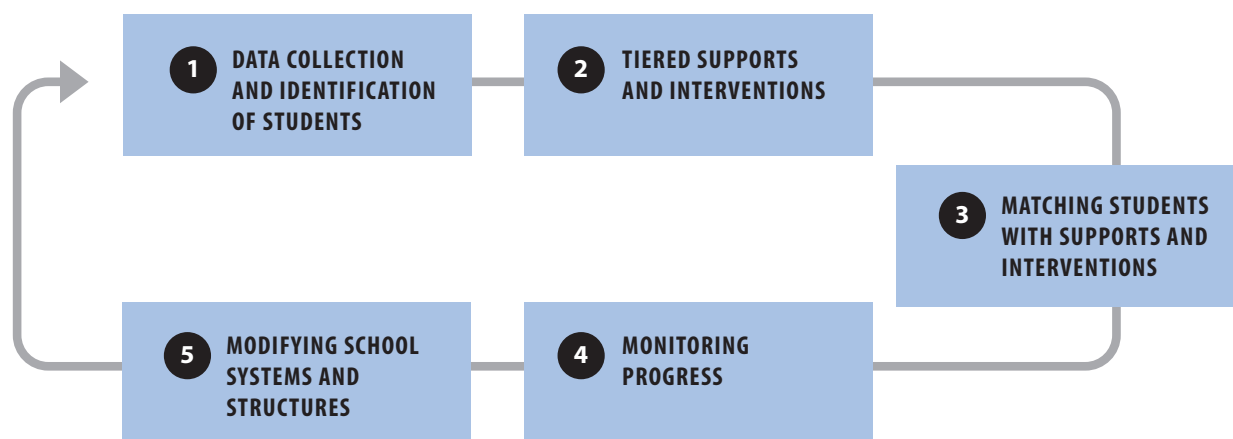
and support to refine grading and disciplinary policies; assistance in accessing and/or redistributing resources for operational supports (for example, additional staff, extra funds to support teachers); and assistance with dealing with external factors that can facilitate or constrain progress.

Eventually, the schools in the PSO recognized that the early warning systems, and the *Indicators for Success* model, was not just another initiative or program, but a powerful lens for looking at students holistically as young adolescent learners with unique needs.

INDICATORS FOR SUCCESS IN PRACTICE

Using the JHU framework as a guide, *Indicators for Success* was designed as a systemic model with five phases, or components: (1) implementing school structures necessary for addressing individual student needs; (2) analyzing data on the indicators to identify students in need of supports and interventions; (3) designing tiered supports and interventions in each of the four indicator areas; (4) matching “off track” students with appropriate supports and interventions (through a root cause analysis approach); (5) continually analyzing data to ensure that students are moving back on track and adjust supports and interventions accordingly. These are described in detail below, and are presented graphically in Exhibit 1.

Exhibit 1: Indicators for Success Model



1. Data Collection and Identification of Students: Using local data systems, schools/districts compile the student data into data reports to easily and readily identify which students are on track and which students exhibit one or more of the at-risk early warning signs, and to get information at the school and network levels to inform necessary professional development and support. When FHI 360 supported the data analysis phase in the PSO schools, the reports were color-coded to more easily identify student status in each of the indicator areas: red = off track; yellow = sliding (or at risk); light green = on track; dark green = exemplary. See Appendix III for examples of data reports.

FHI 360 uses two types of data reports (generated at the end of each grading cycle, at minimum).

- *Indicators for Success Student Status Report* is an interactive spreadsheet listing each student (by grade as well as by school) and his/her status in each indicator area for each marking period of that year.
- *Indicators for Success Trend Analysis Report* is a summary report that aggregates and disaggregates a school's indicator data to make it easier to see trends and get a "big picture" view of the number of students who were off track, sliding, on track, or exemplary in each indicator area (attendance, language arts and math grades, and state assessments), for each grade level, and for different student subgroups.

2. Tiered Supports and Interventions: The three-tiered approach to supports and interventions was based on the Response to Intervention (RTI) public health approach of prevention and intervention (Fuchs et al., 2003; Fuchs et al., 2006). RTI was graphically illustrated as a pyramid, where Tier 1 is at the base of a pyramid, Tier 2 is in the middle, and Tier 3 is at the top. (See Figure 1.) Balfanz and his colleagues adopted this pyramid-shaped tiered model, because the approach to early warning indicators supports and interventions—where the majority of students should be at Tier 1, fewer at Tier 2, and the fewest at Tier 3—was consistent with that used in public health models (Balfanz, 2007).

- **Tier 1: Whole-school** (or whole-grade) preventative measures help keep approximately 70 percent to 80 percent of middle grades students on track to high school graduation.
- **Tier 2: Targeted** interventions are for those approximately 10 percent to 20 percent of students who require more specific or customized supports.
- **Tier 3: Intensive** interventions are aimed at approximately 5 percent to 10 percent of students who need more concentrated, individualized supports.

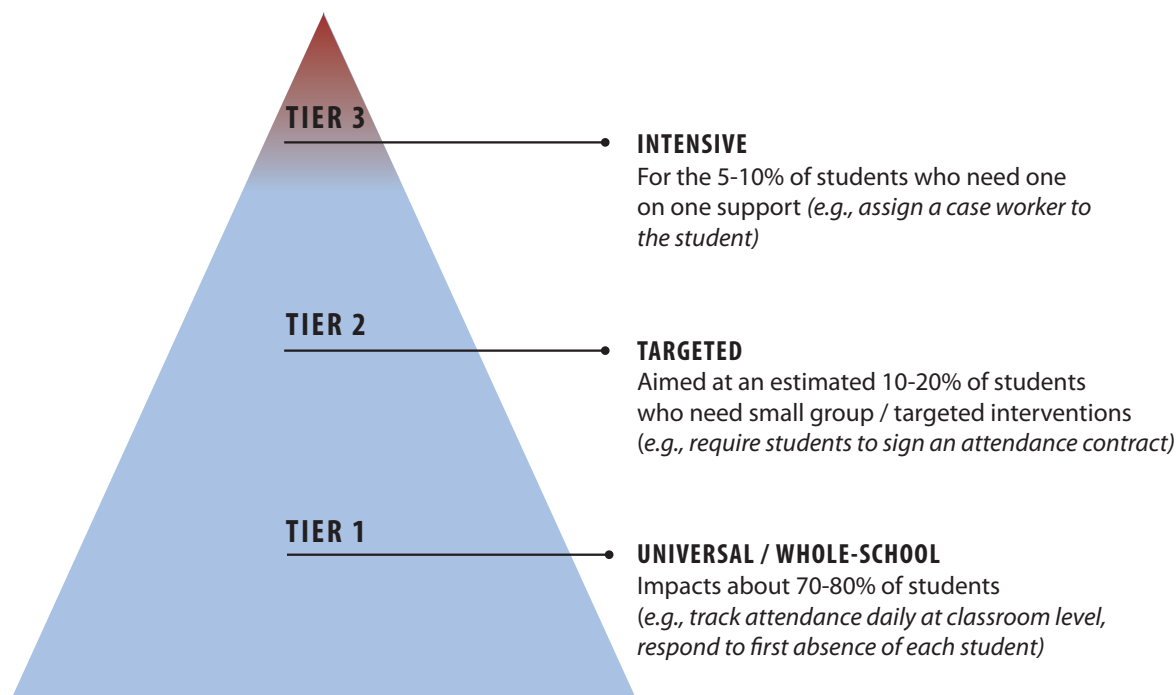


Figure 1. Tiered Supports and Interventions

FHI 360 schools were often overwhelmed by the number of students who were off track and in need of interventions. Thus, work often began with teams working together to establish school-wide (preventative/proactive) supports for all students (Tier 1). This experience highlighted the importance of reimagining Tier 1 supports and interventions to serve the highest percentage of students possible. Once these Tier 1 supports were rolled out, teams turned their attention to planning targeted interventions for students (Tier 2). Because Tier 3 was more intensive and often required time and expertise that the regular school staff lacked, school teams worked to identify and form partnerships with outside agencies to provide individualized supports for students with the greatest needs.

In practice, the pyramid was coupled with a reverse pyramid (see Figure 2), whereby the concentration of resources (indicated by the blue reverse pyramid) increased as the tiers progressed upward (indicated by the green triangle). This new construction was the key to transforming what was deemed unsolvable to manageable.

Thus, the focus shifted to reimagining the universal, Tier 1 supports—a strategy supported by the JHU research. Nield, Balfanz, and Herzog (2009) argued that by focusing first on the Tier 1 school-wide strategies, a school can keep approximately 80 percent of students on the path to success: “[T]he program is based on two fundamental assumptions: that students’ signals are surface indicators of

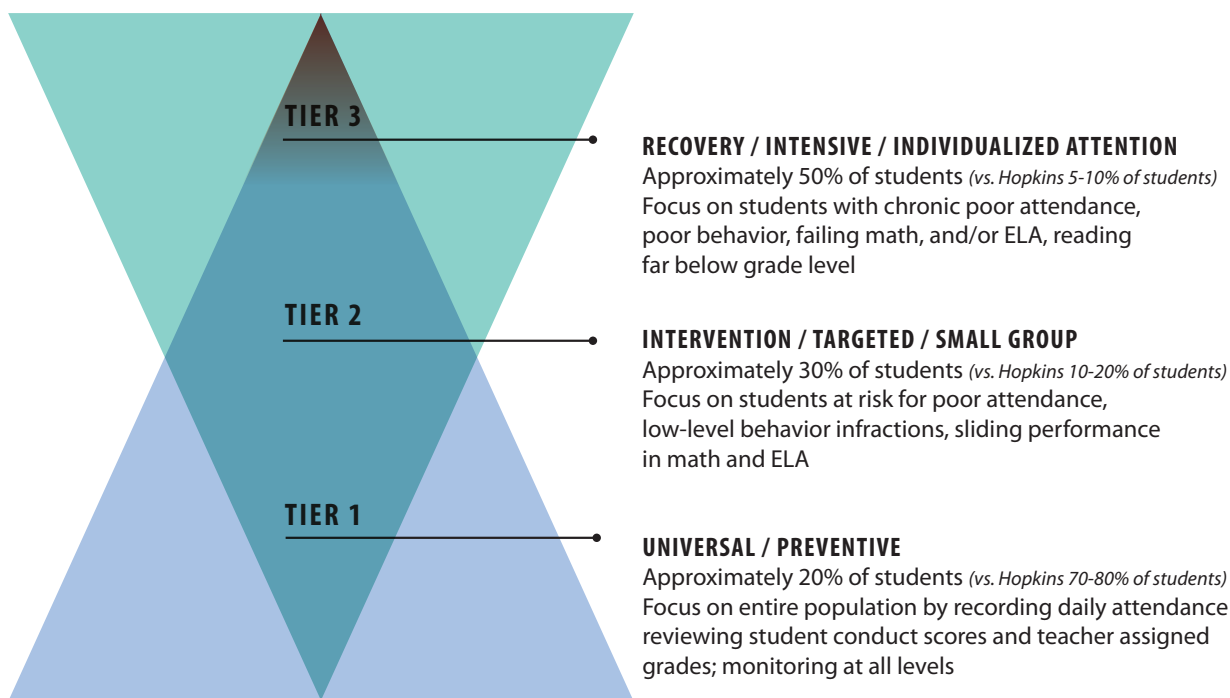


Figure 2

deeper academic problems, behavioral issues, or responses to the home or school environment that schools need to identify and address; and that only a small percentage of students will need the most intensive and costly interventions. For the majority of students, lower-cost school-wide strategies that seek to prevent the problems will suffice” (p. 52). In the creation of *Indicators for Success*, these assumptions were treated as key to transforming what was deemed unsolvable into manageable.

3. Matching Students with Interventions: Teacher teams work together to match each off track student with the most appropriate supports and interventions. This process includes a process known as *root cause analysis*, where the teachers explore possible underlying reasons that a student is exhibiting the early warning signs. The process includes the following steps.

- Determine potential root causes.
- Consider the students’ specific circumstances, interests, strengths, and anxieties.
- Invite the student to be part of the problem-solving and solutions identification process.
- Provide increasing levels of intensity based on the student’s “at risk” status.
- Include the student and his/her family in the implementation of the intervention.

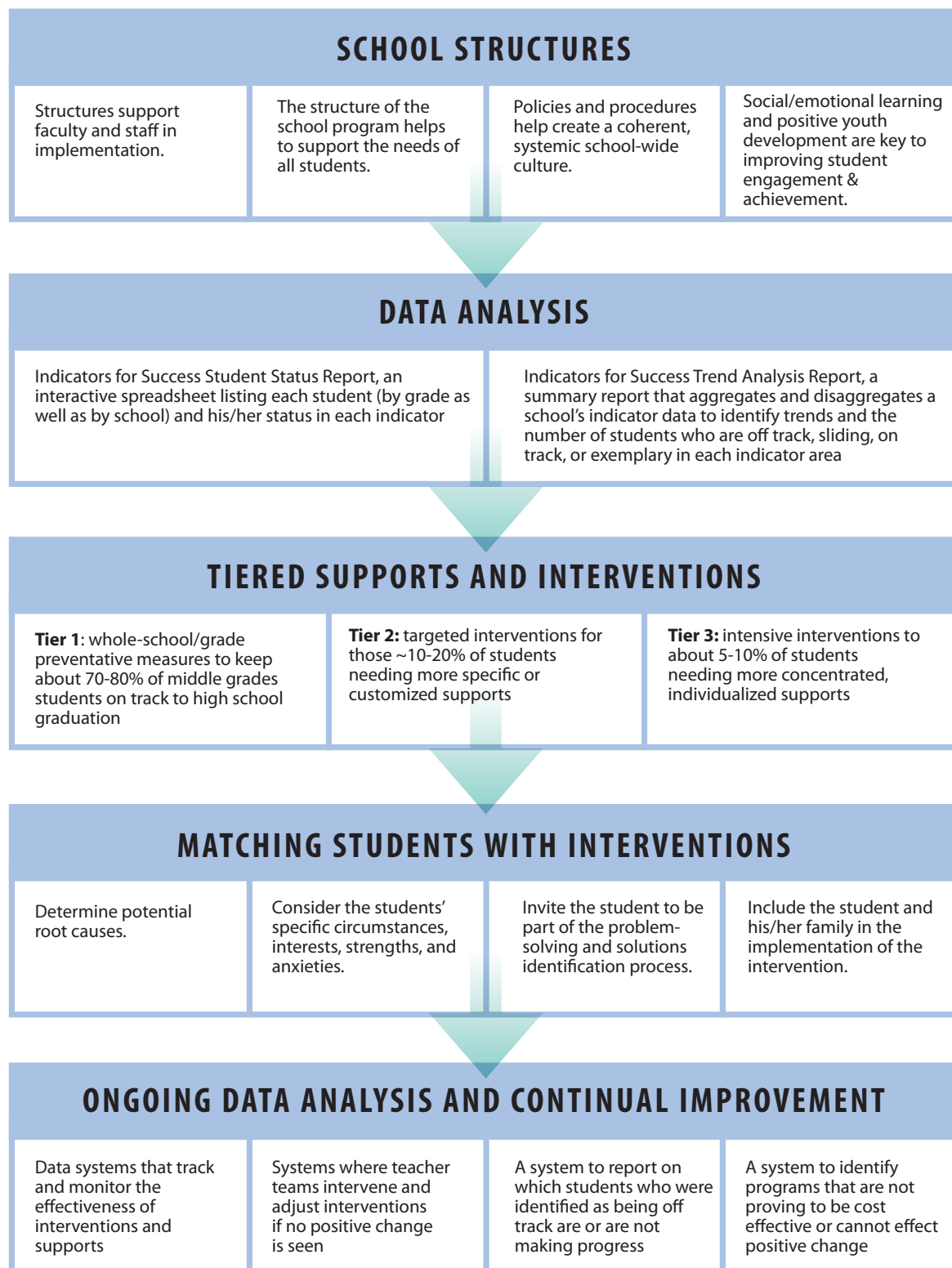
4. Monitoring Progress: Schools establish the practice of using data as part of an inquiry process and make a commitment to reflective review and continual improvement. To support this process, systems of accountability must be in place to track and promote student improvement. These include:

- data systems that track and monitor the effectiveness of interventions and supports, and keep track of which supports and interventions are working for which students;
- protocols and systems where teacher teams intervene and make changes to interventions and supports if no positive change is seen;
- a system to aggregate data and report on which students who were identified as being off track are making positive changes, which are remaining the same, or which are sliding further off track; and
- a system for ensuring intervention discipline, where programs that are not proving to be cost effective, or that do not bring about significant change, are dropped.

5. Modifying School Systems and Structures: School, district, network, and/or state personnel must address the necessary systems and structures for supporting the implementation of the *Indicators for Success* framework.

- ***The coach supports faculty and staff in implementation.*** Faculty and staff learn about the research on early warning indicators of student disengagement (through professional development) and are trained to identify the warning signs. Faculty and staff understand why planning tiered supports and interventions is a key part of their roles and responsibilities.
- ***The structure of the school program helps to support the needs of all students.*** Students are grouped into small learning communities where they are taught by a common team of teachers. Regular teacher team meetings are held where teachers share information on students. The school schedule maximizes opportunities for tiered interventions and supports.
- ***Policies and procedures help create a coherent, systemic school-wide culture.*** A standard grading policy distinguishes between effort/conduct, and academic achievement. Conduct is recorded and tracked. Clear attendance policies are in place to address student absence and/or lateness.
- ***Social/emotional learning and positive youth development are key to improving student engagement and achievement.*** A single school culture is established and common expectations for positive behavior are articulated for a variety of school settings. Noncognitive factors, good conduct, and social and emotional skills are directly taught within the regular school schedule. Every student has an adult advocate who monitors his/her progress and is accountable for his/her success.

Exhibit 2: Indicators for Success System: Phases and Components



CHAPTER III

NEW YORK CITY PSO SCHOOLS CASE STUDIES

East Harlem School

Kingsbridge School

Reflection: Initial Outcomes, Early Warning Systems,
Effective School Leaders, and the Principles and
Practices of Successful Middle Schools

New York City PSO Schools Case Studies

The two schools selected for the case studies were part of the FHI 360 PSO. These schools—one in East Harlem and the other in the Kingsbridge section of the Bronx—had several important common characteristics: they were located in low-income areas of New York City, they served predominantly non-white populations, and many of the students’ families were born outside the United States. Both middle schools had principals who were strong leaders, highly equipped to implement evidence-based innovative change strategies.

At the same time, the two schools differed from each other in a few key areas. The East Harlem school was one of five new schools created through FHI 360’s participation in the New School Development program, a NYCDOE initiative with funding from the Gates Foundation (through the New York City Fund for Public Schools). FHI 360 staff was heavily involved with developing the design principles, school planning team, faculty recruitment and selection, and technical assistance in new school portfolio application development.

When it opened in 2008, the East Harlem school was co-located in a building with three other small schools that had no connection with this new school. In contrast, the Kingsbridge school had a history and culture that predated this school’s creation in 2005. It was one of three smaller middle grades schools that replaced one larger school. These three schools, along with one high school, share the same building. Thus, the Kingsbridge school came to the PSO in 2007, after several years in operation and with strong systems and structures already in place.

**DEMOGRAPHICS:
NYC CASE STUDY SCHOOLS AND NYC**

	School/Zip Code		
	KINGSBRIDGE (10463*)	EAST HARLEM (10029)	NYC
HS graduate	19%	25.3	20.6
Foreign born	13.6%	16.6%	17.8%
Unemployed	10.7%	12.5%	10.2%
Household poverty	14.2%	24.9%	16.9%

Source: U.S. Census, retrieved June 2014

EAST HARLEM SCHOOL

The East Harlem school was created in 2007 and enrolled its first class of 6th graders at the start of the 2008 school year. Given the demographics of the neighborhood, this school was originally slated to be a school for new immigrants, with children of families from Spanish-speaking areas, French-speaking

African nations, and the Middle East. However, the percentage of English language learners (ELL) was only approximately 10 percent among this first class of 6th graders. The greater challenge for the school in this first year was that 40 percent of the students had special education needs, which forced the school leadership to shift its focus.

This school was primed for an early warning indicator system from the very beginning. As part of the New School Development program with the NYCDOE, the East Harlem school had the benefit of many resources. For the first three years, the FHI 360 New School Development Team provided ongoing leadership coaching for the school principal. The support focused on a number of key areas including: recruitment and selection of staff, refining systems for observation and supervision, improving the functioning of the school's teaming structures, reviewing assessment data, and assessing consultants and school partners. Additional ongoing support was devoted to mentoring and coaching the principal in aligning the student support strategy with the social and emotional needs of the school's large special education population.

In its first three years of its existence, the school made measureable progress in building a strong school community rooted in its core values of community, diversity, college access, literacy, and youth agency. After three years of work, the principal was able to point to the expansion and refinement of school structures aligned with the essential elements of effective middle grades schools including: the establishment of a positive and inclusive school culture; a health and wellness team; a focus on college readiness; the development of a professional study and inquiry group; and the implementation of academic assessment strategies. The following were among the essential systems and structures that were developed at this school:

- **Curriculum Planning and Development:** Curriculum planning and development had been embedded within the professional study and inquiry group process that focused intensively on the study of individual students (student descriptive review) as a lens for better understanding teaching and learning at the school.
- **Implementing a No Failure Grading System:** This school embraced a no-failure philosophy—also known as Mastery Learning—and continues to work to make it sustainable at the school. They also developed and refined a school progress report system that integrated the no-failure policy.
- **Health and Wellness Team Coaching:** FHI 360's support for the school's Health and Wellness Team consisted of working with the school principal and social workers to understand the needs of the student population and to introduce strategies to help students embrace the school's values around community and respect for diversity. The overall result has been the development of a school culture and community that is increasingly successful

at supporting a diverse population of children with a wide array of emotional, cognitive, physical, and social needs. For example, the school community is actively accepting of homosexuality, proactively addresses issues of sexual harassment, and is intolerant of bullying.

However, even with this strong foundation, the supports from FHI 360, and the systems put into place by the principal, the school still struggled to attain high academic achievement among their high needs population. For example, in 2009–2010, this school scored a C on its annual Progress Report from the NYCDOE. As one teacher recalled, “When we got our first C grade, that made us motivated to look at the data and figure out what systems can be put in place to address the issues at hand.” The school had been trained to implement the overarching *Indicators for Success* framework, but it was now time to think through the current systems and structures to re-examine the data, and make some changes to support individual student success.

Using early warning indicator methodology around tiered supports and interventions, the school team responsible for examining the data—the Cabinet, which will be described later—came to several conclusions. Focusing corrective action on the most struggling students—in the EWS language, those at Tier 3, and in the school’s rating system, those who scored a 1 on the math and/or ELA standardized tests—was not working school wide.⁴ Although the students at the “1” level showed some improvement, the other students’ needs were not being met, and as a result they felt disengaged and were not meeting their growth potential. The problem was most acute for students in the “2” category; these students were below proficient but had some skills and knowledge. The “3” students were also at risk because although they were demonstrating proficiency, they were not excelling. As one teacher described it:

Looking at the breakdown was an awakening for the staff. One or two students can impact entire school performance. We were able to identify and monitor those few students, and then figure out supports. We used to only think about how we were going to raise the most struggling students up. Now, we are looking at several kids per cohort and pushing them higher—for example from a level “3” to a level “4.” This raises the bar and encourages all the kids.

They determined that attendance was also a problem. According to the principal, “We found that attendance was the strongest predictor of failure. If students are missing 15 to 18 days, there is a clear correlated impact on performance, and it’s more significant with math than ELA.”

Compounding these challenges was a student body that was already off track upon arrival. The principal explained that the entering 6th grade classes were typically “50/50,” meaning that 50 percent were on track to succeeding, while 50 percent were not. For example, many of the newly enrolled 6th graders had poor attendance rates, which the principal estimated at between 38 percent and 40 percent. This problem was

⁴ The scores in New York City ranged from 1 (the lowest possible score) to 4, which indicated that a student was both proficient and excelling.

not confined to the 6th grade, however, since students entering the school at the 7th and 8th grades had similarly poor rates. Attendance seemed to improve the longer the student was enrolled in the school, although not to optimal levels (the 7th grade rate fell to only 32 percent).

“Our Outcomes Follow our Intent” (East Harlem School Principal)

It was clear that the best and most efficient approach would be one that would affect and benefit all students, with successful students having as many incentives to improve as struggling students. Thus, the interventions and strategies needed to be implemented not only for the students, but for the teachers and school leadership as well.

Strengthening Data Analyses

Primarily it was the Cabinet that drove the teacher and school leader activities. The weekly Cabinet meetings were attended by a cross section of teachers and other key individuals, plus the principal. The members held leadership roles in the other school teams such as the PTA, wellness team, content area teams, grade level team, and Special Education team. This group was mostly responsible for examining the data at a macro level—class-, grade-, and school-wide—while the other teams examined the data at a micro level (that is, by student). For example, when the data, as well as reports from the ELA teacher teams, indicated that students were having trouble deconstructing narratives, the Cabinet recommended professional development in the GIST method, which is a literacy strategy that instructs students how to paraphrase and summarize as they listen for the big idea when reading text. It enables readers to read quickly, extract important ideas, and recall text. This proved to be successful as shown by classroom test scores.

The Cabinet would also regularly cross walk the school performance data with other data: in particular, the Learning Environment Survey, an annual survey given to teachers, students (at and above the 6th grade), and parents to assess the school culture, leadership, and challenges. Given the range of the data issues with which it was involved, the Cabinet was responsible for identifying the major goals for the school for the academic year.

The Cabinet, as well as other school teams, advocated for improvements in data collection and analyses. For example, the school implemented the Data Decision Instructional Tools (DDIT) program, which required teachers to fill out a template for their students to plan and chart their areas of focus. Data were also used to measure teacher performance; some of this was part and parcel of current efforts by the NYCDOE to use student data to assess teachers, but this school focused more on peer observations and reviews, as well as on student work (such as written work, periodic/formative assessments). The goal was to develop a seamless protocol for looking at data that began by identifying the learning problem, finding

corresponding instructional strategy(ies) to target learning, and then having peer teachers review, observe, and provide feedback.

The principal commented, “Our process is really quite successful,” although he expressed that he wished that he could increase the utilization of the quantity of rich data being produced. He went on to explain, “It’s really a matter of time, more so than resources or staffing, in order to set up these data discussions.” A Cabinet member shared additional concerns. “Our data processes have sometimes proved to be a mixed bag. There have been some areas where there have been some positives, and yet still some uncertainties on where to focus.” Still, these processes have enabled school staff to determine where they are getting their best return on investment for students (for example, which teacher, or which intervention or support strategy, is the best for which type of student).

Most importantly, this work was starting to show a positive impact. The school successfully increased its Progress Report score to a B for several years in a row. Then, in the 2012–2013 academic year, the East Harlem school earned its first A on its Progress Report, and a numeric score of 80.3, which placed it the 93rd overall percentile rank in the city. The East Harlem school received an A in student progress, an A in student performance, a B in school environment, and reported a 91.3 percent attendance rating. Still, the school realized that even more could be done to sustain these successes.

Carrots over Sticks: The Merit Games

As a result of the improved systems for collecting and analyzing data, the school felt that even more could be done to enable students to take greater ownership of their learning. This strategy needed to be at the school level, not only for the sake of efficiency but also for visibility. This resulted in a school-level strategy for students called The Merit Games, but with a totally different focus. The Merit Games was a reward system for students that used merits and demerits as incentives for improvement. All students had an incentive to improve, and not just those that were struggling. The Merit Games began in the winter of 2014.

The merit/demerit system is nothing new, nor did East Harlem invent it. In programs that use these types of extrinsic feedback systems, demerits are designed to instill self-discipline in students by encouraging students to learn from their mistakes, show self-control, and make good choices. On the other hand, merits are designed to provide positive feedback and reward good behavior. However, in many cases, schools are more inclined to define the demerits rather than the merits. Although this might have some effect on controlling behavior, it can be motivating in the negative sense. In other words, students might be motivated, but also demoralized. Sometimes, merits are nothing but the absence of demerits. For example, in the Philadelphia school system, a student can earn a merit for not engaging in any activity that could

garner a demerit for a two-week period.⁵ In this type of structure, students learn what bad behavior is, and what good behavior isn't, but they don't necessarily have a vision and language for what good behavior looks and sounds like.

With a shared commitment to address both merits and demerits in The Merit Games, teachers at the East Harlem school were encouraged to write up students for good behavior with the same effort it took to write them up for infractions. Merits could be earned for good classwork, good behavior, and good attendance—the type of noncognitive factors that research is showing lead to improved academic performance and college and career readiness. The school felt that it was important that the rewards were visible and frequent. And, as important as it was for students to know the consequences of poor behavior, it was also important for them to see that good behavior also had consequences (other than the absence of bad consequences). The school started bi-weekly, quarterly, and trimester celebrations of success. The celebrations were not limited to award ceremonies at assembly time. For example, students with a certain number of merits might be allowed to wear the school t-shirt on a Friday, go out to the movies, or go out for pizza (or some other treat). These were small but visible rewards.

One teacher described the results in terms of the school culture. “We wanted to drown out the kids’ negative voices. The voices of the kids doing the right thing are powerful.” Another teacher remarked that the system created friendly peer competition. “They’re starting to check each other. They’re using and checking Jupiter [the school-based online student information, learning management, and grading system used by students and teachers] regularly for grades and assignments online. Students are now asking for additional feedback.” One other teacher shared, “Whether they know it or not, the students’ behavior is being modified through this positive encouragement.” In the classroom, teachers felt empowered to “aim high,” knowing that the merit system would entice the students to follow suit. A Cabinet member took the “peer” theme by suggesting that the school “establish a leadership class to encourage that students own the systems and take the pulse of their peers to move forward.” Buoyed perhaps by the rewards system and the focus on student voice and engagement, parental involvement in school activities increased.

In addition to the proactive character of The Merit Games, for the teachers and school leadership the merit system made it easier to identify students in need of intervention. It made them wonder why some students were still getting demerits even as they see how good behavior is rewarded. Why were students continuing to be chronically absent? Why didn't incentives work with some students? These struggling students, they concluded, were the ones that needed the most intervention. Rather than see these students as behavior problems, or tag them as lazy or disengaged, the teachers shared the mindset that these demerits signified lagging skills, and it was the school's job to identify the challenge and provide interventions to help support students in getting back on track.

⁵ Education Week Live Chat: Using Stimulus Aid to Turn Around Low-Achieving Schools, 12/10/2009. <http://www.edweek.org/ew/events/chats/2009/12/10/index.html>

KINGSBRIDGE SCHOOL

In 2007, this school was one of the initial two PSO schools that received professional development and training around the early warning indicators. Specifically, the FHI 360 team invited Robert Balfanz and Douglas MacIver from JHU, the principal researchers from the Johns Hopkins early warning indicators longitudinal study, to meet with the principals and visit the school to provide feedback and perspective. At the same time, the school participated in related workshops on social and emotional learning, adolescent brain development, reading comprehension, collaborative problem solving, and other evidence-based strategies to support their ongoing development of tiered supports and interventions. The school also participated in a focus group dedicated to exploring creative ways to support overage middle grades students. The principal knew that to improve student performance, she and her staff had to become more intentional in using data to target the supports and interventions that would make students attend school regularly, be positively engaged, and succeed in all classes, particularly math and ELA. She imagined that these shifts would also improve relationships between students and the adults in the building and make the best use of staff skills and time. Thus, she was strategic in her approach to professional development, and supported teacher teams in participating together, so that she could quickly build professional capacity and have those at the forefront of specific initiatives take the lead on coaching their colleagues.

One of the elements that made the Kingsbridge school so successful in its implementation of the early warning indicators is that it integrated these new supports and resources completely into its existing student support framework so that the resulting program was one that the school could call truly its own. The principal explained that in order to be responsive to her students' support needs, the quarterly data reports that the FHI 360 team was preparing for each of the schools in the network were not sufficient, because they quickly became outdated and unhelpful. She needed her data in "real time," not quarterly or even monthly. To address this issue, she created a dedicated part-time staff position (staffed by a teacher at the school) to scan the NYCDOE databases and the school-wide electronic gradebook weekly to generate real-time student data reports, using Microsoft Excel, that provided an up-to-the-minute picture of which students were sliding off track, which students were staying the same, and which students were making progress. According to the principal, when they started this focused work on the early warning indicators, "We found that just about every student in our building was off track in some area. We needed to find out what was behind some of these numbers." As a result, the principal worked with her staff to develop a questionnaire to elicit information about students and their home lives. The questionnaire—which became known as the Social Emotional Learning (SEL) Student Survey—served as a tool for school counselors to engage in one-on-one conversations with their students, and to play a major role as the advocate for the student by targeting the intervention and implementing better coordination with teachers.

With these two strategies, this school developed its own tracking system. By including the information from both the online gradebook and from student surveys, and by convening teacher teams and school counselors on a regular basis to discuss students' strengths and needs, the leadership team was able to obtain the kinds of detailed and subtle information that would help to identify some of the underlying causes of students falling off track and match them with the most appropriate supports and interventions for getting them back on track.

In addition, the principal placed the greatest emphasis on the infrastructure changes. Perhaps the most critical change was the expansion of the role of the school counselors. The school restructured its guidance program to allow for three guidance counselors—renamed “school counselors”—to provide ongoing support for all students, and to provide targeted support to off track students. One counselor was assigned to each grade. To afford the cost of this expanded counselor staffing, the faculty and staff agreed to support slightly larger class sizes, which created a larger teacher-to-student ratio. But they felt the benefits outweighed the burdens. In this new model, each student had a scheduled small group advisory period led by the counselor once a week during which they set goals, reviewed their data, identified areas in which they needed support, developed SEL skills, and learned study skills and other noncognitive factors. They used this time as a study hall, where students completed schoolwork as the counselor met individually with different students. The counselor also provided tutoring and academic support during this time. In addition to this advisory period/study hall/tutoring role, the counselor served as a student advocate, reviewing students' data regularly, helping to create intervention plans, and serving as a liaison between the administration, the teachers, the student, and the families. In addition, the counselors conducted personal interviews with each student based on a rubric the school developed to assess student readiness for high school. The transcripts of these interviews were used by the leadership team during their “root-cause” analysis meetings, to help them select the most appropriate intervention(s) and/or support(s) for each student.

Expanding the counselor role was key to their successful implementation of EWS because the counselors, more than the other adults in the school, were trained to deal with the whole child. Once the counselor role was expanded to include supporting the academic skills development and academic performance of students, they were given considerable leverage in managing the relationships between teachers and students. “We’d always had relationships with students to deal with their social emotional needs,” said one counselor. “Now, this program allows us to build those relationships using an academic framework [that is, ELA and math grades].” Counselors had always known of the forces that were acting upon their students' achievement capacities, but they had no systematic way of documenting these forces or sharing information with the other adults in the building. To build a unified approach to serving each student, counselors collaborated with several other adults in the building: the homeroom teacher, the subject area teachers, and the administration.

This change, however, took good leadership, careful management, and a fair amount of political skill to make happen, particularly with respect to winning the buy-in of the teachers. Counselors were becoming more proactive in ensuring that the teachers were addressing students' needs in the classroom. For some teachers, this created a new tension. Teachers who had been in the school system for many years, as well as new, inexperienced teachers who were primarily focused on how to present content, were wary of counselors telling them how to build relationships with the students in their classrooms, and felt that dealing with the social emotional needs of their students was not in their job description. "Teachers told us, 'Do we tell you how to teach math?'" recalled one counselor. Managing this tension took skilled leadership on the part of the principal and her assistant principals in using the counselors as a resource for teachers who wished to balance good instruction with relationship-building, as well as improve their classroom management skills. In return, teachers were also encouraged to take part in the data discussions through participation in the various team meetings.

Early Warning Indicators in Practice

Data Collection: In the first month of school, the counselors at the Kingsbridge school interview all students and fill out an SEL Student Survey, a four-page paper-based tool that helps students talk with the counselor about their families, their backgrounds, their homes/community life, and attitudes about school and life, and to self-assess their own academic progress, interests, stresses, and strengths. In addition to the interview questions, the student completes an essay responding to either of the following statements, "If I could change my life, this is how it would be," or "If I could help someone, this is who I would help and why." The school uses these student surveys to shape the focus of their advisory programs (see below). The survey also informs the counselors and leadership team in designing the best support and intervention plan for each student. Students understand that any information that they provide will be kept confidential and only used for the intended purposes.

To supplement the SEL Student Survey data, the school team collects baseline data on each student at the beginning of the year through the New York Department of Education (DOE) data systems (this includes district-wide databases that are called ATS and ARIS). These student data include hold-over histories (if they exist), state test results, ELL status, and details regarding any individualized education programs (IEPs) or classifications they may have. These data are entered onto a spreadsheet and used as a first step in identifying students who may need supports and interventions. In addition, the counselor reviews students' past data to determine if they've been off track in any indicator area, if they have any special needs classifications, and/or if they have had or need any interventions.

Throughout the school year, the administrative teams, made up of the principal, assistant principals, the dean, the school counselors, and any teachers who work with a given set of students, collect and review ongoing academic data using Engrade, their online grade book. The counselors review Engrade regularly

for their assigned students to check for any red flags that need following up. They track student progress on class assignments and on ELA and math grades in order to catch students who are falling off track. They also review the attendance data daily and follow up as necessary. When a student is identified as off track in any of these areas, the administrative team convenes to brainstorm supports and interventions. The principal is the keeper of the data spreadsheet, which she shares with the counselors in hard copy, and during teacher meetings on an overhead projector.

Interventions and Supports: Student advisory, which is run by the three school counselors at the Kingsbridge school, is the core of the Tier 1 interventions. Each student meets weekly with one of the schools counselors for an advisory period, which focuses on helping them understand promotion criteria and how they are progressing in each key area (such as grades, assignments, attendance, and behavior). Students also receive support and guidance to develop their executive function skills, including time management, planning, organization, and task completion. Should a student need extra supports or is falling off track in any of the key indicator areas, the counselor arranges for the student to participate in small, targeted group supports (Tier 2), or intensive one-on-one supports (Tier 3). (Advisories are designed for whole groups and targeted groups as well.) Counselors also make full use of the attendance monitoring and response system designed to track student absences more efficiently.

In preparing an advisory for an individual student, the school counselors rely on the SEL Student Survey for important context and background information, and to identify, with the help of the administrative team, the student's unique learning needs. They use the aggregate SEL Student Survey data to inform topics covered in the whole group advisory sessions, as well as whole group targeted assemblies. In a whole group advisory session, counselors directly address and teach key social and emotional skills, approaching these skills as assets rather than liabilities. Advisors draw upon several published curriculum sets for these whole group advisory sessions, including one called *Kids to College* from the New York Institute of Technology (for 6th and 7th graders). An example of a whole group targeted session could include an 8th grade advisory that focuses heavily on transition to high school and navigating the high school choice process.

Because resources are limited, they meet regularly to evaluate the effectiveness of specific school-wide and targeted interventions to determine the extent to which they helped support and reengage students. Each year they redesign the specific supports and interventions made available.

There are also academic and social emotional interventions and supports that are provided throughout the school day, as well as afterschool and during Saturday school. However, the variety of systems and structures designed to identify and address students' risk of falling off track are only as successful as the involvement of the adults in the school. As explained by a former assistant principal (who is now acting principal following the founding principal's retirement), "The key to our success relies on human

interaction and investment. No matter how great the programs and strategies, interventions will be ineffective without constant communication and collaboration among the faculty, staff, and students.” Meetings are frequent, and there are clearly delineated roles and responsibilities for following up with interventions and seeing how they are working for students. In this school, the principal always participates in student meetings and does not end a meeting until there is a quick response and a plan in place to address student needs.

Ultimately, it is the counselor and the homeroom teacher who are in constant communication to be sure that the student is succeeding. They work closely with content area teachers to ensure that students are staying on track, and they make it clear to the student that they care about her success and are committed to supporting her every step of the way. There is a strong belief in the importance of what Dr. Robert Brooks, a leading psychologist and learning specialist, calls “a charismatic adult,” to help a student overcome challenges and develop the right mindsets to make good choices and devise positive solutions. Dr. Brooks’ research has shown that when adults who have overcome adversity in their youth are asked, “What was the most important thing in your life to help you to be more resilient and optimistic through these challenges?” the most common response was that there was at least one adult who believed in them and stood by them when they were younger. This “charismatic adult” can be a teacher, a coach, a mentor, an aid, a tutor, or anyone from whom the student can draw energy, strength, or confidence and who makes the student feel competent and valued (Brooks, 2010).

Much of this school’s Tier 1 programming and whole-school supports and interventions are designed around best practices of positive youth development, which enables students to develop and experience their sense of competence, confidence, connection, character, caring, and contribution. In advisory, students learn the basic social and emotional skills that they are expected to put into practice during their academic classes. There is also a range of afterschool programs that help nurture students’ noncognitive skills, such as sports and fitness clubs, girls international (where girls explore how women are treated around the world), arts programs, and high school fraternities, as well as academic supports and enrichment.

Cultural and Structural Changes

The most compelling changes in this school stemming from *Indicators for Success* have been cultural. The early warning indicator framework and a shared belief of the importance of tiered supports and interventions is fully integrated into this school’s highly developed system of distributed leadership. This is the product of a strong leader who has the respect of her staff and has built a culture of shared leadership and responsibility among many parties, including the principal herself, assistant principals, deans, teachers, counselors, and other student support staff.

This has fostered significant structural changes in the school, aimed at better supporting children moving from off track to on track and increasingly for some to exemplary. In 2012, this school ranked above many of its peer schools in ELA and math proficiency scores on city-wide standardized tests. Perhaps most important, EWS was a catalyst for the school to rethink the way it did business by changing the relationships among counselors, teachers, parents, and students by using data strategically to address each young adolescent holistically. “It increased the number of conversations, and humanized the process of dealing with teachers and students,” according to the principal. Counselors are empowered as they have never been before, moving from working in isolation primarily on providing information about high schools or student health to being advocates for their students and working as a team with fellow counselors and teachers.

REFLECTION: INITIAL OUTCOMES, EARLY WARNING SYSTEMS, EFFECTIVE SCHOOL LEADERS, AND THE PRINCIPLES AND PRACTICES OF SUCCESSFUL MIDDLE SCHOOLS

The obvious question that anyone considering an EWS for his or her school might ask is, “Will it improve student performance?” Although more research is clearly needed to truly establish the connection between EWS and student achievement, initial findings show great promise for the program’s efficacy. A review of quantitative data from midyear 2009 to midyear 2011 demonstrates that the students in all of the schools implementing *Indicators for Success* in New York (which included the two case study schools) had improved in the four key indicator areas: attendance, behavior, and grades in math and ELA.

- **Attendance.** Seventy-five percent of the students had an attendance rate of 90 percent to 100 percent, and 15 percent attended 80 percent to 90 percent of the time. This means that very few students were off track in attendance.
- **Behavior.** In the past, the schools focused primarily on students who committed significant infractions that resulted in referral or suspension. The schools became adept at (1) developing more sophisticated behavior/conduct grading systems that are sensitive to students committing lesser infractions (such as minor classroom disruptions), whom the research says are more likely to slip through the cracks; and (2) applying behavioral interventions that engage those students in learning.
- **ELA and Math.** Academically, the students were not only getting on track, but increasing numbers of them were also excelling. The schools raised the number of exemplary students while reducing the proportion of students who are off track in both ELA and math. Across the PSO network, schools raised the percent of exemplary students in math and ELA by approximately 5 percent during the 2009–2010 school year. The percent of students off track over that same period of time fell by 5 percent in ELA and nearly 10 percent in math.

In addition, according to interviews with teachers and principals, as well as observations from coaching sessions, *Indicators for Success* tools and supports helped the schools achieve these outcomes by promoting use of the *Indicators for Success* data to identify trends and to determine interventions; improving relationships with students and families; and creating a common language and collegial culture focused on the needs of students.

Both the East Harlem and Kingsbridge schools benefitted from strong leadership. Recent research stresses the importance of school leaders' effective use of data to make sound educational decisions (Sparks, 2005; Harris & Spillane, 2008). Moreover, it is through personal leadership that successful principals foster a culture of excellence (Fullan, 2003). A key challenge in education reform is training school leaders to use data to inform instructional improvement, particularly given the connection effective data use has with high-quality leadership training, teacher practice, and positive student outcomes (Davis et al., 2005).

As instructional leaders, principals play a pivotal role in moving their schools to use data; this is most effectively manifested through distributed leadership (Harris & Spillane, 2008). This was found in both schools. Given the increasing demands for accountability felt by all adults in a school system, a principal's effectiveness is gauged by his or her ability to move staff toward assuming responsibility for outcomes, and by training that staff to think of data as the means to improve teaching and learning, which in turn requires a greater level of teacher engagement (Halverson et al., 2005). Although working with the staff on issues of teaching and learning is at the heart of instructional leadership, distributive leadership is recognized as a separate and critical component of effective schools (Sparks, 1999; Elmore, 2000).

To facilitate the implementation and sustainability of *Indicators for Success* and EWS in their schools, the principals profiled had the knowledge and skills necessary to effect reform and school-wide culture change by using personal leadership to generate buy-in; developing structures within schools to use data for selecting appropriate interventions; aligning human and financial resources to use data for improvement; applying research-based interventions to ensure student success; and marshaling resources in the community to strengthen and broaden interventions. In other words, these principals applied the *Principles and Practices of Middle Start*.

- **Principle 1: Reflective Review and Self-Assessment:** Engage in ongoing assessment, reflection, and inquiry into teaching and learning through cultivating a collaborative professional culture of leaders and learners, and engage in the ongoing examination of data and evidence regarding student learning to focus the staff on identifying progress, achievement gaps, and professional development needs.

- **Principle 2: Effective Small Learning Communities:** Develop small learning communities of adults and students and create opportunities for staff to know each student well and engage in ongoing planning of instructional priorities, reviews of student work and formative assessments, communication with parents, and fostering a positive learning environment.
- **Principle 3: Rigorous Curriculum, Instruction, and Student Assessment:** Explicitly focus on improving student learning, ensuring that all students have access to rigorous instruction and exemplary assessment that informs instruction and prepares students for high school level work and postsecondary education.
- **Principle 4: Distributed Leadership and Sustainable Partnerships:** Distribute leadership among teachers and through partnership with families and community organizations, businesses, cultural organizations, and universities for the purpose of enhancing students' learning opportunities.

Using EWS, and specifically *Indicators for Success*, to drive the work, these principals led their schools in implementing the four principles and practices above. Arguably, it was this combination that has led to the improvements in student performance and school practices. What we cannot answer yet is *how*. Additional research, including that which will be conducted as part of the Schools to Watch® Transformation Network, will help answer that question.

CHAPTER IV

SCHOOLS TO WATCH® TRANSFORMATION NETWORK i3 CASE STUDY SNAPSHOTS

North Carolina: Professional Learning
Communities as Drivers of Change

Illinois: Focus on Behavior Development

California: Programming and Teaming for
Success

Reflection: Early Warning Systems, Whole-School
Reform, and Outcomes

Schools to Watch® Transformation Network i3 Case Study Snapshots

We now turn to the STW® Transformation Network experience as described by state, district, and school representatives from North Carolina, Illinois, and California. The snapshots provide a glimpse of how the *Indicators for Success* tools have been combined with a school improvement strategy to effect positive change.

BACKGROUND

In 2010, the U.S. Department of Education awarded the National Forum a four-year Investing in Innovation (i3) grant to introduce the principles and practices of *Indicators of Success* to schools in its Schools to Watch® Transformation Network. School teams undertook this work as part of their ongoing inquiry into student progress and outcomes through data, and were supported by the school transformation coaches in each state. These coaches were associated with the National Forum's lead partners in the Schools to Watch® program in each state—Association of Illinois Middle Schools (AIMS), California League of Middle Schools (CLMS), and North Carolina Middle School Association (NCMSA).⁶

As part of a larger and more comprehensive set of activities and supports provided to the schools under this grant, the FHI 360 team worked with the National Forum, AIMS, CLMS, and NCMSA to adapt the *Indicators of Success* practices to the circumstances of the i3 project. Using a train-the-trainers approach, FHI 360 provided an orientation to AIMS, CLMS, and NCMSA, whose coaches would guide the schools in this work. This took place primarily during national conferences, with periodic follow-up support and training through annual state conferences convened by AIMS, CLMS, and NCMSA.

SCHOOLS TO WATCH® TRANSFORMATION NETWORK

The Schools to Watch® Transformation Network is a consortium of 18 low-performing urban and rural schools in North Carolina, California, and Illinois. The four-year project, which began in October 2010, uses a multi-layered system of support and an extensive set of school improvement strategies, including a STW coach, principal coach, STW site visits, professional development, early warning indicator systems, and networking activities. The project is funded by the U.S. Department of Education.

(Source: i3 Project Fact Sheet, National Forum)

⁶ FHI 360 provided statewide workshops for the coaches from North Carolina and Illinois, but not for those from California.

While the National Forum, AIMS, CLMS, and NCMSA provided overall orientation and guidance for the Schools to Watch® Transformation Network, the FHI 360 team provided technical assistance, professional development, and coaching tools and resources to the partner organizations during 2011 and 2012. Each state had one person who had worked with FHI 360 previously, and thus had developed expertise in EWS. FHI 360 conducted two training sessions across districts and a cross-section of schools to introduce the concepts for EWS, and did follow-up trainings in some of the districts. They also made available a wide range of protocols for schools to adapt to their individual contexts and needs, first in hard copy form and then in an electronic format.

Each of the states came to the program with different levels of expertise in EWS. For example, North Carolina had been doing similar EWS work prior to its introduction to *Indicators of Success*, and already had several state-wide systems in place. Others used the *Indicators of Success* tools to help frame their EWS work. Thus, by 2014, many of the i3 schools had been implementing *Indicators of Success* and, as was the case with the New York schools, they have effectively made it their own.

NORTH CAROLINA: PROFESSIONAL LEARNING COMMUNITIES AS DRIVERS OF CHANGE

District Characteristics

The North Carolina school district selected for this snapshot is located in a rural area (defined by the U.S. Census as located more than 25 miles from a major city). It has 18 schools that serve 7,895 students in grades PreK through 12. It spends \$8,341 per pupil in current expenditures. In 2011, the district spent 64 percent on instruction, 30 percent on support services, and 6 percent on other elementary and secondary expenditures. This district has 14 students for every full-time equivalent teacher, which is the NC state average. In this district, 11 percent of students have an IEP, and 4 percent are ELLs.

The Role of the Professional Learning Community in Ensuring Sustainability of Indicators for Success

The concept and practice of a professional learning community (PLC) to guide teaching and learning is nothing new. According to DuFour et al. (2006), a professional learning community consists of “educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve” (DuFour et al., 2006). However, a PLC is not a tangible item or even a process, but the manifestation and facilitator of infrastructure change. It is such a change that has facilitated the work of early warning indicators in the i3 school snapshot from North Carolina.

In response to questions about the initiative, the Schools to Watch® coach for the snapshot school repeatedly and consistently spoke of the importance of her school's PLC. This school's PLC comprised faculty, school leadership, and coaches. Together the members of the PLC were responsible for the key decisions regarding data collection and analysis, the selection of interventions and strategies, and monitoring. Although the teachers remained the most important arbiter of programming (particularly at Tiers 2 and 3) and intervention success, they were supported by the PLC.

This school's PLC is systematic in thinking through the steps from data to intervention: "Throughout each level of intervention, data is used to determine our progress. Our master schedule is designed to ensure that all students participate in some type of enrichment and/or intervention at some point during the academic year. Student schedules are designed to increase opportunities to provide the support needed by our students and their families."

The coach described a typical meeting.

All during the year, we review attendance, grades, formative/summative assessments, and discipline spreadsheets to identify students that need enrichment and/or intervention. Professional learning community meetings held during teacher planning times are used to identify students and groups based on level of need (red, yellow, and green).⁷ Students are grouped across categories (attendance, grades, discipline) of need into the levels of support they receive weekly. During the meetings, students are grouped based on their needs and a treatment plan is designed for the learning groups.

For Tiers 1 and 2, "The [strategies] are provided during our intervention and enrichment time in addition to the regular instructional periods. From week to week, we monitor the effectiveness of our intervention and enrichment period." For some students, these will not be successful, at which point the PLC brings in the Child and Family Services Team (CFST) and plans an intensive Tier 3 intervention.

Students that require intensive support are referred to the CFST/Student Assistance Team. Meetings are held every 30 days to monitor progress and to modify academic development plans and behavior intervention plans with parents, students, educators, and any outside service agencies involved in supporting the student. Students are also assigned a mentor to help them set goals, problem solve, and support progress towards established academic and behavioral goals.

This coach believed that the *Indicators of Success* framework would play a large part in improving academics and attendance moving forward, and that the PLC in particular was key to the model's sustainability: "We have been using the professional learning community framework and ISIS [*Indicators of Success*] to implement data-based intervention for a few years and I believe it is firmly established in our school."

⁷ Using red, yellow, and green is a reference to the *Indicators of Success* student data reports, in which student status is categorized by color: red for off track, yellow for sliding, and green for on track.

ILLINOIS: FOCUS ON BEHAVIOR DEVELOPMENT

District Characteristics

The Illinois i3 schools were within the Chicago City School District, which has 633 schools that serve 421,430 students in grades PK through 12. This district spends \$10,392 per pupil in current expenditures: 60 percent on instruction, 36 percent on support services, and 5 percent on other elementary and secondary expenditures. There are 20 students for every full-time equivalent teacher, with the Illinois state average of 16 students per full-time equivalent teacher. The district had a grade 9 through 12 dropout rate of 16 percent in 2008, as compared with a national rate of 4.4 percent. About 12 percent of students have an IEP; 17 percent are ELLs. Unless otherwise indicated, the information contained in the snapshot below reflects the experience of one of the i3 schools within this district.

Treating the Whole Child—and Families, Too

Most of this district's efforts went into planning for Tier 1 interventions because many of the problems regarding attendance, behavior, and grades were widespread and not isolated among a few students. This approach was entitled the Universal Middle School Intervention. In the snapshot school, it was presented as the Three Bees: Be responsible, Be respectable, Be safe. Behavior change was a prominent theme underscoring the Illinois schools' Tier 1 interventions. The following are some example Tier 1 proactive supports from across the district:

- “Calm classroom,” which was a daily meditation practice, three times a day. According to one teacher, these were so popular that students have come to request a “calm classroom” break whenever the situation becomes tense.
- “Middle School Survival Kit,” which included ordinary items repurposed to help students remember basic tips to keep them on track to academic and personal success. For example, the kit includes a “Toothpick—to remind you to always pick the good qualities in yourself and others;” a “Cotton ball—to remind you to absorb plenty of knowledge;” and a “Q-tip—to remind you to listen before you judge.”
- “Middle School Behavior Rubric,” designed for students to measure their progress in developing self-awareness, motivation, social skills, empathy, and self-regulation.

Some Tier 1 interventions were implemented in partnership with local community organizations and business groups. A local law firm worked with a school to organize mock trials, but also to chaperone students to college visits, and, as part of Tier 3 intensive interventions, serve as student mentors. A group called YMEN (Young Men's Educational Network) provided life-skills programs for both boys and girls; a

local medical center provided sex education classes; another local medical center provided the necessary vaccinations that children needed to attend school (and made home visits to parents if necessary to secure permission).

Tier 2 and 3 academic interventions involved hour-long intensive tutoring and group work in math, reading, social studies, and science. Students were assigned to a group based on ability and not grade level. For struggling 8th graders, this meant being grouped with the 7th or even 6th graders, which caused some pushback from the older students at first, but which eventually proved effective.

According to one of the Schools to Watch® representatives as well as the school data manager, the data team used the data to determine the thresholds that would trigger an intervention. For example, for general Tier 1 interventions, the threshold could be a low overall attendance rate below 95 percent school-wide, or students missing more than 10 days with unexcused absences. A Tier 2 intervention includes having school teams continue to look at attendance and identify groups of students who need additional motivation and incentive. Typically, the school draws up a contract among the family, student, and the school to ensure an increase in attendance. According to the representative, “We impress upon the parent the importance of daily attendance. We also provide incentives for regular attendance.” A Tier 3 intervention would require a more intensive student monitoring. “We monitor daily attendance of truant students, and we do home visits where and when necessary.”

In the snapshot school, interventions at Tier 3 resembled an IEP, in that every aspect of a student’s learning experience was planned and monitored frequently. Often, the implementation of a Tier 3 intervention involved parents, either voluntarily or as a result of a visit from the school. Family support was a crucial part of the process; according to a teacher, “One hundred percent of our students are free lunch—not free/reduced lunch, but free lunch.” These were needy families. The school provided bus cards and referrals to family support services (including housing and health care).

When asked about the challenges of implementing these interventions, the school data manager immediately responded, “Paperwork! We need to document every step of the way: teachers, students, everyone.” However, the results far outweighed the challenges, especially with respect to improved teacher engagement through the data analysis process itself: “We look at the data and discuss. It’s active and not passive. It’s not like listening to a lecture on best practices for two hours.” At the district level, the Illinois respondents to the online survey indicated that their processes and strategies could be sustained over time, and that academics, behavior, and attendance would improve.

CALIFORNIA: PROGRAMMING AND TEAMING FOR SUCCESS

District Characteristics

The i3 school district in California that was selected for this snapshot is located in a town, defined by the U.S. Census as about 10 to 15 miles from an urban area. It has 11 schools that serve 4,339 students in grades K through 12. This district spends \$8,738 per pupil in current expenditures: 58 percent on instruction, 37 percent on support services, and 5 percent on other elementary and secondary expenditures. There are 22 students for every full-time equivalent teacher (FTE), with the California state average being 21 students per FTE. They had a grade 9 through 12 dropout rate of 6 percent in 2008, as compared with a national rate of 4.4 percent. Eight percent of students have an IEP; 50 percent are ELLs; and 13 percent are migrant students. As with the Illinois snapshot, most of the information below came from one of the schools within this district (unless otherwise indicated).

Structured Programs for Maximum Efficiency

Initially, the California district implemented what it entitled “BAG Goals,” which stood for Behavior, Attendance, and Grades, and was taken directly from the work out of JHU. For each grading period, students received prizes for maintaining excellent grades, behavior, and attendance. More recently, one of the California schools within this district implemented the “Triple A” program, as described by a teacher.

We have a program that we call “Triple A”: Attitude, Attendance, and Academics. We track students’ attendance and tardiness, grades, and behavior issues for four weeks. At the end of that four-week period, we distill that data down and look at the whole child. Students who do well are rewarded—ice pops, pizza party, etc.—for fulfilling their end of the bargain of being good students.

The results have been both tangible and intangible. The teacher noted that truancy had declined since the start of the program. More important, however, was the change in students’ perceptions of themselves as learners.

We’re finding that there is now an intrinsic drive on the students’ part to do their best. It starts off as extrinsic, because we offer that carrot. Over time, they start to internalize those good behaviors, and they find that doing a good job is a reward in and of itself.

This school had a variety of interventions, including: afterschool tutoring, support clubs named after prestigious universities, and, if needed, individualized support. One of those supports, which was considered a Tier 2 intervention, was called “Immediate Response.” If a student missed doing his homework, or failed an exam, that student could be pulled out and placed in the Immediate Response classroom (students were also welcome to attend voluntarily). This intervention gave students an opportunity to make up the work or improve his or her academic performance by way of one-on-one

tutoring, remediation, or reteaching to a group of students. It was called “immediate” because the student was pulled out as soon as the teacher was aware of the problem. Both students and teachers responded positively because being sent to Immediate Response before a problem could worsen would help both learning and teaching. The teacher who supervised the Immediate Response reported that the program had improved academic achievement.

According to the teachers at this school, having common prep time and teaming to examine the data and determine interventions was critical to success. According to one teacher, “It’s allowed us to really collaborate and do what’s best for our students, and to effectively communicate with parents and with each other.” Another teacher felt that this process helped all of the teachers get to know all of the students. “Together, we know all of these kids. So, we can ask each other, ‘What’s your best practice?’ ‘Why is this kid acting up in my class and not in yours?’”

On the online survey, the Schools to Watch® coach for the California schools indicated that prior to the introduction of *Indicators for Success*, approximately 50 percent to 75 percent of the students at the school were off track; currently, this has declined to 25 percent to 50 percent, improvement that she believed could be sustained over time.

REFLECTION: EARLY WARNING SYSTEMS, WHOLE-SCHOOL REFORM, AND OUTCOMES

All of the FHI 360 PSO schools and the STW® schools featured in this report successfully embedded EWS in the context of whole-school reform: Middle Start for FHI 360, and Schools to Watch® (STW®) for the National Forum. A common vision regarding the characteristics of successful schools for young adolescents links the two models and guides the implementation of EWS. At the heart of this shared vision are the National Forum’s criteria for highly effective middle grades schools.

- **Academically Excellent:** Schools challenge all students, providing them with the curriculum, instruction, assessment, support, and time they need to meet rigorous academic standards.
- **Developmentally Responsive:** Schools create small learning communities of adults and students in which stable, close, and mutually respectful relationships support all students’ intellectual, ethical, and social growth.
- **Socially Equitable:** Schools work to educate every child well and to overcome systemic variation in resources or opportunities due to poverty, race/ethnicity, first language fluency, special needs, and gender.

- **Organization Structure:** Schools establish norms, structures, and organizational arrangements to support and sustain a trajectory toward excellence. A sense of purpose drives decision-making.⁸

Both FHI 360 and the National Forum have developed rubrics and other tools to measure the extent to which a schools' practices are consistent with the above characteristics. These include the STW® Self-Study and Assessment Rubric (see Appendix II), FHI 360's *Indicators for Success* implementation checklist, and the Middle Start Principles and Practices rubric.

The purpose of the Schools to Watch® Transformation Network was to help i3 schools meet the STW® criteria. The Self-Study Rubric is a tool developed to help schools assess and re-assess the extent to which they resembled a STW® school. Thus, it is no surprise that the i3 schools seamlessly embedded the rubric criteria into their EWS work. This connection to a whole-school reform framework greatly enhanced the EWS outcomes, because it helped the i3 schools develop their approaches to interventions, particularly Tier 1 interventions. By their very nature, Tier 1 interventions focus on all students. Interventions that focus on all students become part of a whole-school reform effort. In the case of the Schools to Watch® Transformation Network Schools, Tier 1 interventions were aligned with the four rubric characteristics and their implementation focused on the essential systems and structures for ensuring successful implementation such as small learning communities, advisement, and data-driven practices.

To date, how well has this worked for the schools that are part of the Network? As with the PSO schools, we have some initial answers. As part of the i3 award, the National Forum has partnered with the Center for Prevention Research and Development (CPRD), which serves as the third-party evaluator for the program. Preliminary three-year descriptive analyses show very promising results. Using data from the STW® Rubric, Self-Study Teacher Surveys, and student achievement data, CPRD found the following initial outcomes:⁹

- **Use of the STW® Rubric:** There were significant increases in the schools ratings based on the implementation of the STW® rubric criteria in the areas of academic excellence; developmental responsiveness; social equity; and operational structures.
- **Collaboration and Climate:** Teachers reported significant improvements in the following areas: frequency of team practices (or, the increase in the number and variety of activities in which school team members were engaged); quality of team interactions; team decision-making opportunities; work climate; and collective teacher efficacy.

⁸ <http://www.middlegradesforum.org/index.php/schools-to-watch/rubric>.

⁹ The full report may be found here: http://www.middlegradesforum.org/images/i3ProjectFactSheetJune_2013.docx.

- **Instructional Practices:** There were significant increases in the extent to which teachers engaged in the following research-based “best” practices: small group active instruction; integration and interdisciplinary practices; authentic instruction and assessment; critical thinking practices; and writing skill practices.
- **Leadership Practices:** Teachers reported significant improvements in the quality of their school leadership (such as communication, follow-through, and problem-solving).
- **Student Achievement:** According to the report, “Preliminary analyses of the first two years of matched, individual student achievement scores on state standardized tests show that the majority of project schools (10 schools) have an upward trend in achievement (6 schools improved in English/reading; 7 improved in mathematics), but the gains are not statistically significant. This trend is encouraging, particularly in light of the contextual improvements measured at schools (that is, improvements in implementation, collaboration, climate, instructional practices, and leadership), which must occur in order to impact student achievement.” The researchers go on to say that improvements in academic achievement typically take longer than two years to manifest.

The data collection effort above is part of a larger research effort that will consist of a mixed-mode quasi-experimental evaluation to measure the effectiveness of their program. The CPRD team will use these methods to explore the program’s implementation and impact, which will provide the educational community with information on the efficacy of early warning indicators that is based on rigorous research.

CHAPTER V

COMMON THEMES AND PRACTICES AMONG SCHOOLS IMPLEMENTING EARLY WARNING SYSTEMS

How School Teams Organize, Undertake, and Assess Their Work

How School Teams Make Decisions about Interventions and Supports, and Their Own Professional Development

The Kinds of Interventions and Supports the Schools Choose to Address Students' Needs, and the Effects They Have on Students' Progress

Common Themes and Practices among Schools Implementing Early Warning Systems

There were several common themes and practices that were shared among the Schools to Watch® Transformation Network i3 schools and the NYC-DOE FHI 360 partner middle grades schools, which can be grouped into three domains:

- (1) the ways the school teams organize, undertake, and assess their work;
- (2) the ways in which school teams compile, display, and analyze student data, and make decisions about interventions and supports, and their own professional development; and
- (3) the kinds of interventions and supports the schools choose to address students' needs, and the effects those interventions and supports have on students' progress.

HOW SCHOOL TEAMS ORGANIZE, UNDERTAKE, AND ASSESS THEIR WORK

Identifying Off track Students

The i3 schools used the *Indicators for Success* tools—specifically, the student data reports in which off track status was indicated by color—to identify students and groups in need of more targeted interventions. The NYC-based case study schools developed their own systems and tracking mechanisms to identify off track students (for example, as discussed earlier, one school created a

ACADEMICS AND BEYOND

“We work with students and families to address issues causing absences such as homelessness. We also try to provide resources for needy families.”

– i3 COACH

“We’d always had relationships with students to deal with their social emotional needs. Now, this program allows us to build those relationships using an academic framework [that is, ELA and math grades].”

– SCHOOL COUNSELOR, KINGSBRIDGE SCHOOL

“Having a common grading system where anyone can see where the student is at is the real means for supporting a student.”

– TEACHER, EAST HARLEM SCHOOL

questionnaire designed to capture the student's home life to supplement the academic data). Apart from the reports, in whatever form, identifying off track students was a labor-intensive task for the teachers and other adults in the building. This i3 coach's explanation could apply to any of the schools featured in this report.

All during the year, we review attendance, grades, formative/summative assessments, and discipline to identify students that need enrichment and/or intervention. Throughout each level of intervention, we use data to determine our progress. Our master schedule is designed to ensure that all students participate in some type of enrichment and/or intervention at some point during the academic year. Student schedules are designed to increase opportunities to provide the support needed by our students and their families.

The schools followed the same pattern when using data to determine interventions. For each indicator area (attendance, grades, behavior) students were grouped based on the levels of support they will receive. "During the meetings," explained one i3 coach, "students are grouped based on their needs and a treatment plan is designed." Regardless of the level of treatment—whole-school, targeted, or intensive—schools follow the same procedures for monitoring progress: weekly or semi-monthly examinations for the school overall using indicator data, and, for those students assigned to targeted or intensive interventions, a greater scrutiny that couples indicator data with notes from teachers, counselors, parents, and/or external service providers (such as a case worker). Due to the labor intensity of the effort and the recognition that progress might not manifest itself in a week, these examinations might be conducted monthly; however, the counselor and/or advisory team responsible for the student would meet with the student on a more frequent basis, such as weekly or even daily.

The *Indicators of Success* framework, and the professional development, technical support, and resources that went along with the implementation, compelled schools to think about the root causes of an off track status, rather than as something that was solely the fault of the student. For example, one case study school noted that some students were absent because they had to care for younger siblings; some students might have exemplary scores in all but one class, indicating that perhaps the student might have difficulties with a particular teacher; or, there may have been a death in the family or a family member could be incarcerated. "Many of our students suffer from the effects of being 'detached,' or separated, from a loved one at an early age. This can have a profound effect on a child," shared one school counselor.

Expanding the Data Sources

The use of data depended on the intervention. Using literacy and math grades, attendance, and behavior records enabled schools to identify students at risk, but when it came to the intervention and monitoring its effectiveness, schools availed themselves of other data. Earlier, we discussed the SEL Student Survey that one of the case study schools used to elicit information about a student's home life. In the other case study

school, the DDIT—which included not only a student’s grades but also plans for improvement, if needed—was used alongside grade data. Other data that schools used to select tiered interventions included private discussions with teachers, students, and/or parents, and targeted formative assessments. Only two types of data sources—1) discussions, notes, or assessments from sources outside the school (such as counselors, physicians, case workers, therapists); and, 2) discussions, notes, or assessments from school staff and school guidance counselors—were used for targeted and intensive interventions only, although they could also be used to monitor the effectiveness of a whole-school intervention. Anonymous teacher and student surveys, such as the Learning Environment Survey mentioned earlier, were used to shape and measure the effectiveness of whole-school interventions. In the STW® Transformation Network schools in particular, the data from the STW® data tools — mainly, the annually-conducted School Improvement Self-Study (completed by staff, students, and parents) and the data collected through the Schools to Watch® Rubric — provided critical and nuanced context to the achievement, attendance, and behavior data.

HOW SCHOOL TEAMS MAKE DECISIONS ABOUT INTERVENTIONS AND SUPPORTS, AND THEIR OWN PROFESSIONAL DEVELOPMENT

Teaming and Building a Professional Learning Community

The North Carolina respondent to the online survey described the data team as “a professional learning community,” rather than just one more interdisciplinary team in the school. Thinking of the work as part of a PLC implies that in the process of using data to determine interventions, much learning is simultaneously taking place among the principal, teachers, and other members of the group charged with early warning indicators. Across all of the schools, and at minimum, the following staff members were always at the table: the principal, at least one assistant principal, a content area teacher, and a grade-level teacher. A school counselor is an important addition, though it wasn’t the case in all schools. In addition, a parent was sometimes included, though this was less frequent. Meetings were held during teacher planning times, and on a fairly regular basis; at the very least, groups met every other week. Regardless of the frequency, EWS meetings were fully embedded in the school culture.

Among the team, teachers assumed a critical role in ensuring that the EWS implementation was successful. Because the indicators were most often manifest in classrooms, the teacher was best positioned to notice poor grades, attendance, or behavior. The teacher often had the greatest say in the kinds of interventions needed, and how progress could or should be measured. In this way, teachers were empowered in new ways. As one of the teachers in the snapshot school described it, “[There are] new opportunities for teachers to take on different roles within the school and community.” The i3 schools reported that the teachers took the lead in deciding which data to use in determining who was or was not on track, the interventions to put into place, and the data to use in determining whether those interventions were successful. In this way, EWS became something teachers were doing, and not something being done to them.

If there was a common challenge among schools, it was the need for parental involvement. One of the case study school principals described it as one of his biggest challenges, and further explained that only about 50 percent of his students' parents were involved in the schools. This means that lack of parental involvement regarding EWS was seen in other areas as well. The i3 principals stated that the parents were “somewhat involved” with EWS efforts, but that the parents were generally unaware of how the data were used and why. However, for those parents who were involved—as part of EWS meetings (as in one of the case studies) or as part of a Parent Teachers Association—their contributions were substantive. The principal with the 50 percent parental involvement rate also said that the parents who were involved were key in recommending positive changes and programs, such as peer mediation groups, hiring youth counselors, and fostering more effective community interactions.

Knowing the Literature

Another commonality is that the EWS teams, which most often includes instructional leaders and teachers, work hard to ensure that all members are knowledgeable on the latest literature on interventions, particularly pertaining to literacy and math, as well as engaging instruction and positive youth development. In addition, all schools in this report were open to and actively engaged in strategic partnerships that connected them to research-based practices and experts in the field. The NYC case study schools had the advantage of being part of the AED (later FHI 360) PSO network, and, as such, had access not only to internal education experts but also to a vibrant community of experts from Teachers College (Columbia), City University of New York (CUNY), New York University (NYU), Princeton, Fordham, and other prestigious schools, which provided access and guidance to several research-based practices, including RULER¹⁰, Read 180¹¹, the Michigan Model¹², Guided Discipline¹³, and Mindfulness teaching practice.¹⁴ Similarly, the i3 schools had access to the extensive professional knowledge base of their schools' coaching teams, which was deemed invaluable.

For example, one of the case study schools relied upon extant research, specifically on brain theory and young adolescent development, to determine interventions. The administration team, school counselors, and a targeted team of teachers attended a series of workshops with behavior and youth development experts, and brain researchers studying the young adolescent brain, and they have embedded this research into their school programs and structures. In addition, when they decide on specific professional development focus areas, they send a team of faculty to experience it together so they can have a shared experience, build internal capacity, and then form a collaborative team to help teach other faculty who were not at the actual workshop or workshop series. The principal of the other case study school was also mindful to keep abreast of the latest research on young adolescent development.

10 RULER: <http://heblab.research.yale.edu/heblab-yale/myweb.php?hls=10082&id=3>

11 <http://teacher.scholastic.com/products/read180/index.htm>

12 Michigan Model: <http://www.emc.cmich.edu/mm/>

13 Guided Discipline: <http://esrnational.org/professional-services/middle-school/reform/classroom-discipline/>

14 Mindfulness teaching practice (called CARE): http://www.garrisoninstitute.org/index.php?option=com_content&view=article&id=77&Itemid=79

THE KINDS OF INTERVENTIONS AND SUPPORTS THE SCHOOLS CHOSE TO ADDRESS STUDENTS' NEEDS, AND THE EFFECTS THEY HAD ON STUDENTS' PROGRESS

The Importance of a Caring Adult

All of the schools mentioned in this report shared the common intervention of ensuring that each student had at least one adult responsible for his or her academic and social emotional well-being. At minimum, all students were assigned a mentor to help them navigate various demands and challenges, problem solve, and support progress toward established academic and behavioral goals. This was part of the universal, or Tier 1 supports. For the intensive and, in some cases, targeted interventions, often a team of adults was charged with this responsibility of working together to determine and monitor interventions. This was clearly described in the Kingsbridge School's advisory model, where counselors worked closely with the administration, the homeroom teacher, and the subject area teachers to provide uniform and integrated supports across all elements of the student's school life.

Re-imagining Tier 1 as “Lifting all Boats”

In thinking about economies of scale, the schools highlighted in this report shared a common hope and expectation that whole-school, proactive interventions would have the effect of “lifting all boats,” which would, in time, reduce the number of students who needed targeted or intensive interventions. Two of the schools—one i3 and the other a NYC case study—have implemented a whole-school merit system that emphasized positive awards for good grades, attendance, and behavior. Another i3 school provided incentives for regular attendance. As discussed earlier, there were several reasons for the merit or reward system: Carrots worked better than sticks; a reward system was more likely to engage the greatest number of students; and such a system would make it easier to identify and target students who needed greater supports—that is, those who did not respond to the reward system.

As captured in this report, schools that implement EWS reach out to community providers to help students and families in crisis. One North Carolina school created a Child and Family Services Team, which maintained communication with parents, students, and (if necessary) service providers. More than ever before, schools are now charged with dealing with the various crises that might affect academic achievement. At one of the case study schools in NYC, it was not uncommon for a student to suffer from the effects of a death in the family or of an incarceration of a family member. “Many of our students suffer from the effects of being ‘detached,’ or separated, from a loved one at an early age. This can have a profound effect on a child,” stated a school counselor at the Kingsbridge school. Thus, schools often found it important to bring in mental health professionals or social services case workers, because doing so was critical to nurturing students' noncognitive skills and creating the conditions for learning that are necessary for ongoing success.

CHAPTER VI

CONCLUSION

Appendix I: Middle Start Principles
and Practices Rubric

Appendix II: Schools to Watch® Self-Study
and Assessment Rubric

Appendix III: Sample Data Reports

References

Conclusion

To date, many dropout prevention programs have been ineffective because they rely on demographic characteristics and/or standardized test scores to target young people for intervention. Recent studies find that although low test scores, poverty, and minority status are correlated with dropping out of school, they are not the strongest predictors of whether a student drops out (Dynarsky & Gleason, 2002; Gleason & Dynarsky, 2002).

The solution could not be found in the collection of new and different data. This was really a non-issue because there was never any lack of data. In NYCDOE schools, data were (and still are) everywhere—the annual school progress reports; the periodic assessments; absence reports; incidence (behavioral) reports; the learning environment survey data (completed by parents, teachers, and students); the state test scores; and the school quality review reports. In addition, each NYC public school had a mandated inquiry team, in which groups of teachers and administrators examined student data to identify struggling students and to develop interventions to support them. In fact, there were almost too much data and too few guidelines to help schools convert data to action. The inquiry team model was a good start, but school staff needed to determine on which data to focus and how to put those data into practice to support student development and achievement.

The administrators and staff of schools that chose to implement EWS already know their neighborhoods and student demographics. But with EWS, now they are able to identify which students are most at risk for dropping out, which supports and interventions students need for academic success, and which

“[Students] won’t care about what we know until they know that we care.”

– **TEACHER, i3 SCHOOL**

“Data has also created new opportunities for teachers to take on different roles within the school and community.”

– **TEACHER, EAST HARLEM SCHOOL**

“It increased the number of conversations, and humanized the process of dealing with teachers and students. Before this, kids easily slipped through the cracks. But now that we have a program that targets criteria, we’re able to take ownership of each student. Kids are aware that someone cares for them. No one slips through the cracks anymore. No student is written off.”

– **PRINCIPAL, KINGSBRIDGE SCHOOL**

interventions help students transcend the impact of their environment to succeed. To access or develop the right interventions to support students, these educators believe it is not necessarily new data they need, but more strategic ways to use the data already in hand.

No school would say that it had “arrived” at the solution to dropout prevention and holistic, tiered supports and interventions to keep all middle grades students on track to a successful transition to high school, and an on-time high school graduation. Rather, the schools all shared the belief that there are more questions to be answered through the data and more strategies to be implemented. They see the positive progress and are eager to see the impact over time. They are committed to continuing the data collection so that they can answer the questions one of the principals featured in this report asked: “Does this work? What impact are we having?” This sentiment is shared among all principals who wonder whether an emphasis on the four early warning indicators increases test scores. The good news is, as the data from the case study schools show, that a focus on tiered supports and interventions improves performance. However, we do not know how that connection is manifested. Is it an indirect effect of a greater emphasis on behavior improvement, or increased attendance? Is it parental involvement? No research has answered this question. Yet.

Another compelling question seems to be, what interventions, or constellation of interventions, produce the best results? Improvements can be measured at the school level, as shown earlier. Interventions, however, are as varied as the students themselves. For example, when a student is failing math, she might be given an intervention plan that includes extra help sessions with the math teacher, meeting regularly with the counselor (to work on skills), homework help, time management, participating in afterschool math intensives, and attending Saturday school. If she passes math, no one knows which intervention, or, to use a medical term, dosage of the intervention, was effective. Knowing this would be invaluable to schools, because efficiency would be increased. Instead of implementing an intervention, or series of interventions, and hope that academic performance will improve, schools will now know that a specific intervention produces a result.

This question suggests a robust research agenda. For example, one might create a typology of schools by their EWS implementation (for example, with or without external coaching; conducting meetings with or without parents; focusing on a single grade or on all grades) and then examine any changes in the four indicators. That would allow us to measure, using our examples above, the effectiveness of coaching, parental involvement, and focusing on a single grade. The next challenge is to develop a research strategy that helps us to directly attribute which interventions are most successful, and which are less successful. Again, to use the example above, which was most effective: homework help? Saturday school? Or a combination thereof? In addition, what kind of student would be most responsive to an intervention?

Research can answer another important question: Can an EWS system exist outside the context of school reform, in particular, a STW® model of school reform? Put another way, how replicable is this? Research is underway that might be able to answer that question, including that which is currently underway for the Schools to Watch® Transformation Network. Is EWS a school reform model in and of itself, or must it exist in the context of an existing model? It seems like the initial findings may be pointing toward the latter. While this can and has been implemented as a “stand-alone” program in many schools, when this type of program is incorporated within a broader school improvement effort (such as STW®) that focuses the entire school on Tier 1 interventions, the impact of EWS can be much greater.

But, perhaps it goes beyond that. The most important next research question must be to what extent can this data-driven program produce the kinds of changes that will, ultimately, move all students not only from failing to on track but from on track to exemplary, and prepared for high school and beyond? And, are the systemic changes to the schools’ culture and infrastructure worth the effort? Data are just beginning to answer the former question, as shown earlier. To the latter question, schools would answer with a resounding “Yes.”

Appendix I: Middle Start Principles and Practices Rubric

Each Principle and Practice indicator is rated on the following scale: Emerging; Implementing; and Sustaining.

PRINCIPLE 1. REFLECTIVE REVIEW AND SELF-ASSESSMENT: A Middle Start school engages in ongoing inquiry into teaching and learning, using both internal and external reviews of student work, curriculum, instruction, and teacher assignment. Reflection and inquiry are central to the school's approach to continual improvement of learning for all students and to the cultivation of a collaborative professional culture of leaders and learners.

1. The school devotes resources and time to continuing and deepening schoolwide inquiry and reflection into teaching and learning, making it a central aspect of school culture. A democratically elected and representative school leadership team leads these efforts.
2. The school collects and examines data and evidence, including a school self-assessment, to focus the staff on identifying and setting teaching and learning goals.
3. The school examines evidence to identify academic progress as well as gaps in achievement related to income, gender, race/ethnicity, and special status (ELL and special education).
4. The school makes inquiries into student learning through a regular and formal process of reviewing student work.
5. The school conducts formal and periodic external reviews of its teaching and learning practices and uses the results to improve practice.

PRINCIPLE 2. EFFECTIVE SMALL LEARNING COMMUNITIES: A Middle Start school has small learning communities with interdisciplinary teams at each grade level. Teams of teachers meet during common planning time to set instructional priorities for their team, develop interdisciplinary units, conduct reviews of student work to assess the team's direction and needs, and communicate with parents. Such small learning communities are important to the healthy development of young adolescents as they foster a caring and supportive learning environment.

1. School teams use common planning time to coordinate the curriculum, instruction, and assessment for all students and identify an instructional focus that crosses all content areas. Teams regularly review student work to assess progress toward their teaching and learning goals, and set future directions.
2. School teams are involved in making decisions about school policies, practices, and procedures in collaboration with the school leadership team.
3. School teams cultivate meaningful, two-way, and regular communication between home and school that builds families' understanding of the academic and developmental needs of young adolescents. Teams also involve families and community agencies in classroom and school activities and invite their perspectives on future directions for the school.
4. School teams promote the intellectual, physical, emotional, moral, and social development of every student.
5. Students are flexibly grouped within small learning communities so that every child has access to a rigorous curriculum, effective instruction, and an appropriate level of support.

PRINCIPLE 3. RIGOROUS CURRICULUM, INSTRUCTION, AND STUDENT ASSESSMENT: A Middle Start school explicitly focuses on improving student learning and achievement. The school matches a rich curriculum with best instructional practices and exemplary assessment to realize the full potential of each student.

1. The school uses best instructional practices and a curriculum that emphasizes deep understanding, higher order thinking, and experiential learning.
2. The school aligns curriculum, instruction, and assessment with each other and with district, state, and national standards.
3. The school researches, selects, and uses multicultural curricula and teachers use a variety of teaching modalities to meet the needs of all students.
4. The school assesses student progress in a variety of ways, including performance-based and project-based assessments, which provide all students with multiple opportunities to demonstrate mastery and understanding.
5. Teachers use standards and rubrics when evaluating student work; students have opportunities to learn about, develop, and use rubrics.
6. The school engages in standards-based professional development that builds on teachers' knowledge and creates opportunities for reflection.

PRINCIPLE 4. DISTRIBUTED LEADERSHIP AND SUSTAINABLE PARTNERSHIPS: A Middle Start school cultivates sustainable partnerships with families, the district, the school board, local businesses, universities, and other community groups for the purpose of enhancing student learning. The school fosters high levels of awareness and support for middle grades education among its partners. Leadership is shared and distributed throughout the school and through all levels of the school community; all members of the staff hold themselves accountable for student learning and achievement.

1. The leadership team involves families, school staff, and community partners in school governance and in making decisions about policies and practices for the improvement of teaching and learning.
2. Teachers, administrators, and counselors regularly communicate with families, and welcome families and community members into classrooms, team meetings, and school events.
3. The school leadership team provides space and resources to families in order to extend their knowledge about the needs of young adolescents and approaches to supporting students academically and developmentally. The school leadership team also provides access to community agencies, services, and resources.
4. The leadership team facilitates the schoolwide collection of data to assess the concerns and perceptions of families regarding the school, and uses this evidence to make related changes in policies and practices.
5. The leadership team is collaborative and inclusive in its efforts to attain the school's teaching and learning goals. In addition, the school's emphasis on reflective review facilitates the development of internal accountability for the improvement of teaching and learning.
6. The leadership team participates in the Middle Start network and leadership seminars, and shares information from these meetings with staff. To facilitate professional development, staff from the school visit other schools to study their efforts to improve teaching and learning, and are visited by their fellow Middle Start schools for this purpose.
7. The school views students as central to its purpose, and seeks their ideas on new initiatives as well as their feedback on progress in teaching and learning. The school regularly reviews students' work in teams and as a whole-school, using internal and external reviewers, to gauge its progress toward its teaching and learning goals.

Appendix II: Schools to Watch® Self-Study and Assessment Rubric

The STW® Rubric uses the following scale:

- 4 =** The practice is highly and completely implemented, systemic, in a coherent fashion in every classroom, by every teacher, across the school.
- 3 =** There is a high degree or maturing quality of implementation that is systemic, but it may not be coherent or of the highest quality in every classroom and by every teacher, but certainly by most, 75 percent or better.
- 2 =** There is a mixed, fair, immature quality of implementation. A 2 also means that practices may include many teachers but not the majority. The program may be too new to have realized accountable results or to be evaluated as effective.
- 1 =** The practice may just have gotten started, (very immature), or is only practiced by a handful of practitioners.

ACADEMICALLY EXCELLENT. High-performing schools with middle grades are academically excellent. They challenge all students to use their minds well.

1. All students are expected to meet high academic standards.
2. Curriculum, instruction, and assessment are aligned with high standards.
3. The curriculum emphasizes deep understanding of important concepts, development of essential skills.
4. Instructional strategies include a variety of challenging and engaging activities that are clearly related to the concepts and skills being taught.
5. Teachers use a variety of methods to assess student performance (such as exhibitions, projects, performance tasks).
6. The faculty and master schedule provide students time to meet rigorous academic standards.
7. Students are provided the support they need to meet rigorous academic standards.
8. The adults in the school are provided time and frequent opportunities to enhance student achievement by working with colleagues to deepen their knowledge and to improve their standards-based practices.

DEVELOPMENTAL RESPONSIVENESS. High-performing schools with middle grades are sensitive to the unique developmental challenges of early adolescence.

1. The staff creates a personalized environment that supports each student's intellectual, ethical, social, and physical development.
2. The school provides access to comprehensive services to foster healthy physical, social, emotional, and intellectual development.
3. All teachers foster curiosity, creativity, and the development of social skills in a structured and supportive environment.
4. The curriculum is both socially significant and relevant to the personal and career interests of young adolescents.
5. Teachers use an interdisciplinary approach to reinforce important concepts, skills, and address real-world problems.
6. Students are provided multiple opportunities to explore a rich variety of topics and interests in order to develop their identity, learn about their strengths, discover and demonstrate their own competence, and plan for their future.
7. Students have opportunities for voice—posing questions, reflecting on experiences, and participating in decisions and leadership activities.
8. The school staff members develop alliances with families to enhance and support the well-being of the children.
9. Staff members provide all students with opportunities to develop citizenship skills, to use the community as a classroom, and to engage the community in providing resources and support.
10. The school provides age-appropriate, co-curricular activities to foster social skills and character, and to develop interests beyond the classroom environment.

SOCIAL EQUITY. High-performing schools with middle grades are socially equitable, democratic, and fair. They provide every student with high-quality teachers, resources, learning opportunities, and supports. They keep positive options open for all students.

1. To the fullest extent possible, all students, including English learners, students with disabilities, and gifted and honors students, participate in heterogeneous classes with high academic and behavioral expectations.
2. Students are provided the opportunity to use many and varied approaches to achieve and demonstrate competence and mastery of standards.
3. Teachers continually adapt curriculum, instruction, assessment, and scheduling to meet their students' diverse and changing needs.
4. All students have equal access to valued knowledge in all school classes and activities.
5. Students have ongoing opportunities to learn about and appreciate their own and others' cultures.
6. The school community knows every student well.
7. To the fullest extent possible, the faculty welcomes and encourages the active participation of all its families and makes sure that all its families are an integral part of the school.
8. The school's reward system is designed to value diversity, civility, service, and democratic citizenship.
9. To the fullest extent possible, staff members understand and support the family backgrounds and values of their students.
10. The school rules are clear, fair, and consistently applied.

ORGANIZATIONAL STRUCTURES AND PROCESSES. High-performing schools with middle grades are learning organizations that establish norms, structures, and organizational arrangements to support and sustain their trajectory toward excellence.

1. A shared vision of what a high-performing school is and does drives every facet of school change.
2. The principal has the responsibility and authority to hold the school-improvement enterprise together, including day-to-day know-how, coordination, strategic planning, and communication.
3. The school is a community of practice in which learning, experimentation, and the opportunity for reflection are the norm.
4. The school and district devote resources to content-rich professional learning, which is connected to reaching and sustaining the school vision and increasing student achievement.
5. The school is not an island unto itself; it is a part of a larger educational system, i.e., districts, networks, and community partnerships.
6. The school staff holds itself accountable for student success.
7. District staff and school staff possess and cultivate the collective will to persevere, believing it is their business to produce increased achievement and enhanced development of all students.
8. The school staff and district staff partner with colleges and universities.
9. The school includes families and community members in setting and supporting the school's trajectory toward high performance.

Appendix III: Sample Data Reports

1: INDICATORS FOR SUCCESS STUDENT STATUS REPORT

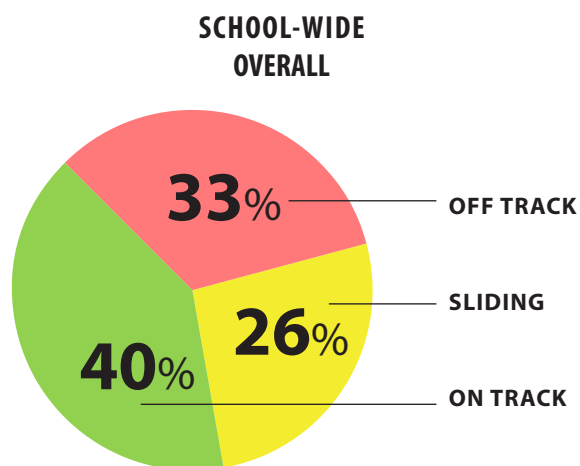
Using an Excel spreadsheet, individual students are listed in order of their status, with off track students listed first. Student status in each indicator area is color-coded: red = off track; yellow = sliding (or transitional); light green = on track; dark green = exemplary. If a student is off track in even one of the indicator areas, that student is considered off track overall and is color-coded as such. Thus, the *Indicators for Success* dataset can be easily sorted to isolate students with at least one off track indicator.

On Track Status Cycle 2		movement on/off track	Grade	Official Class	ATTENDANCE					BEHAVIOR			GRADES						
Last Name on track status Cycle 2	First Name on track status Cycle 2				Days Absent Prior Year	Prior Year Attd Rate	Attendance Rate Cycle 1	Days Absent YTD	Attendance Rate YTD	Movement on/off track Attendance	Behavior Cycle 1	Behavior Cycle 2	Movement on/off track Behavior	ELA Grade Cycle 1	ELA Grade Cycle 2	movement on/off track ELA	Math Grade Cycle 1	Math Grade Cycle 2	movement on/off track Math
XXXXXX	XXXXXX	—	8	831	41	77	79	20	76	—	S	S	—	85	80	—	98	99	—
XXXXXX	XXXXXX	—	8	821	6	97	98	4	95	↓	N	N	—	75	70	—	70	65	↓
XXXXXX	XXXXXX	—	8	811	11	94	95	6	93	—	N	N	—	Missing	70	—	65	65	—
XXXXXX	XXXXXX	—	8	803	6	97	98	2	98	—	S	S	—	75	80	—	70	85	—
XXXXXX	XXXXXX	—	8	811	14	92	98	3	96	—	N	N	—	75	75	—	70	65	↓
XXXXXX	XXXXXX	↓	8	811	6	97	95	3	96	↑	N	U	↓	65	65	—	65	55	↓
XXXXXX	XXXXXX	↑	8	831	11	94	98	4	95	↓	N	S	↑	65	75	↑	85	85	—
XXXXXX	XXXXXX	—	8	812	179	0	83	15	82	—	N	N	—	90	85	↓	65	70	↑
XXXXXX	XXXXXX	—	8	162	26	86	84	11	87	—	N	N	—	75	75	—	63	62	—
XXXXXX	XXXXXX	—	8	803				1	90	—	S	S	—		1	—		1	—
XXXXXX	XXXXXX	—	8	812	7	96	100	1	99	—	S	S	—	89	85	—	85	90	↑
XXXXXX	XXXXXX	—	8	803	1	99	98	1	99	—	N	N	—	65	70	↑	70	70	—
XXXXXX	XXXXXX	—	8	812	13	93	100	1	99	—	N	N	—	65	65	—	70	75	—
XXXXXX	XXXXXX	—	8	162	26	86	70	25	70	—	S	N	↓	55	65	↑	65	65	—
XXXXXX	XXXXXX	—	8	801	8	96	95	3	96	↑	N	N	—	80	80	—	85	80	—
XXXXXX	XXXXXX	↓	8	801	10	94	98	4	95	↓	S	N	↓	80	70	—	85	97	↑
XXXXXX	XXXXXX	—	8	811	1	99	100	1	99	—	N	N	—	80	65	↓	80	70	—
XXXXXX	XXXXXX	—	8	831	17	91	63	19	77	—	U	N	↑	85	85	—	80	85	—
XXXXXX	XXXXXX	↓	8	821	11	94	88	9	89	—	N	U	↓	65	65	—	65	65	—
XXXXXX	XXXXXX	—	8	821				0	100	—	N	N	—		65	—		65	—
XXXXXX	XXXXXX	↑	8	803	13	93	95	1	99	↑	U	N	↑	80	80	—	80	80	—
XXXXXX	XXXXXX	↓	8	803	39	78	91	7	92	—	N	U	↓	70	70	—	70	75	—
XXXXXX	XXXXXX	—	8	812	11	94	88	6	93	↑	S	N	↓	99	87	↓	80	77	—
XXXXXX	XXXXXX	—	8	812	7	96	100	2	98	—	N	N	—	91	81	↓	70	75	—
XXXXXX	XXXXXX	—	8	812	17	91	74	29	66	—	N	N	—	76	65	↓	65	65	—
XXXXXX	XXXXXX	—	8	811	9	95	93	5	94	—	N	N	—	75	70	—	70	65	↓
XXXXXX	XXXXXX	—	8	821	179	0	95	6	93	—	N	N	—	70	65	↓	65	65	—
XXXXXX	XXXXXX	↓	8	821	0	100	100	30	64	↓	N	N	—	70	70	—	65	65	—
XXXXXX	XXXXXX	—	8	801	6	97	98	3	96	—	S	S	—	75	75	—	93	95	—
XXXXXX	XXXXXX	—	8	821	21	88	86	14	83	—	N	N	—	70	65	↓	65	65	—
XXXXXX	XXXXXX	↑	8	801	12	93	95	8	91	—	U	S	↑	85	90	↑	75	85	—
XXXXXX	XXXXXX	↑	8	803	0	100	91	4	95	—	N	S	↑	70	75	—	65	70	↑
XXXXXX	XXXXXX	↓	8	803	4	98	98	1	99	—	N	U	↓	65	70	↑	65	65	—
XXXXXX	XXXXXX	↑	8	812	0	100	100	0	100	—	N	S	↑	93	87	↓	75	77	—
XXXXXX	XXXXXX	—	8	811	15	92	88	11	87	—	N	N	—	80	70	—	75	70	—
XXXXXX	XXXXXX	↓	8	831	5	97	95	29	66	↓	S	N	↓	75	80	—	80	80	—
XXXXXX	XXXXXX	↓	8	811	7	96	100	2	98	—	N	U	↓	80	80	—	75	80	—
XXXXXX	XXXXXX	↑	8	821	3	98	93	4	95	—	N	S	↑	75	75	—	80	75	—
XXXXXX	XXXXXX	↑	8	803	0	100	100	0	100	—	U	N	↑	70	80	—	75	86	—
XXXXXX	XXXXXX	—	8	162	14	92	84	13	85	—	S	N	↓	75	75	—	95	70	↓
XXXXXX	XXXXXX	—	8	812	15	92	100	3	96	—	N	N	—	80	91	↑	85	85	—
XXXXXX	XXXXXX	—	8	821	179	0	94	6	93	—	N	N	—	65	65	—	65	65	—
XXXXXX	XXXXXX	—	8	831	41	77	77	20	76	—	S	N	↓	70	70	—	70	75	—
XXXXXX	XXXXXX	↓	8	812	179	0	91	4	95	—	N	S	↑	70	60	↓	65	65	—
XXXXXX	XXXXXX	—	8	821	179	0	86	2	98	↑	N	S	↑	65	65	—	65	65	—
XXXXXX	XXXXXX	↑	8	831	19	89	91	10	88	↓	N	N	—	70	80	—	55	75	↑
XXXXXX	XXXXXX	↑	8	811	2	99	98	2	98	—	N	S	↑	55		—	65		—
XXXXXX	XXXXXX	—	8	811	20	89	88	10	88	—	N	N	—	80	75	—	65	70	↑
XXXXXX	XXXXXX	—	8	812	5	97	100	0	100	—	S	S	—	89	85	—	70	85	—
XXXXXX	XXXXXX	↓	8	812	2	99	93	13	85	↓	S	S	—	97	90	—	90	85	↓
XXXXXX	XXXXXX	↑	8	831	10	94	95	6	93	—	N	N	—	65	65	—	55	65	↑
XXXXXX	XXXXXX	—	8	803	10	94	95	2	98	↑	N	N	—	70	70	—	80	85	—
XXXXXX	XXXXXX	—	8	811	14	92	91	6	93	—	N	N	—	75	75	—	70	70	—
XXXXXX	XXXXXX	↑	8	803	15	92	88	9	89	—	U	N	↑	75	80	—	70	85	—
XXXXXX	XXXXXX	—	8	803	5	97	98	2	98	—	N	N	—	75	75	—	70	75	—
XXXXXX	XXXXXX	↓	8	811	8	96	91	11	87	↓	S	S	—	90	90	—	85	80	—
XXXXXX	XXXXXX	—	8	801	17	91	100	5	94	↓	S	S	—	80	70	—	75	75	—
XXXXXX	XXXXXX	—	8	812	2	99	100	2	98	—	S	S	—	94	92	—	80	85	—

2. INDICATORS FOR SUCCESS TREND ANALYSIS REPORT

School wide	Overall	ATTD Rate	Behavior	GRADES			ASSESSMENTS	
				Reading	Writing	Math	LAL	Math
Off Track	29	16	NA	7	12	6	52	41
Sliding	23	5	NA	15	21	24	NA	NA
On Track	36	2	NA	62	51	43	20	24
Exemplary	0	66	NA	0	0	11	0	8
Students w/o data	1	0	NA	5	5	5	17	16
TOTAL	89	89	NA	89	89	89	89	89

This summary report, also in Excel, aggregates and disaggregates a school's indicator data to enable the user to see trends and get a fuller view of the number of students who are off track, sliding, on track, or exemplary in each indicator. There are also grade level reports and others for selected subgroups, such as ELL, that follow this format but are not shown here.



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