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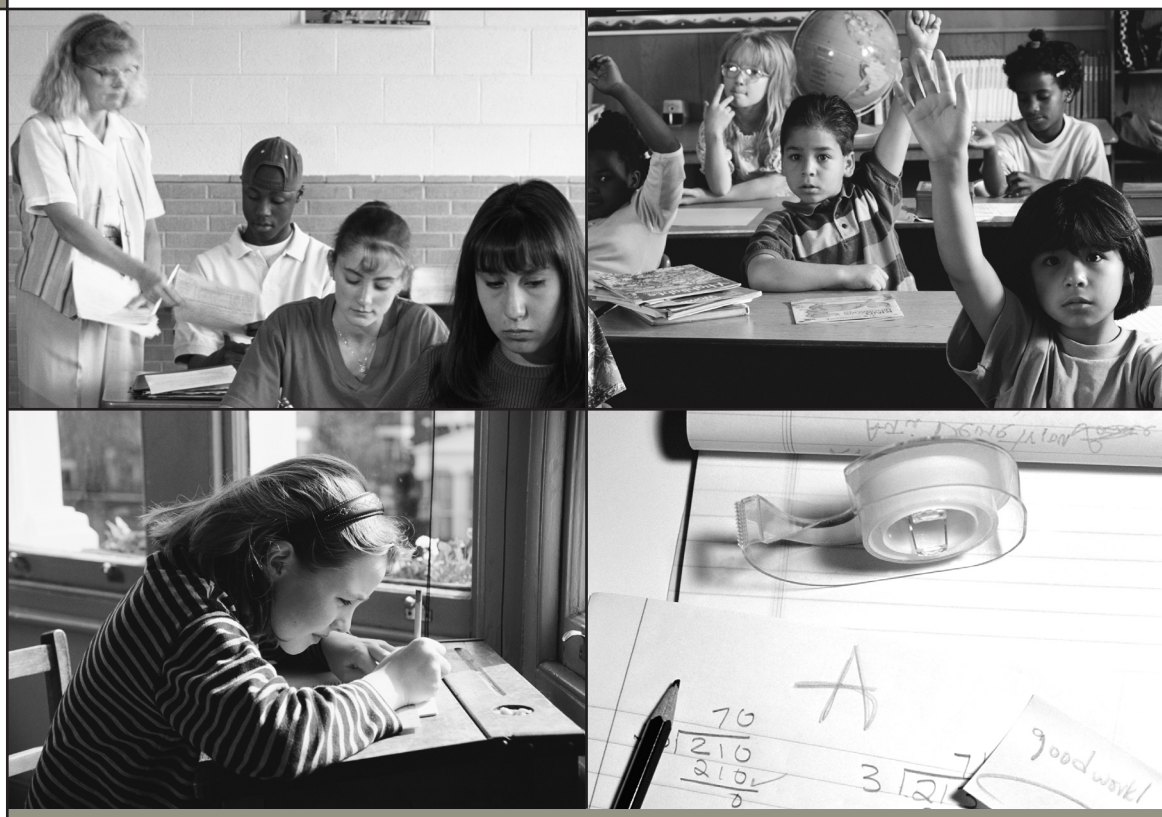
Managing for Performance and Results Series

The Philadelphia SchoolStat Model



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IBM Center for The Business of Government

2007

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TABLE OF CONTENTS

Foreword 4

Executive Summary 6

Introduction 8
- Background 8
- Organization of the Report 9

The Philadelphia SchoolStat Model 11
- The Data Component 11
- The Meeting Component 15
- Summary of the Program 26

Impact of SchoolStat 27
- Impact on Performance 27
- Impact on Culture 32
- Impact on Communication 36
- Summary of the Program's Impact 38

Lessons Learned and Conclusion 39
- Lessons for the Stat Program's Leaders 39
- Lessons for the Stat Program's Designers 44
- Lessons for the Stat Program's Facilitators 46
- Summary of the Lessons Learned 48
- Conclusion 49

Endnotes 50

References 51

About the Authors 52

Key Contact Information 54

FOREWORD

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, "The Philadelphia SchoolStat Model," by Christopher Patusky, Leigh Botwinik, and Mary Shelley.

Albert Morales

Philadelphia's SchoolStat is a case study of the adaptation of a successful management model, CompStat, developed over a decade ago by New York City's Police Department. The model has since been adapted by various city agencies in New York; by cities, such as Baltimore's CitiStat; and by some state governments, such as Maryland's new StateStat. The School District of Philadelphia is one of the most prominent early efforts to adapt this model to improving the management and performance of schools.

The objective of the various "–stat" models is to make decision making by managers more fact- and data-driven. The authors of this report describe how the model was adapted for a school district, what improvements occurred in the performance of the Philadelphia School District after it was implemented, and which features of the approach seemed to be the biggest contributors to improvement.

Pati Benson

This report continues the IBM Center for The Business of Government's long interest in performance measurement and "-stat" models. In 2001, Paul E. O'Connell prepared a report for the Center on CompStat, "Using Performance Data for Accountability: The New York City Police Department's CompStat Model of Police Management." In 2003, Lenneal J. Henderson prepared a report for the Center on CitiStat, "The Baltimore CitiStat Program: Performance and Accountability." Concurrently with the SchoolStat study, the Center is publishing "What All Mayors Would Like to Know About Baltimore's CitiStat But Were Afraid Someone Might Actually Tell Them" by Robert Behn. All of these reports are available on the Center's website at www.businessofgovernment.org.

We believe that this report on Philadelphia's SchoolStat initiative offers lessons for other school districts and that many districts could benefit from similar initiatives. The report also holds relevance for other government organizations—at the federal, state, and local level—interested in developing performance measurement systems.

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EXECUTIVE SUMMARY

Much has been written about the original New York City Police Department CompStat and Baltimore CitiStat performance management programs and their "stat" progeny that have grown up in police departments and municipal governments across the United States. However, until recently, school districts have not attempted to implement stat programs; therefore, there is little information available about how such programs might best be put into place. This report seeks to begin to fill this gap in the stat literature by telling the story of the Philadelphia SchoolStat program.

During the 2005–06 school year, the School District of Philadelphia (District) launched its new SchoolStat performance management system, which represents a unique adaptation of the stat program to the public school district context. It requires all 270 principals, the 12 Regional Superintendents, and the chief academic officer to attend monthly meetings where data is used to develop and monitor strategies designed to improve school instruction, attendance, and climate. Although the program has only been in effect District-wide for just over one year, the targeted performance measures have begun to improve and the District's organizational culture has begun to incorporate the use of data as part of its management process.

The SchoolStat program's goal is to make the District a data-driven organization on the theory that this would lead to better schools and greater student achievement. It targeted a series of measures that quantified how well the schools were performing in several areas, including attendance, school climate, and instructional results. For example, the District saw the following improvements in median school rates for the period September through December 2006 over the same period for the previous year (before the implementation of SchoolStat) on the following measures:

- The number of suspensions issued per 100 students has decreased from 6.00 to 3.74
- The average daily student absence rate decreased from 7.98 percent to 7.06 percent
- The average daily teacher absence rate (excluding teachers absent long-term) decreased from 3.68 percent to 3.14 percent
- The average daily teacher absence rate for teachers out on a long-term basis decreased from 1.97 percent to 1.82 percent

The primary driver for these changes has been the program's ability to function as a central nervous system that carries information vertically up and down the chain of command and also horizontally among the Regional Superintendents, principals, and key central administration staff. The flow of ideas and information has helped spread data-driven practices throughout the organization, including the use of real-time data for planning mid-course corrections and the use of historical trend data to plan proactive improvement strategies. Because this dynamic exchange between managers has led to data-driven action, SchoolStat has moved beyond performance measurement and instead serves as an effective performance management program.

The opportunity for communication among colleagues has been one of the most valued aspects of the program. Indeed, SchoolStat has been well received by the participants from the very start; in response to a survey question asking how useful SchoolStat was in helping achieve their school's or

region's goals (with 5 being the highest possible score), the Regional Superintendents rated it a 4.7 and the principals a 4.2. These survey results underscore the fact that these key managers have begun to embrace a data-driven organizational culture.

Two of this report's authors were deeply involved in the design and implementation of the Philadelphia SchoolStat program. Therefore, it is written from the perspective of practitioners who want to impart the following to public sector leaders:

- The details of how the program was built and how it works
- The impacts that it has had on the organization
- The lessons learned that might be helpful to others who are contemplating the creation of a stat system in their organizations

Introduction

In November of 2005, the School District of Philadelphia (District) launched its new SchoolStat performance management program, which required the principals from each of its 270 traditional public schools to attend monthly stat meetings with their Regional Superintendent (Regional). A few months later, the 12 Regionals began to meet monthly with the chief academic officer (CAO) in their own stat meetings. A little over one year and more than 500 SchoolStat meetings later, the positive impacts of the new program on the District's operations and organizational culture are becoming clear. The performance measures used by the program are improving, the District has continued to transform into a more data-driven operation, and the dual-layered SchoolStat meetings have become an important communications network that connects and helps coordinate the different levels of administration.

SchoolStat is perhaps best described as an adaptation of the successful New York City Police Department CompStat and Baltimore CitiStat programs to the public school context. The overarching goal of the program has been to incorporate data-driven "stat" practices into a vertically and horizontally integrated management system that can focus the District's efforts on achieving measurable results. The main components of the program are two sets of interconnected monthly meetings: (1) the 40 or so region-level meetings that take place among each of the District's 12 Regional Superintendents and several groups of five to eight principals within their region; and (2) the monthly District-level meetings among the CAO and the 12 Regionals, who attend in two groups of six. At the monthly meetings, these key leaders and managers review school or regional performance, share information and experiences, develop and track action plans to improve operational and instructional performance, and monitor changes in the performance data. Together, the meetings plug principals and District managers into an integrated process that uses meetings built around a defined set of measures to drive action at the region and school level.

Background

SchoolStat is the product of a unique partnership between the District and the University of Pennsylvania's Fels Institute of Government (Fels). As part of its mission, the Fels Institute offers its expertise and assistance to local government agencies seeking to improve their management practices. At a meeting in the spring of 2003, Dr. Lawrence Sherman, then director of Fels, presented the SchoolStat concept to the chief executive officer (CEO) of the School District of Philadelphia, Paul Vallas, and other senior District officials. At the meeting, Vallas approved a pilot project and invited Regional Superintendent Harry Gaffney to lead the model program in the District's Southwest Region during the coming year. Members of the Fels Institute faculty and several graduate students then worked with Gaffney, his staff, and the District's information technology department to design the program.[1] The SchoolStat team identified the data measures that would be used, designed the SchoolStat graphs and other materials, and then created the monthly meeting format.

During the 2003–04 school year, the joint District/Fels SchoolStat team carried out a rolling and partial implementation of the program in the Southwest Region's 15 elementary schools that allowed for experimentation with different data measures, graph types, and discussion formats. At the end of the school year, the team used feedback from a survey

of the principals to tweak the program. Gaffney then directed a full pilot of the program during the 2004–05 school year that included all 24 schools in the Southwest Region including elementary, middle, and high schools (the pilot). Based on the pilot results, the District began to consider whether it should expand the program to several of the 12 regions or to attempt a jump to a District-wide implementation.

During the late spring of 2005, District CEO Vallas decided to expand SchoolStat District-wide and asked the District's CAO, Dr. Gregory Thornton, to assume management of the project. At that time, the District comprised 12 regions and 290 non-charter schools serving approximately 185,000 children.[2] Each region included 12 to 40 schools and was run by a Regional Superintendent who reported directly to Dr. Thornton. Ten of the regions were based on geographical areas of the city (e.g., Center City, Southwest, North, and so on); the remaining two comprised schools managed by outside providers, called Educational Management Organizations (EMO Region), and a small number of schools that had failed to make progress for several years and were being provided extra support (CEO Region). The District leadership chose to exclude the charter and 20 disciplinary schools from the program and to include only the 270 traditional public schools.

During the summer of 2005, Thornton led a process that translated the pilot into a District-wide program that could be scaled up from 24 to 270 schools. He established a new SchoolStat project team that included representatives from the District and Fels, and also technical consultants from IBM and SchoolNet who had been hired previously to upgrade the District's data capabilities. This diverse team prepared for program launch by designing each component and building the necessary technical capabilities to generate the data tables and graphs that were central to the process.

The District-wide launch was led by a combined Fels/District team. The Fels team included a part-time Fels faculty project director and a full-time Fels staff project manager. The District team members included Thornton as project director and John DiLello, director of the Office of the CAO, as project manager. Fels also provided 15 graduate students who worked 20 hours per week supporting the Regional Superintendents and the CAO in their implementation of SchoolStat meetings. Each month the students would analyze data, suggest possible agenda items based on these analyses, prepare the SchoolStat meeting materials, and take notes at the meetings.

Acronyms and Abbreviations

CAO:	Chief Academic Officer
CEO:	Chief Executive Officer
CSAP:	Comprehensive Student Assistance Process
District:	School District of Philadelphia
EMO:	Educational Management Organization
IMS:	Instructional Management System
KPI:	Key Performance Indicator
NCLB:	No Child Left Behind Act
OFI:	opportunity for improvement
OSS:	Office of Specialized Services
PDSA:	Plan-Do-Study-Act
PSSA:	Pennsylvania System of School Assessment
QSV:	quarterly site visit
Regional:	Regional Superintendent
SIP:	School Improvement Plan
SY:	School Year

The region-level SchoolStat meetings began in November 2005 and the District-level meetings began in March 2006. Based on the positive feedback from the Regionals and principals, preliminary improvements in the measures, and the CAO's own positive experience with the program, the District decided to continue the program during the 2006–07 school year. Although Fels continues to play the same support role in the program as in the previous year, the plan is to transfer responsibility over the next two years for all aspects of the day-to-day management of the program to District staff so that it becomes internally self-sustaining.

Organization of the Report

The purpose of this report is to describe SchoolStat to leaders of public agencies also considering a stat program who might benefit from the Philadelphia experience of adapting the well-documented

examples from New York and Baltimore to a different context. Two of the authors have participated directly in the design and implementation of the program and, therefore, it is told from the perspective of practitioners/participant observers.[3] The report includes:

- A nuts-and-bolts description of the SchoolStat program as well as the reasoning behind key design decisions
- A before-and-after analysis of the District's performance data one year after implementation as well as a discussion of some of the program's qualitative and organizational impacts
- Lessons learned that might be helpful to other public sector organizations

The Philadelphia SchoolStat Model

This section of the report serves as both the "assembly instructions" and "operating manual" for the Philadelphia SchoolStat program. It describes the program's components in detail, how the different pieces fit together, and how it was constructed. It also provides reasons for some of the key design decisions including those that differ from other stat programs.

The Philadelphia SchoolStat program, like other stat models, includes two core components: stat data and stat meetings. Each is addressed in turn.

The Data Component

The data component of the program is represented by the data measures, or Key Performance Indicators (KPIs), that quantify school and student performance across several areas. They form a type of dashboard that tells Regionals, principals, the CAO, and other staff how well or poorly each school is doing month to month and year to year. Early on in the design of the pilot, the team decided that the program should select and stick with one set of KPIs for the year to the extent possible. The team determined that KPI uniformity and consistency would simplify generation of the program's materials for the some 40 meetings they needed to mount each month. Moreover, it would help participants master them more quickly and allow them to move past discussions about what the data meant to more fruitful discussions about problems, causes, actions, and practices. Finally, consistent KPIs allowed for sustained continuity of discussions about questions over the course of the entire year.

Description of the Key Performance Indicators

The SchoolStat program focuses on improving performance at the school level. For the District-wide implementation, the District selected the following KPIs, which are organized by the program's three areas of focus: instruction, attendance, and school climate. The KPI data is updated each month or as often as possible (e.g., every six weeks for the benchmark tests) so that the program can track school performance at regular enough intervals to influence action and performance throughout the year.

Instructional KPIs

- **Six-week benchmark tests:** The percentage of questions answered correctly by students on benchmark tests. The District administers benchmark tests in math, reading, and science approximately every six weeks to students in grades three through eight and to students in particular high school courses.
- **Reading levels:** The percentage of students at target reading level as indicated by teacher-administered assessments
- **Student support:** The number of students who are referred to Tier 2 of the Comprehensive Student Assistance Process (CSAP) as compared to the number of permissions to evaluate students' eligibility for special education services. Tier 2 referral calls for the creation of an individualized educational intervention plan to address poor attendance, academic performance, or behavior for a particular student.[4] This KPI is used in connection with discussions surrounding the use of the CSAP interventions to prevent the over-identification of students to special education. The sidebar on page 12 contains a more complete description of CSAP.

The Comprehensive Student Assistance Process: Finding the Keys for Student Success

The School District's Comprehensive Student Assistance Process (CSAP) is a three-tiered, collaborative process by which schools identify barriers to learning and remove barriers by accessing internal (school-based) and external (community-based) resources. The heart of CSAP is the classroom, where the classroom teacher analyzes the strengths and learning needs of students and adapts instruction and environment to create optimal learning conditions.

School-wide CSAP:

Any comprehensive support process must begin with creating a network of supports for students and staff that result in a safe and productive learning environment. At the school-wide level, elements which contribute to such an environment include ongoing opportunities for skill-building among staff and students, the engagement of families as educational partners, a behavior management model which is clearly defined and consistently implemented, and data-based decision making.

CSAP Tier I:

The Tier I level of intervention is designed to address the needs of groups of students experiencing similar barriers to learning. At this level, teachers meet regularly with their grade group or academy colleagues to identify and implement strategies for the classroom. The grade group or academy leader facilitates Tier I meetings.

CSAP Tier II:

It is sometimes the case that individual students may be experiencing particular barriers to learning. Tier II is designed to provide targeted, individualized support for such students. At Tier II, a core team of trained professionals (the referring teacher, counselor, and/or nurse) joins parents/guardians at a meeting scheduled by the school counselor. Together, this team develops an intervention plan that is designed to address the needs of the student and/or family. This plan can include both school-based and community-based supports, and the team can include auxiliary members (school psychologist, agency staff) as indicated by need.

CSAP Tier III:

At Tier III, the focus is on an evaluation for change of placement when a child is still not meeting with success. This change of placement may be for educational or behavioral reasons. Team membership, documentation, and timelines are governed by procedural dictates established by the School District of Philadelphia and the Commonwealth of Pennsylvania.

Source: *The District provided the above description of CSAP from their website at http://www.phila.k12.pa.us/offices/oss/servicesupport/csap.html.*

Attendance KPIs

- **Staff daily absence rate:** The average daily absence rate for teachers and non-teaching school staff
- **Student daily attendance rate:** The average daily attendance rate for students

Climate

- **Serious incidents:** The number of serious incidents reported, including assaults; weapon, drug, and alcohol offenses; acts of vandalism; accidents and illnesses; and other serious rule violations
- **Suspensions:** The percentage of students suspended

Although SchoolStat currently uses the above measures, it can incorporate any measure for which regularly updated data is available.

The Technical Backbone

In an era defined by the No Child Left Behind Act (NCLB), many school districts have improved their information technology systems in order to comply with the Act's data reporting requirements (Hoff, 2005). These new data systems, however, are capable of doing far more than creating backward-looking

NCLB compliance reports; they can serve as the backbone for a data-driven management program. This is the case in Philadelphia, where the development of data systems for NCLB was leveraged to support the SchoolStat program.

The SchoolStat program requires that a school district have the technical capacity to: (1) input school-level KPI data into an electronic database on a regular basis (e.g., daily, weekly, monthly, or quarterly); (2) organize and present the data in user-friendly graphs; and (3) make this data readily accessible to staff members who impact student learning.

In Philadelphia, data sets are currently collected and then stored centrally in several legacy database systems. For some of the KPIs, the original information is manually inputted at the school by a secretary, school counselor, or other staff member. In other cases, data is automatically collected and uploaded; for example, high school student attendance is obtained when students swipe their student ID upon entering the building, and some benchmark test results are scanned by an outside vendor. While this fulfills the first requirement of storing data electronically, the District's older information systems are cumbersome to use and cannot communicate directly with one another, limiting the scope of queries and forcing users to go through different portals for each type of information needed.

As the SchoolStat team discovered during the pilot phase of the project, these inadequacies in the technology made the process of creating graphs less efficient and limited access to the data as well as the types of graphs that could be created. During the past few years, the District has remedied this situation by investing heavily in its information technology capabilities. More specifically, the District made the second and third technological requirements cited earlier much more manageable by working with IBM and SchoolNet to increase the capacity and facility of its information management systems. Sufficient upgrades were in place by October 2005 to support the District-wide launch the following month.

First, IBM developed a data warehouse that links data from the various legacy systems together so that users can access data from various business areas through one front end using Oracle's Discoverer solution. The data warehouse provides additional benefits by cleansing the data and allowing access to historical data. The IBM team has created a data mart specifically for the SchoolStat project that is updated with fresh data on a monthly basis. The Fels student analysts built a set of reports using the Discoverer tool that is used each month to access the data needed for each KPI. The data is exported to Excel, where a standard set of graphs and tables are made and then pasted into a PowerPoint presentation that is reviewed at each SchoolStat meeting.

The data warehouse also allows the SchoolStat team and other District staff to build custom reports to supplement the standard data views. For example, if a Regional wants the principals to more deeply investigate student attendance, a report disaggregating the information in a variety of ways—for example, grade level, ethnicity, or special education status—can be created to obtain the relevant data. The data is all easily exported to Excel, so that more comprehensive analyses across business areas can be conducted.

In addition to the above data tools that are core to the SchoolStat program, SchoolNet created a web-based instructional management system (IMS) for teachers, central office staff, and others to access student-level data such as benchmark test results, reading assessments, grades, and year-end standardized test results. The IMS provides access to multiple levels of information, including the ability to disaggregate student data by gender, ethnicity, and grade level, and to drill down to individual student names in order to assist with instructional planning at the classroom level. The IMS features many pre-formatted reports that can be refreshed as new data becomes available, with the option of creating more-customized reports for those who feel comfortable doing so, all accessible through a user-friendly interface. Although the SchoolStat team relies primarily on the data warehouse, analysts also use the IMS to access data that has not yet been added to the SchoolStat data mart.

In addition to the IMS, SchoolNet produces a comprehensive monthly data report for principals, called the Insight for School Improvement Principal's Dashboard (Dashboard). The Dashboard was created specifically to support the SchoolStat process, and provides multiple views for each KPI included in the SchoolStat program. Principals and Regionals can access the Dashboards directly via the SchoolNet portal several days before their meetings in order to prepare for the discussions.

Through the various databases, the data warehouse, and the IMS, the District is able not only to fulfill all three technical requirements for SchoolStat, but to do so in an extremely efficient and comprehensive manner. The SchoolStat team continues to work with the District's Office of Information Technology, IBM, and SchoolNet to ensure technological upgrades are designed to coordinate with and, where possible, further enhance the data component of the SchoolStat program.

Data Design

SchoolStat was initially conceived during the pilot stage as a program for improving climate, attendance, and other non-instructional processes. The team felt that improved management of these areas would lead to a more productive learning environment for students. When working with Gaffney, the regional leader of the model program, to determine which KPIs to use, the team asked three questions:

- Did the KPI measure performance related to effective and/or efficient operations?
- Did the KPI measure something that the principal could influence?
- Was there regularly updated data available to support the proposed KPI?

Gaffney's many years of experience in the District as a teacher, principal, central administrator, and Regional Superintendent proved valuable in identifying which measures he believed were important to a successful school and which could be impacted by the principals.

The team then worked with the Office of Information Technology to determine which of the KPI candidates could be supported by available electronic data sets. Data was available for most of the indicators, such as student and teacher attendance, suspensions, and violent incidents, but not for several others, which were then excluded. For example, the team wanted to track work repair orders so that the program could drive repair and improvement of facilities, which was a serious problem in some schools. This KPI met the first and second parts of the test, but it failed the third part when the team quickly learned that the work order data was not available electronically and would require a disproportionate amount of time and effort to translate into a usable format.

In two cases, however, the team decided that it was worth the effort to create a collection system for measures, a decision that would consume a significant amount of time during the pilot program. First, the team gathered information from handwritten special education reports that indicated the number of children who were referred for evaluation and whether they were evaluated within the state's mandated time period. Because Gaffney wanted to improve the evaluation times to comply with the state's requirements, this extra data collection work was taken on. Similarly, Gaffney wanted to know how much money was being spent on "prep payback," which is a benefit that teachers receive when they cover a class for an unavailable teacher during their contractually provided preparation time, because it represented a form of in-school substitute-teaching cost. In order to use this measure, the principals entered data into an Excel spreadsheet created by the Fels team and e-mailed it to the Fels analyst each month.

The pilot KPIs proved very useful from an operations standpoint. However, when the District decided to expand the program District-wide, CAO Thornton determined that it should move beyond operational matters to include measures of academic achievement and instruction. He then convened a cross-departmental KPI Committee that could bring expertise to bear on the selection process while also building support for the program within the District. The committee included representatives from the accountability, instruction, and information technology departments, among others, as well as representatives from the Fels Institute and from information technology vendors IBM and SchoolNet.

The KPI Committee then went through a KPI selection process that was similar to the one used during the pilot, except that it was far more deliberative and included a much larger group of people representing viewpoints from the various departments. Since the program goal was school-level improvement, the committee began its work with a discussion of the question, "What does a successful school look like?" This led to consensus on certain features including high academic achievement, a safe and nurturing school climate, and good student and staff attendance. Once these three areas were identified, the committee turned its attention to identifying ways to measure them. The result was a "dream list" of KPIs.

From this dream list, the committee excluded those measures for which data was not collected electronically across all schools, as everyone agreed it would be too monumental a task to institute new data collection systems across the 270 schools while simultaneously managing the ramp-up of the SchoolStat program. As during the pilot, the team also considered the degree to which principals could influence performance for each measure, excluding any that seemed outside of the control of the principal. The resulting list included the new instructional measures and eliminated the special education and prep time measures from the pilot because the data was not in electronic form.

With the KPIs selected, the implementation plan was well under way, but it was not complete. The KPIs still needed to be reduced to actual formulas and then expressed in specific types of graphs or "views." Then technical work was needed to prepare a data mart that would include all data needed to perform the calculations. Finally, the KPI graphs had to be incorporated into presentation and briefing materials that would be useful to the CAO, Regionals, and principals.

During the summer of 2005, Thornton established a smaller KPI Technical Committee—composed of representatives from the District's IT and CAO offices, the Fels Institute, IBM, and SchoolNet—that was tasked with completing the process. IBM took the lead in building the data mart and in working with the subject matter experts at the District to determine the calculations. Fels designed the data displays that would be used in the SchoolStat meetings, and SchoolNet created a school Dashboard that would provide each principal the data for their school each month in an easily usable format (see page 16–17 for an example of a Dashboard).

The definition of the final KPI formulas proved to be particularly challenging because there were various permutations to choose from, with no obvious right answer in some cases. For example, the committee needed to decide whether teacher absences should include all absences, exclude certain categories of absences such as workers' compensation, or attempt to break out absences by type in a large and ultimately unwieldy table; whether students that tested off-grade level should be included or excluded from the benchmark test results; and other similar decisions.

The process of determining calculations often revealed disagreements about which aspects of school performance were within the control of school leaders and therefore should be taken into account in the measurement, and which were not and so should be excluded. The creation of the graphs displaying the KPIs also involved a great deal of work as the Technical Committee struggled to design views that were easy to read by laypeople but that also provided as much information as possible. The Technical Committee convened several focus groups of principals that provided feedback to help make some of these decisions.

The result of this process was a first version of both the Principal's Dashboard and SchoolStat PowerPoints that were used for the first SchoolStat meetings. Throughout the first year of implementation, participants provided input regarding both the KPI calculations and views through various channels including verbal feedback to the Fels graduate student analysts and written feedback sent by e-mail to the Technical Committee, which continued to meet regularly throughout the year. In some cases, the team responded by modifying the formulas or views; in other cases, the feedback was noted and revisited the next summer for consideration during year two of implementation. This process achieved the team's original goal of maintaining a sufficient level of consistency in the data measures while also having the flexibility to fix problems and improve the program month by month.

The Meeting Component

Description of Meetings

The SchoolStat meetings are the core process in the SchoolStat program. At the highest level, the District's CAO facilitates two meetings per month, with six of the 12 Regionals attending each meeting. The Regionals, in turn, facilitate anywhere from two to six monthly meetings with small groups of the principals they supervise. In general, both sets of meetings look at the same KPIs, with the region-level viewing the data broken out by school and the District-level by region. This use of the same KPIs provides an integrating function between the levels that enables both sets of meetings to address the same issues using the same data each month. For example, Regionals can discuss school-level teacher absence rates at their meetings with principals and then address the rolled-

Example of a Principal's Dashboard

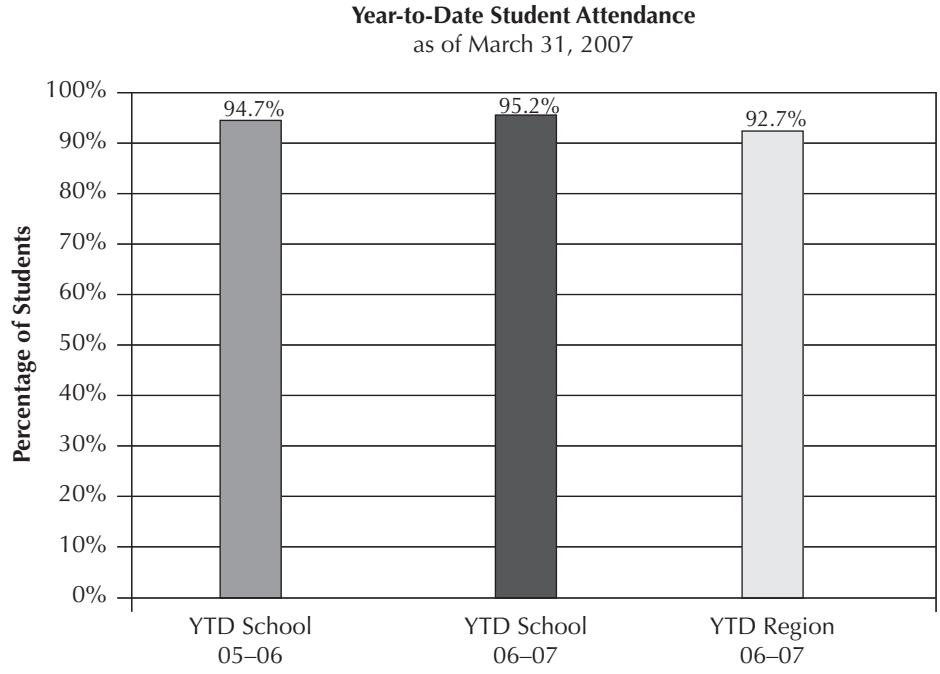
Key Performance Indicator

Improve Student Attendance

- ➤ Is your school showing year-to-year improvement in year-to-date student attendance?
- ➤ How does your school's year-to-date student attendance compare to the region average?

Additional Attendance Reports can be found in the Account in Saved Report Bank in SchoolNet.
Please visit phila.schoolnet.com.

Summary

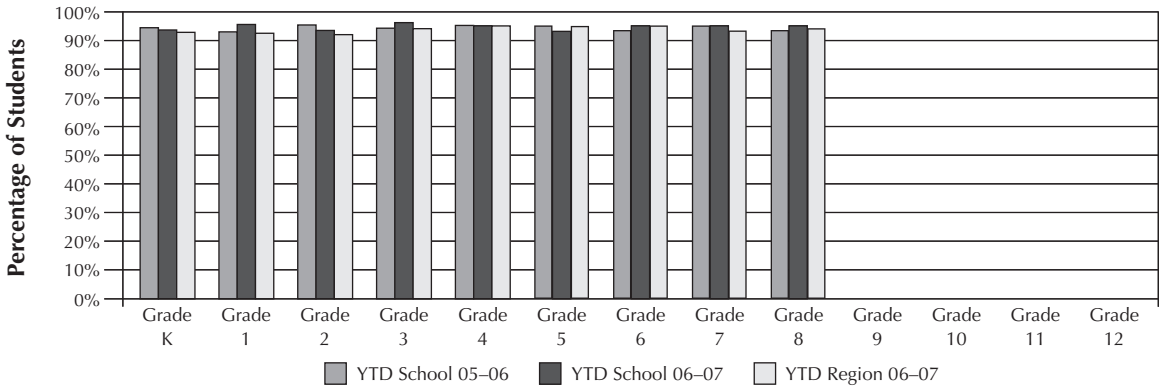


Notes: _____ Action Steps: _____

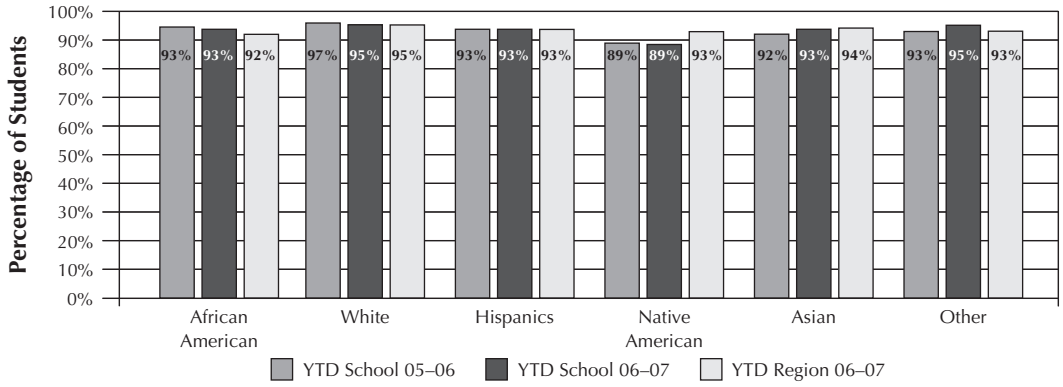
Example of a Principal's Dashboard *(continued)*

Detail

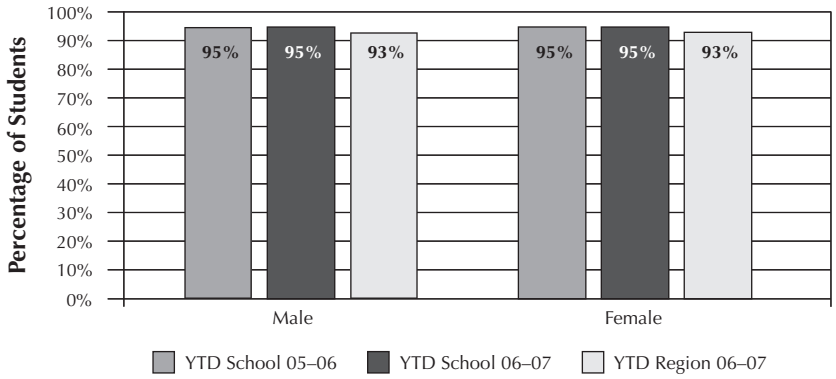
Year-to-Date Student Attendance by GRADE LEVEL
as of March 31, 2007



Year-to-Date Student Attendance by ETHNICITY BREAKDOWN
as of March 31, 2007



Year-to-Date Student Attendance by GENDER BREAKDOWN
as of March 31, 2007



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up region-level rates with the CAO. Conversely, the CAO can raise particular issues in his meetings and ask the Regionals to discuss them with the principals. This vertical process enables the CAO both to push his priorities down through the Regionals to the school level while also receiving feedback up from the schools through the Regionals, all within the 30-day cycle between meetings. To further this integration, both levels of meetings are scheduled within a two-week period so that the conversations at each remain fresh in everyone's minds.

The Regionals and the CAO control the scheduling, length, and attendance for their monthly SchoolStat meetings. SchoolStat meetings tend to last about one hour each, but sometimes stretch to one and a half hours. Although not uniform, most Regionals group the principals in each of their meetings by school grade level. For example, one meeting would include all the elementary schools, another meeting would include the middle schools, and a third meeting would include the high schools. Also, most Regionals stack their meetings in a row so that they complete all their SchoolStat meetings in three to five hours on a single day. Finally, most Regionals invite some or all members of their leadership team so that they can address the issues raised in real time without requiring additional conversations later on with, for example, the director of special education.

The CAO schedules his two meetings back to back with six Regionals in attendance at each meeting. The meetings last one and a half hours each; therefore, the CAO spends about 3 hours per month in the SchoolStat meetings. He groups the regions in the meetings according to a particular strategy that pairs them based on similar demographics, performance, and other factors, with a high-performing, mid-performing, and low-performing pair in each group. The CAO invites several senior members of his staff to the meetings; however, staff from other departments within his office generally do not attend—a decision that was discussed in some detail during the design phase of the program and that might evolve over time.

The SchoolStat meetings at both levels follow a fairly consistent agenda. The facilitator (either the CAO or the Regional, depending on the level of the meeting) shows a PowerPoint presentation containing a series of graphs and tables displaying the KPI data on a large screen. In most cases, the graphs contain data only for the schools and regions in the room for each particular meeting. The facilitator then leads a dialogue that aims to achieve the following:

1. Analysis: The participants begin a conversation that reviews the KPIs within a particular area of performance (e.g., instruction). The facilitator will either ask participants to identify any opportunities for improvement (OFIs) that are evident in the data or might start the conversation by stating the OFI that the facilitator wants to focus on. The facilitator then follows up with questions to help participants identify possible root causes of problems. Sometimes, the facilitator might provide extra data beyond the standard views, especially disaggregated or more detail-level information, to help participants break down the problem further.

2. Problem solving: The major goal of the SchoolStat program is to support school leaders' use of data to solve problems. One way the meetings help accomplish this is by providing a time for the participants to create action plans in response to problems identified during data analysis. Although principals and Regionals are expected to do this type of planning work on their own as well, the SchoolStat meetings allow them to work with their colleagues, who are often able to share practices they have found to be effective, in the design of improvement plans. The meetings have proven to be collegial affairs, with principals embracing the opportunity to share ideas.

3. Follow-up: Another key component of the SchoolStat program that can be done only in the meeting setting is follow-up on previously discussed action plans. For example, a facilitator might ask participants to share the current state of implementation, including any challenges that are being encountered. This not only allows the Regionals and the CAO to monitor the work being done, but also provides participants an opportunity to ask for support when needed.

4. Evaluation: Because meetings provide a regularly occurring opportunity to track progress on the indicators, it becomes clear whether improvement efforts are having the desired impact or not. When they are not, participants use SchoolStat meeting time to discuss their hypotheses as to what is preventing improvement, and then decide whether to make slight changes to the current strategy or adopt a new strategy.

By having key District staff work through this process month after month, SchoolStat aims to drive a cycle of improvement in school operations and instruction that will ultimately increase student achievement. In order to encourage this type of data-driven improvement process, the District has adopted the Plan-Do-Study-Act (PDSA) cycle to provide a framework for facilitating the meetings. PDSA is a continuous improvement model developed by Walter Shewhart to increase quality control (Johnson, 2002). The four steps of PDSA are:

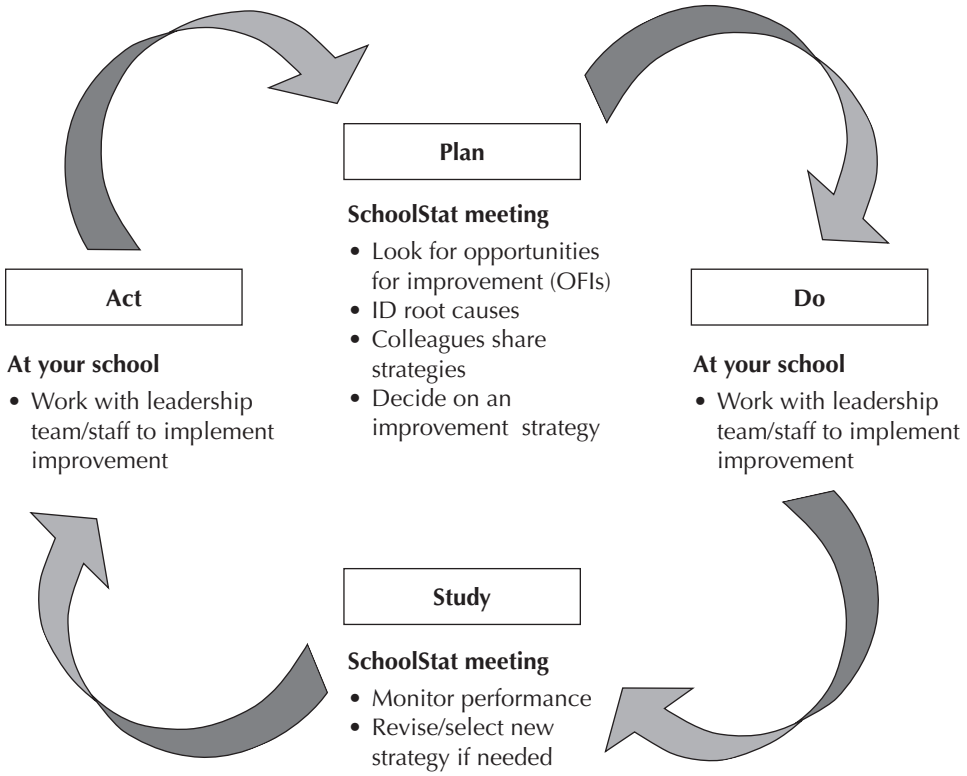
- Plan—planning a change
- Do—taking action according to the plan
- Study—checking the results
- Act—taking action based on the results

Figure 1 shows the adaptation of PDSA for the SchoolStat program. The PDSA model, as its name indicates, requires the Regionals and principals to use the data to "plan" out what actions they are going to take to tackle problems brought to light by the data. As Figure 1 indicates, this is done during SchoolStat meetings, and the conversation often includes a discussion of the possible root causes of the problem as well as possible strategies for improving. From this discussion, the participants can choose what particular actions to take. The next step is to "do" the proposed actions, which means implementing the plan at the school or regional office. Once the plan has been implemented, participants "study" the results as measured by the data, again usually at SchoolStat meetings. It may take several months of implementation before results can realistically be seen. During those months, SchoolStat meetings can be used to discuss the status of implementation and whether the participant needs any additional support to carry out the actions. The final step is to use the findings from the study phase to "act" by continuing to implement the strategy, modifying it, or adopting a new one.

Meeting Materials

The SchoolStat program uses two documents to support the meetings: a KPI PowerPoint presentation and the facilitator's Briefing Memo. The PowerPoint presentation is used to show the KPI graphs on a screen during the meeting. The meeting agenda is built around discussion of the data shown in this presentation. Figures 2 and 3 on page 21 represent two examples of the KPI graphs used in the region- and District-level meetings, respectively.

Figure 1: The PDSA Model Adapted for SchoolStat



Both figures are typical of the non-instructional KPI graphs that are included in each SchoolStat meeting. They display comparisons of participants in the room for any given meeting as well as comparisons over time. The former is important because it often leads to a sharing of strategy when one school or region is performing better than another in a particular area, especially if other factors such as demographics, poverty levels, and so on are similar across regions or schools. The comparison over time is important because (1) it helps catch problems early on so that the participant can plan and implement an improvement strategy (Plan stage) and (2) it helps participants determine whether an implemented strategy is having the desired impact (Study stage).

Some KPIs do not lend themselves to comparisons over time. In particular, benchmark test results, which are the primary source of instructional data for the SchoolStat program, were not designed to accurately measure progress from one test to another. Instead, they are designed to provide information about the level of mastery of the content most recently taught. Figure 4 on page 22 represents an example of an instructional data graph used in SchoolStat meetings.

The data are presented in a way that helps participants look for particular skills or types of questions that students appear to be struggling with, so that the meeting discussion can focus on how principals or Regionals can better support teaching in those areas. Also, the data represent a District-wide average, as opposed to breaking out the data by school or region. This is occasionally done when the overall pattern across the group is the same. The participants can therefore discuss the common challenges and plan improvements as a group.

The second document used in the meetings is the Briefing Memo, which includes the same KPI graphs shown in the PowerPoint presentation, guiding questions that the facilitator can use to lead a discussion about particular data points, and the follow-up questions based on action plans discussed in previous SchoolStat meetings. In some cases, the facilitator shares the Briefing Memo with the participants in advance so that they can prepare for the discussion.

In addition to the PowerPoints and the Briefing Memo, two other documents are sometimes used during meetings. The Principal's Dashboard is provided to the principals in advance of their regional meetings and includes their school's KPI data. The main difference between the Principal's Dashboard and the SchoolStat PowerPoint is that the SchoolStat PowerPoint displays the data for all the schools that are in a meeting group together whereas the Dashboard features data for the individual principal's school only. Because each graph in the PowerPoint shows data for multiple schools, the data are aggregated to the school level only. Alternatively, the Dashboard is able to present additional disaggregated data for each KPI. The Dashboard can be used to prepare for meetings, and sometimes principals bring them to the meetings to use as a reference during conversation. Additionally, some principals provide copies to their staff to help with school-level planning.

The Principal's Dashboard provides principals with two levels of information: a high-level view that displays the overall school average and a detail-level view that disaggregates the data. Both views are shown in Figures 5 and 6 on page 23.

This high-level view shows the school-wide percentage of students reading at target reading level, based on teacher assessments of students, at the end of the previous school year, and then each marking period of the current school year.

This detail-level view disaggregates the reading levels by ethnicity, allowing principals to determine progress in closing the achievement gap. Other disaggregations, including grade level, gender, students with special needs, and students with limited English proficiency, are also provided to help principals determine whether certain groups of students require extra attention.

The last meeting document is a supplementary data packet that the SchoolStat analyst will sometimes provide to the Regional and/or each of the participants. These packets often include student-level data, disaggregated data, or correlations among different types of data that allow for a more detailed analysis of a particular set of questions. The analyst generally prepares this at the request of the Regional as a piece of customized research,

Figure 2: Region-Level KPI Graph Addressing Teacher Absences, Monthly View

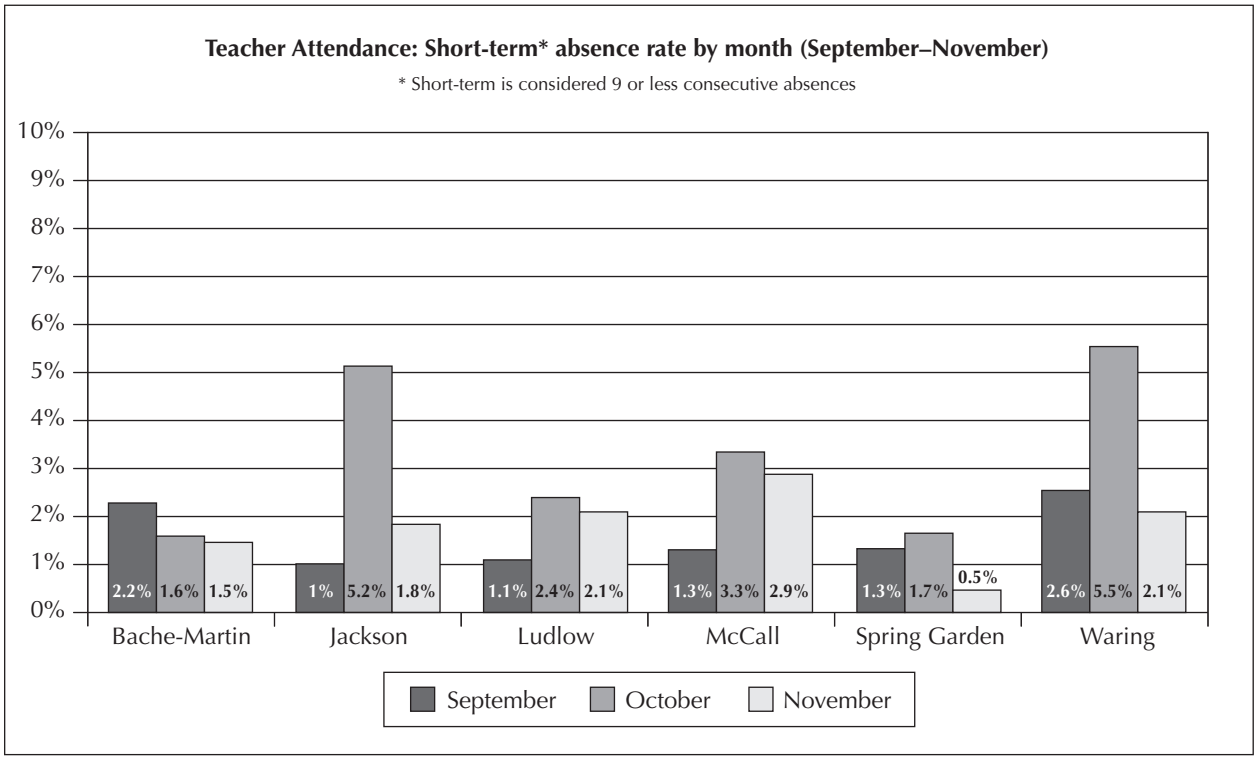


Figure 3: District-Level KPI Graph Addressing Teacher Absences, Yearly View

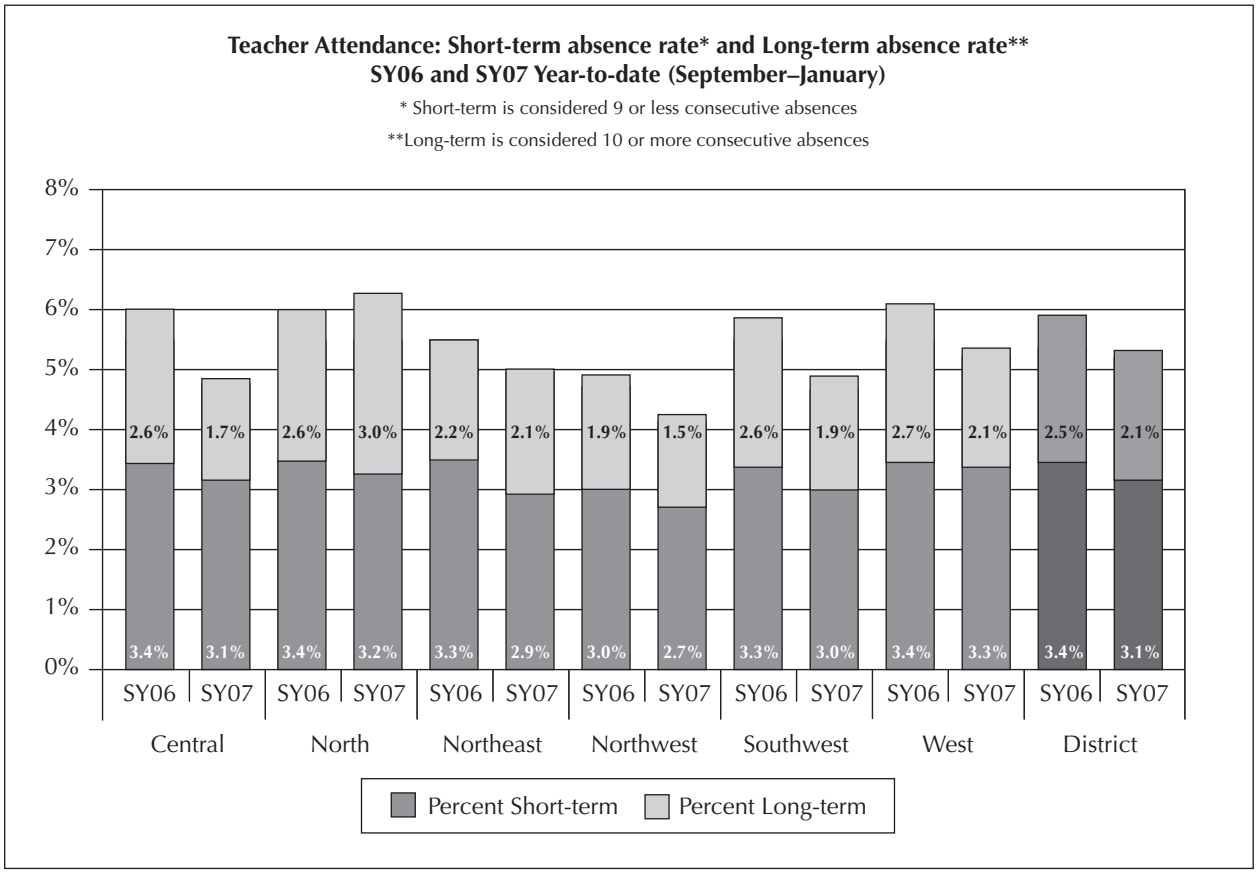
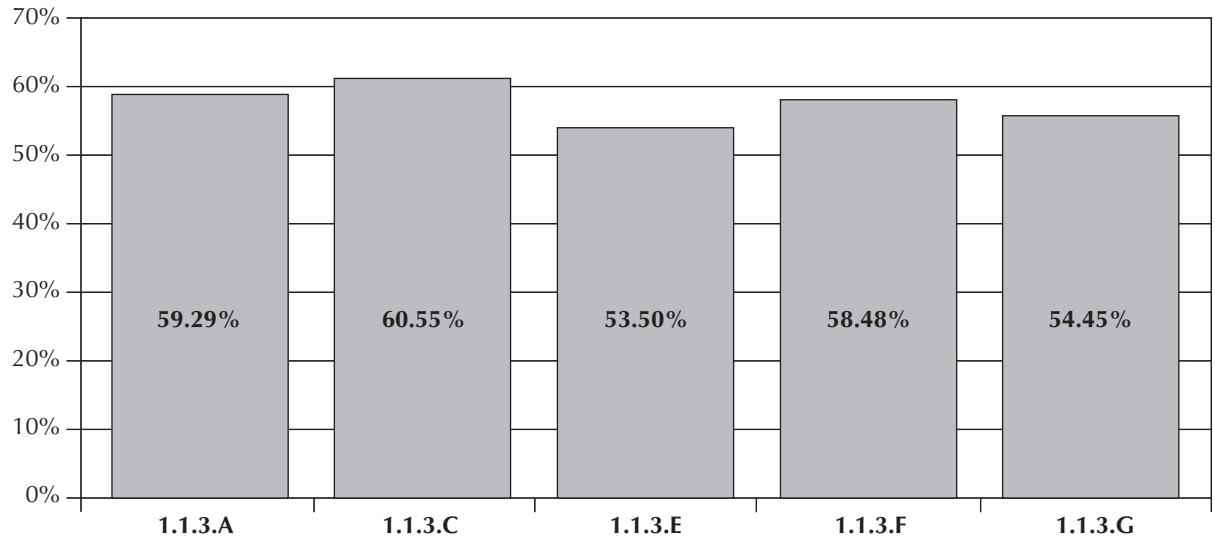


Figure 4: District-Level KPI Graph Addressing Benchmark Results, by Subtopic



1.1.3.A: Identify the purposes and types of text before reading.

1.1.3.C: Use knowledge of phonics, word analysis, syllabication, picture and context clues to decode and understand new words during reading.

1.1.3.E: Acquire a reading vocabulary by identifying and correctly using words. Use a dictionary when appropriate.

1.1.3.F: Understand the meaning of and use correctly new vocabulary learned in various subject areas.

1.1.3.G: Demonstrate after reading understanding and interpretation of both fiction and nonfiction text.

but on some occasions the analysts create it on their own initiative in response to questions raised in the meetings.

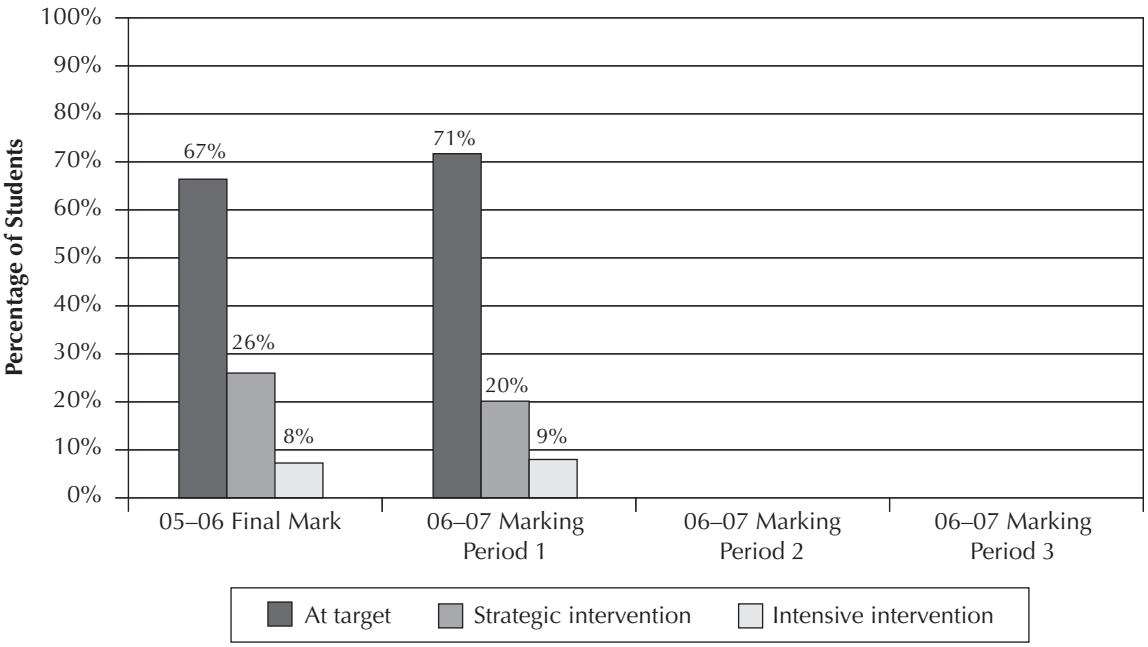
Table 1 represents an example of the type of data that might be included in a supplementary data packet. It lists the students at a particular school who are failing either math or English and whether or not that child is at Tier 2 of CSAP. In a SchoolStat meeting, this type of data would be used to drive a discussion about whether all the students who need Tier 2 interventions are in fact receiving them. Because the data are presented at a student level, it often makes the action step needed quite clear.

Principals can also access student-level data on their own through the SchoolNet IMS. In particular, principals often use the IMS to view instructional data such as benchmark test results, reading assessments, grades, and year-end standardized test results. The IMS provides multiple levels of information, including the ability to disaggregate by gender, ethnicity, and grade level, and everything drills down to individual student names in order to assist with creating targeted action plans.

Table 1: Region-Level Table Addressing CSAP, by Student

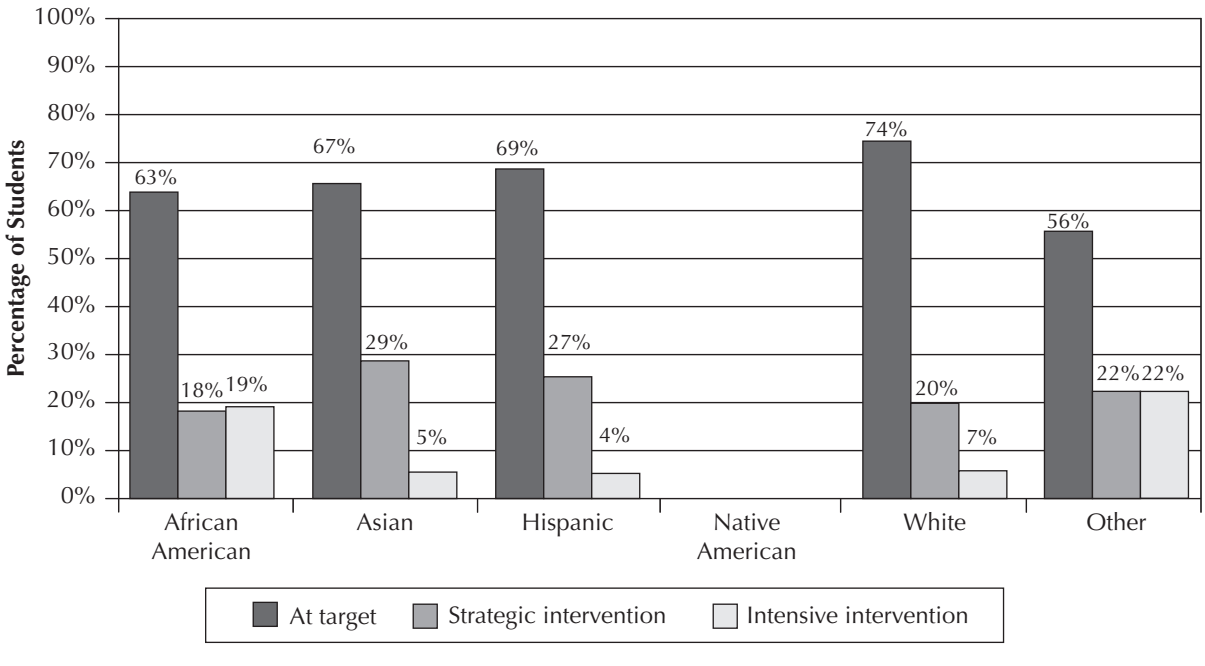
Student Name	Failing math or English?	CSAP?
Student 1	Y	N
Student 2	Y	N
Student 3	Y	N
Student 4	Y	Y
Student 5	Y	Y
Student 6	Y	Y

Figure 5: K–8 Student Reading Levels, as of February 28, 2007



Note: *Data for marking periods 2 and 3 are added to the Principal's Dashboard as they become available.*

Figure 6: K–8 Student Reading Levels by Ethnicity, as of February 28, 2007



Meeting Design

Although the SchoolStat meeting process was inspired by the CompStat and CitiStat programs, some key differences were introduced from the beginning of the project to adapt the model to the public school district context.

- **Group meetings versus individual meetings:** Whereas the CitiStat department heads and CompStat police captains appear individually or with their staff in the meetings with their supervisors, the SchoolStat meetings include three to 10 peer-level principals at the region-level meetings and six Regionals in the District-level meetings. The SchoolStat team decided to use this group approach for a few reasons. First, Regionals are responsible for 12 to 40 schools, and, therefore, it was not practical either in terms of scheduling or time management for the Regional to hold a SchoolStat meeting with each principal every month. Second, there are important benefits to having a peer group in the room for each meeting. It afforded the opportunity for participants to share experiences in what turned out to be a very collegial environment. Unlike the various agencies of a city government, schools are similar to one another in structure and mission, and a uniform set of KPIs could be used for all of them. This gave principals and Regionals much in common to discuss. In addition, the group approach allowed for "compare and contrast" discussions among the participants with respect to performance. For example, two schools with similar demographics could engage in discussions with the Regional regarding why one school was successful in curbing absenteeism while the other was not. Therefore, the group meeting structure created a positive tension between collegiality and competition.
- **Frequency of meetings:** The Baltimore City department heads attend CitiStat meetings every two weeks, which contrasts with SchoolStat's monthly meeting schedule for both the region- and CAO-level meetings. There were several reasons for this decision. First, principals and Regionals needed at least 30 days to take action and obtain results in response to discussion at their SchoolStat meetings. A small change based on a two-week data cycle could merely be "noise" that does not represent an actual improvement or decline in performance. Also, many of the data sets that were available for use by the program were prepared on a monthly or six-week cycle, including both operational data and testing data sets; therefore, it made sense to match the meetings to the availability of new updated data. Finally, the benefits of attending SchoolStat meetings have to be weighed against the cost of pulling principals out of their buildings during school hours, particularly for smaller schools that do not have assistant principals or other administrators to fill in in the case of an emergency. For these reasons, the SchoolStat team struck a balance by scheduling the meetings one time per month.

Some aspects of the meeting component were not part of the pilot and were added during District-wide implementation.

- **District-level meetings:** The SchoolStat program was conceived as an effort to improve the management of schools; therefore, it seemed natural to start at the region-level with principals as participants. When the District began to consider expanding the program to all schools, however, it became clear that it would be helpful to integrate the regional meetings with the central administration in some way. Furthermore, the CAO recognized that the program would benefit Regionals in the same way that it was designed to help principals improve their performance. Thus, the District-level meetings were added midway through the 2005–06 school year. The District-level meeting enables the CAO to gather information from the Regionals that he otherwise would not have access to, including both the substance of the discussions with the principals and the Regionals' own ideas regarding the data. At the same time, the meetings give the CAO a vehicle for both making and implementing policy, whether on his own initiative or in response to questions or issues raised in the meetings. Thus, the bi-level meeting structure represents a focused vertical communication network that connects the highest levels of District management to the schools through the Regionals.
- **Horizontal integration meetings:** In School Year (SY) 06, the SchoolStat team organized

The Role of the Facilitator

In Philadelphia, the person tasked with planning and leading the discussion during the monthly SchoolStat meetings is referred to as the facilitator. The facilitator of the District-level meeting is the CAO and/or his two deputies. At the region-level meetings, the facilitator is the Regional Superintendent. The school leaders whose performance is being reviewed and discussed at the meetings are referred to as the participants.

At the District-level, the participants are the 12 Regional Superintendents, while at the region-level the participants are the principals. Some facilitators choose to have several members from their staff attend the meetings either to support the facilitation or to participate in the conversations. For example, at a region-level meeting, the Regional Superintendent might ask the regional director of instruction to facilitate the portion of the meeting devoted to instructional KPIs.

several "horizontal integration" meetings among representatives of key central administration departments, including instruction, information technology, special education, and accountability, in an effort to integrate the departments into the SchoolStat management system. The theory was that these departments could offer their expertise and support to the efforts by the CAO and the Regionals to develop and implement strategies in the field at both the regional and school levels. However, these three or so meetings tended to focus on refinement of the data measures rather than on the substance of what was discussed during the regional and CAO meetings. Therefore, although valuable, the meetings did not serve the intended integrating purpose. During the coming year, the SchoolStat team will further explore ways to better integrate the SchoolStat system horizontally across central administration departments. One idea is to have some of these departmental representatives attend the District-level SchoolStat meetings in the same way that senior city officials attend the Baltimore CitiStat meetings.

- **CAO quarterly site visits:** At the same time that the SchoolStat program was preparing to launch District-wide, the SchoolStat team realized that it should align the program with the CAO's regular quarterly meetings with each regional leadership team, called the CAO Quarterly Site Visits (QSVs). At the QSVs, the CAO and his staff meet with each regional team to discuss the region's performance, support needed from the central administration, and other matters. Although the QSVs existed prior to the creation of SchoolStat and were not formally part of the SchoolStat process, the CAO and the SchoolStat team recognized their interrelatedness and, therefore, aligned the QSV with SchoolStat so that both sets of meetings were looking at similar data. Because each region meets separately, the QSV meetings are an opportunity to discuss the issues of performance in greater detail than is possible during District-level SchoolStat meetings.

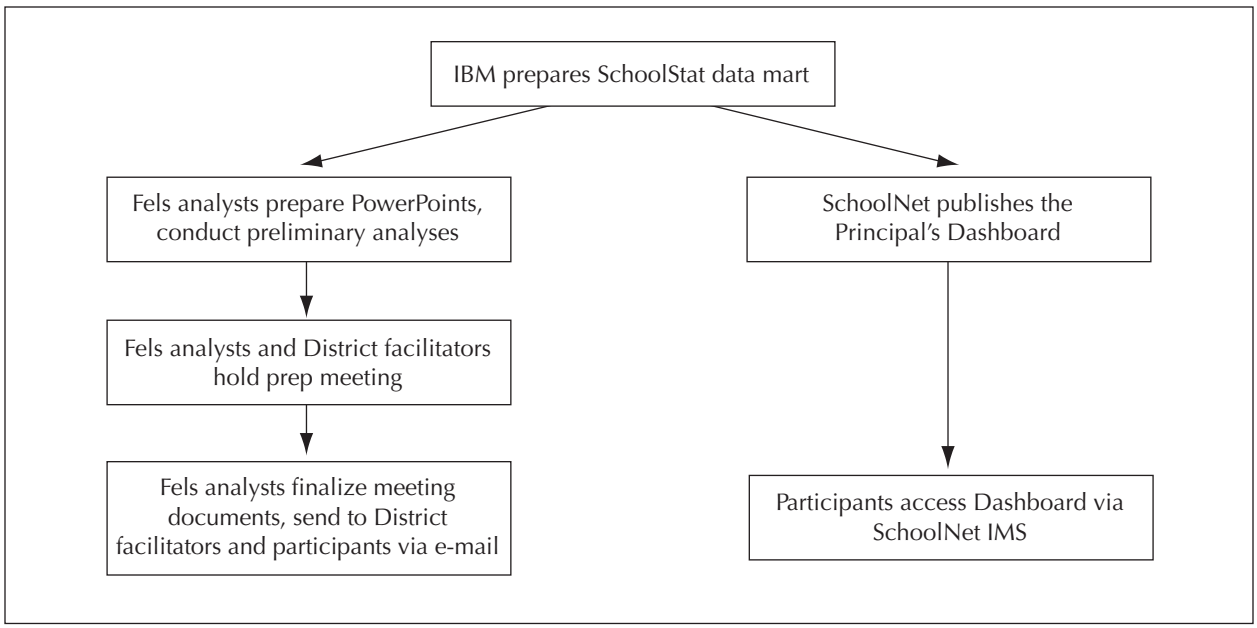
Meeting Preparation

Figure 7 on page 26 lays out the monthly preparation process for the SchoolStat meetings. At the beginning of every month, IBM updates the SchoolStat data mart with the previous month's data for all KPIs. This data mart is the source for both the presentations prepared by Fels for the SchoolStat meetings and the Principal's Dashboard prepared by SchoolNet.

The preparation centers on analyses of the KPI data and creation of the agendas for the upcoming meetings. This process begins with the Fels analysts, who create a draft PowerPoint displaying a standard set of graphs for each of the approximately 40 monthly meetings. The analysts then conduct a deeper analysis of the data by looking for patterns and trends across schools and regions as well as examples of significant progress or decline in performance. They use their observations to draft a Briefing Memo for the facilitator that incorporates the KPI graphs, data observations, and questions to guide the discussion. Next, the Fels analyst meets with the regional or District leadership team to review the data and discuss the proposed Briefing Memo. During this prep meeting, several decisions have to be made:

1. **Which KPIs does the facilitator want to focus on?** Some facilitators prefer reviewing all the KPIs each month so that all performance areas

Figure 7: SchoolStat Meeting Preparation



are consistently monitored, while others like to alternate so that there is time for deeper discussion of a few areas.

2. **Are there any opportunities for improvement, or OFIs, that the facilitator wants to address?** If the facilitator sees declines in performance that are particularly worrisome, he or she might engage in a discussion with the regional leadership team during the prep meeting to anticipate any issues that could come up. In some cases, the leadership team will decide on an action step that the facilitator will assign during the meeting; in other instances, the facilitator will delegate this to the participant.
3. **Are there examples of high performance or improvements that the facilitator wants to highlight?** This can be for the purpose of maintaining morale as well as to drive conversation about potential successful strategies that can be used.
4. **Are there supplemental data sets that would support a more in-depth discussion of the OFIs and root causes?** The facilitator might ask the Fels analyst to prepare a data packet in addition to the standard set of high-level graphs.
5. **Is there any follow-up on the implementation of action steps discussed in previous meetings?** Depending on how much time has passed since the action step was discussed, the facilitator might want to ask either how the implementation is progressing or whether it is having the desired impact.

After the prep meeting, the Fels analyst incorporates the decisions made into the Briefing Memo, creates any additional graphs or tables requested, and sends the final documents to the facilitator. Some facilitators use the Briefing Memo during the meetings as a guide; others send it to the participants in advance of the meeting so that they can come prepared.

Summary of the Program

In summary, the District and its partners implemented the SchoolStat program across all of its 270 traditional schools and 12 regions during the 2005–06 school year as described in this section, and the program was continued for the 2006–07 school year. Although some changes were made in the program along the way toward implementation, it still closely tracks the original design conceived during the pilot stage. The next section addresses whether SchoolStat has had the anticipated positive effects on the District's performance, operations, and culture.

Impact of SchoolStat

The SchoolStat program was designed to increase student achievement by improving school climate, student and teacher attendance, and the quality of instruction. The theory of action was that by providing regularly updated data and supporting data-driven decision making through monthly stat meetings, the SchoolStat program would lead to better school and classroom management, which would result in improved student performance. This section of the report discusses three results from the program: (1) improvement in operations as measured by gains in the KPIs; (2) increased signs of a data-driven culture in the District; and (3) the use of SchoolStat as a new communications network that integrates the District vertically and horizontally around common goals and targets.

Although the positive results described below are consistent with expectations, it is not possible to say that SchoolStat alone caused the improvements. The program did not include a randomized controlled trial that would allow a more definitive comparison between schools participating in SchoolStat and others that did not. Moreover, the District has implemented other programs to improve school performance and increase data use during the past five to 10 years, including the proliferation of charter schools, the use of private managers to administer 39 of the District's lowest-performing schools, the transition to a single core curriculum, and the creation of the IMS to provide instructional data to teachers and principals. Nevertheless, the results are promising and are supported by anonymous survey results indicating that the participants themselves have found SchoolStat to be a useful program for improving performance.

Impact on Performance

The KPI data indicates that median school performance improved on all but one of the indicators. Table 2 presents a summary of performance before and after SchoolStat implementation. For the four non-instructional indicators, the median rate during

Table 2: Median School KPI Data

Median Rates for September–December				
KPI	**SY 2003–04**	**SY 2004–05**	**SY 2005–06**	**SY 2006–07**
Suspensions per 100 students	6.379	5.653	6.008	3.737
Student % absence rate	7.85%	7.61%	7.98%	7.06%
Short-term teacher % absence rate	4.15%	3.88%	3.68%	3.14%
Long-term teacher % absence rate	2.12%	1.88%	1.97%	1.82%
Violent incidents per 100 students	0.919	1.038	0.909	0.909
Median Rates for Spring Pennsylvania System of School Assessment (PSSA) Administration				
Literacy PSSA: % below basic or basic	68.10%	65.36%	63.23%	
Math PSSA: % below basic or basic	71.99%	58.39%	56.34%	

the time period September–December is shown over four years, with SY04, SY05, and SY06 being before implementation and SY07 after.[5] The Pennsylvania System of School Assessment (PSSA) results are used to measure impact on instruction, and the median rate of students scoring below basic and basic on the spring administration in SY04, SY05, and SY06 is shown, with SY04 and SY05 being before and SY06 being after.[6] All results are calculated as the median performance for all 270 schools participating in the SchoolStat program; that is, half of the schools performed better than the reported rate and half performed below. This methodology gives equal weight to all schools regardless of size because SchoolStat is a school-level intervention, making the school the unit of measurement for the program. The results, with a particular focus on changes after SchoolStat implementation, are summarized below:

- Student suspensions, student attendance, and long-term teacher absences improved in SY07 versus SY06.
- Short-term teacher absences showed improvement all four years, but had the greatest year-to-year improvement in SY07.
- There was no change in performance in SY07 for violent incidents.
- PSSA results improved over all three years, with no considerable difference after implementation.

A second analysis was performed to see how performance looked broken out month by month over several years in order to see which KPI numbers moved first, when, and by how much. This data is displayed in Figures 8–12. When reviewing the figures, it is important to note that the regional SchoolStat meetings did not begin until late November 2005 and, therefore, the program could not begin to impact the KPI data until the next month, December 2005, or, more realistically, the months following the holiday break. In addition, the CAO meetings did not begin until March 2006, and, therefore, they could not begin to have impact until late in the school year. One additional factor appears to have had an important impact on school performance and the KPI data during the launch year. The annual statewide PSSA tests were administered in April during 2005, the year before implementation, and then were moved up one month to March 2006 during the implementation year. This could explain why the KPIs, as represented in Figures 8–12, showed immediate improvement after launch and then several showed a decline as compared to the previous year as soon as the tests were taken. One of the lessons that can be taken from the program is that school performance might be improved by pushing annual statewide tests closer to the end of the academic year.

Suspensions

As predicted, the student suspension rate in most schools decreased almost immediately after launch of the program (see Figure 8). The decision to issue a suspension is almost entirely at the discretion of the principal, who can usually use alternative responses to misbehavior.[7] As a result, principals have more control over their performance for this KPI than some of the others, and it is therefore more quickly impacted by SchoolStat. The suspension measure also represents the program's ability to serve as a policy implementation tool connecting the CAO to the classroom. From the first set of meetings, the Regionals, following guidance from the CAO, informed principals that they wanted schools to use alternatives to suspension where appropriate, and the results support a conclusion that this happened.

Student Absence Rates

The program also saw an almost immediate positive impact on the median school student percent absence rate, but this progress reversed itself for the two months immediately following the March 2006 PSSA tests (see Figure 9). Performance improved over the previous year in June, the final month of the school year, and this improvement continued through each of the first four months of the current year.

Teacher Absence Rates

The SchoolStat program breaks median teacher percent absence rates into two KPIs: short-term absences (nine or fewer consecutive absences) and long-term absences (10 or more consecutive days). This distinction was worked into the KPI after principals asserted that they could not control long-term illnesses, injuries, pregnancies, and child-care leave, and that, therefore, it was not fair or useful to include these types of absences in the overall absence rates. Rather than eliminate the measure completely, the SchoolStat team began displaying the data separately,

Figure 8: Median Student Suspensions per 100 Students, by Month

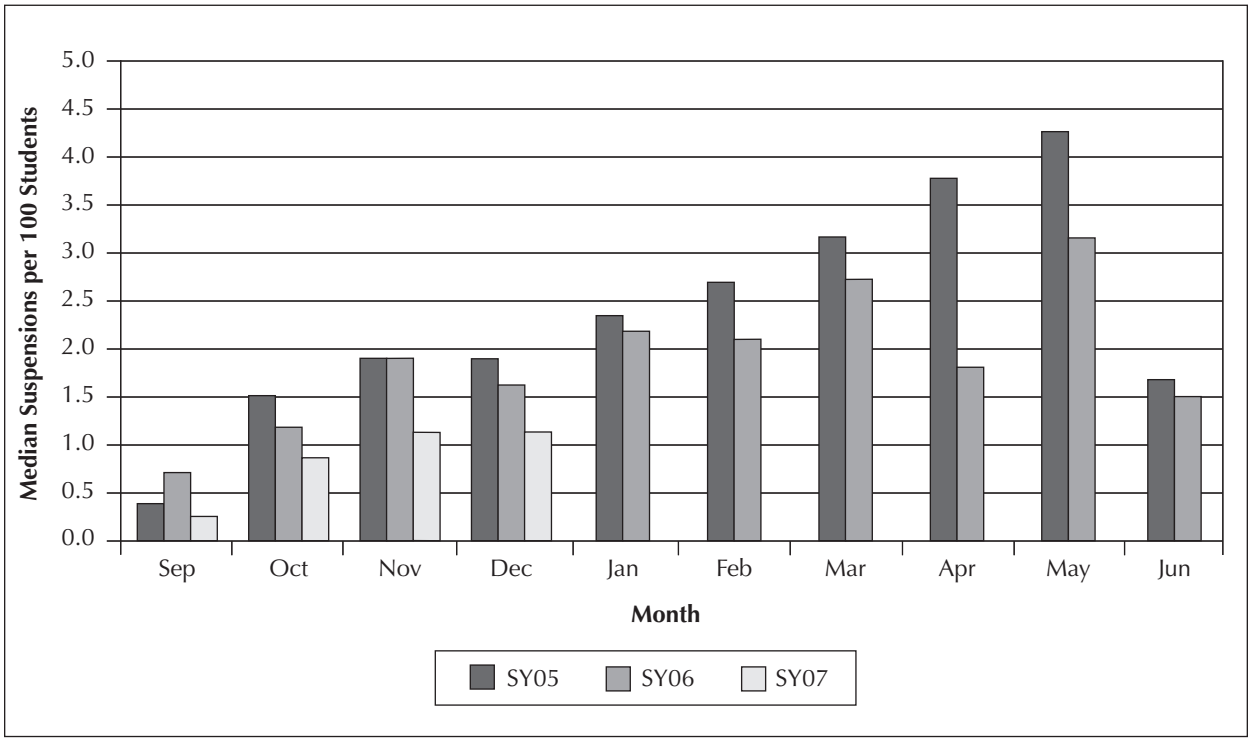


Figure 9: Median Student Absence Rate, by Month

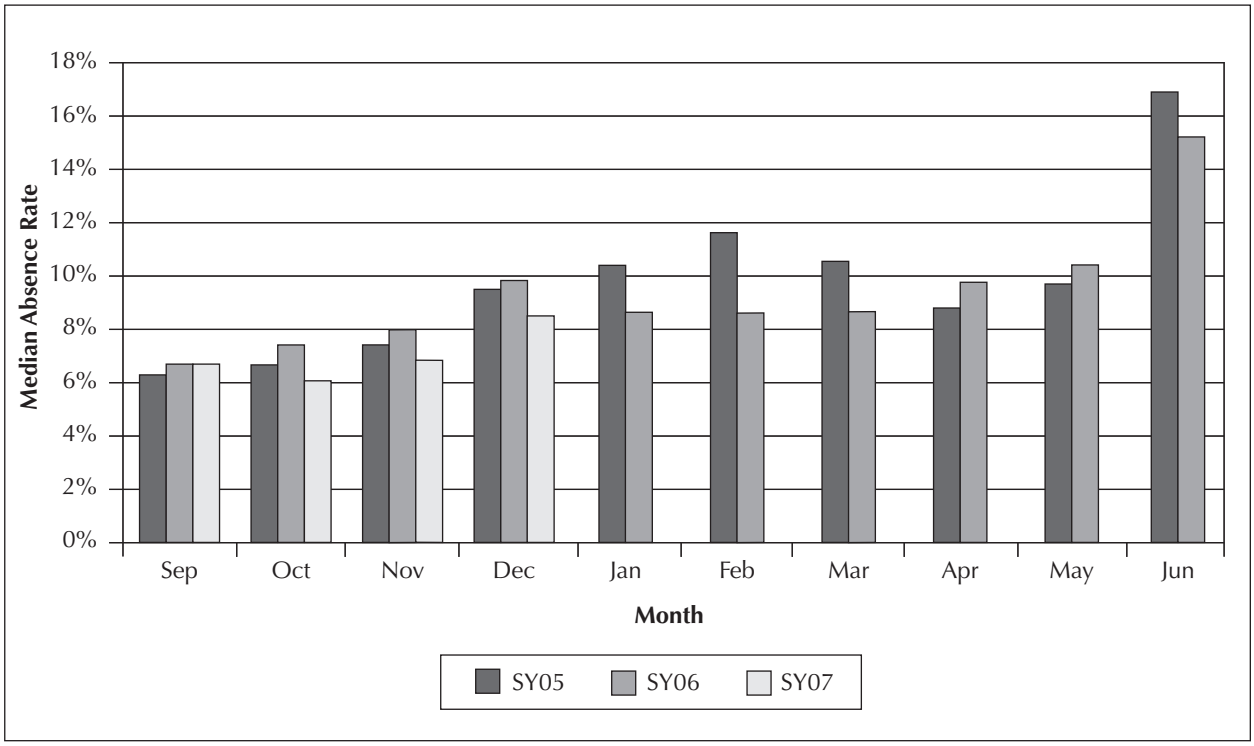
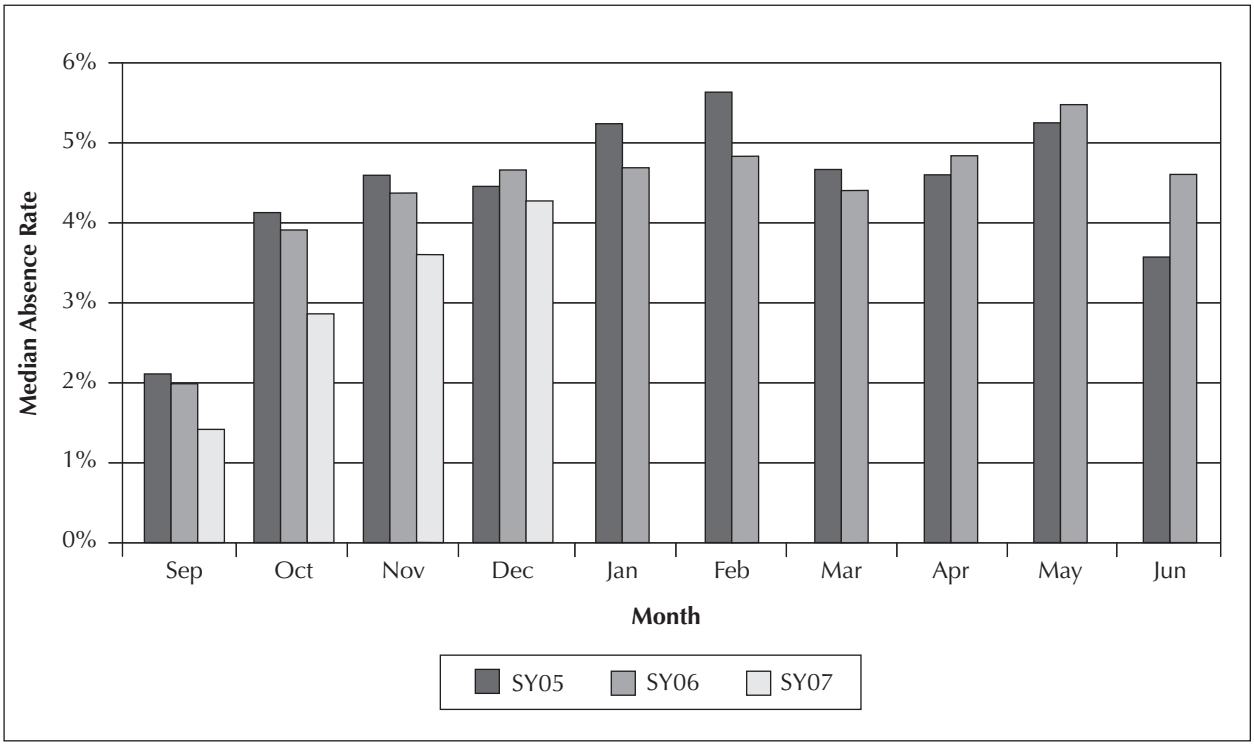


Figure 10: Median Short-Term Teacher Absence Rate, by Month



holding firm to a belief that potential abuses of the long-term leave policy could be reduced with attention and that discussions regarding the data might also impact the policy over time.

Short-Term Teacher Absences

Short-term teacher percent absence rates followed a pattern similar to student absences (see Figure 10). They improved immediately after launch as compared to the previous year and then turned negative after the PSSAs in March 2006. This negative trend, however, did not reverse itself until September 2006, when they began a significant month-by-month decrease in comparison to the previous year. As noted above, the short-term teacher absence rates for the September through December 2005 period had already continued a pre-SchoolStat trend downward, but the greatest year-to-year gains occurred during the first four months of the current year, the period after the SchoolStat launch. These results could indicate that SchoolStat is helping to accelerate the improvement in short-term teacher absences; the data for the rest of the current school year, and in particular the post-PSSA months, will allow for a longer-term comparison later in the year.

Long-Term Teacher Absences

The month-by-month KPI data shows that long-term median teacher percent absence rates across the District began to decrease a few months after program implementation and have continued their decrease each consecutive month since then (see Figure 11). The results indicate that the Regionals and principals might have more control over these types of absences than previously thought.

Violent Incidents

The serious incidents KPI is broken out into violent and non-violent incidents. Non-violent include serious illnesses or accidents that occur on school property and must be reported. Most of the focus during SchoolStat is on violent incidents, which include abductions, assaults, drug and alcohol offenses, incendiary fires, moral offenses, robberies, and weapon offenses, because these incidents reflect school climate. This analysis includes only violent incidents (see Figure 12). The median school rate of violent incidents per 100 students has been erratic, with some months lower than the previous year and some higher. Overall, the rate was the same for the first four months of the current year as for last year, thus showing no improvement or deterioration. This represents the only non-instructional

Figure 11: Median Long-Term Teacher Absence Rate, by Month

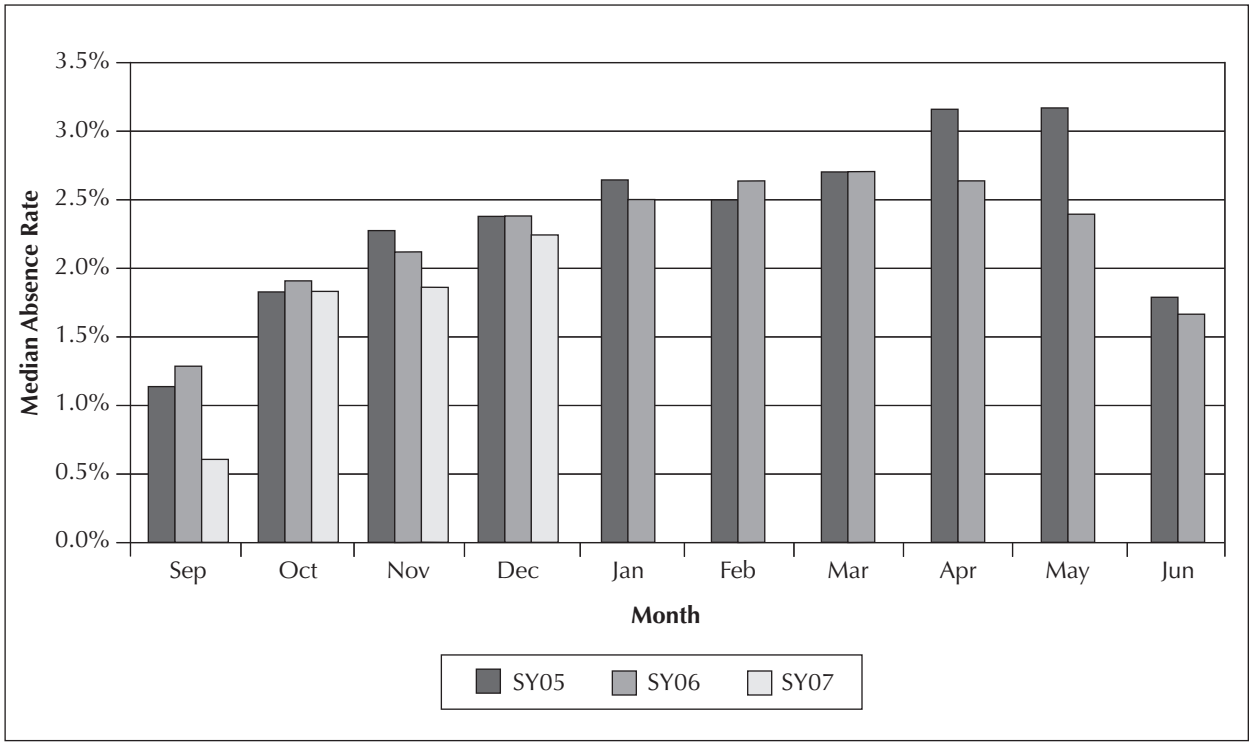
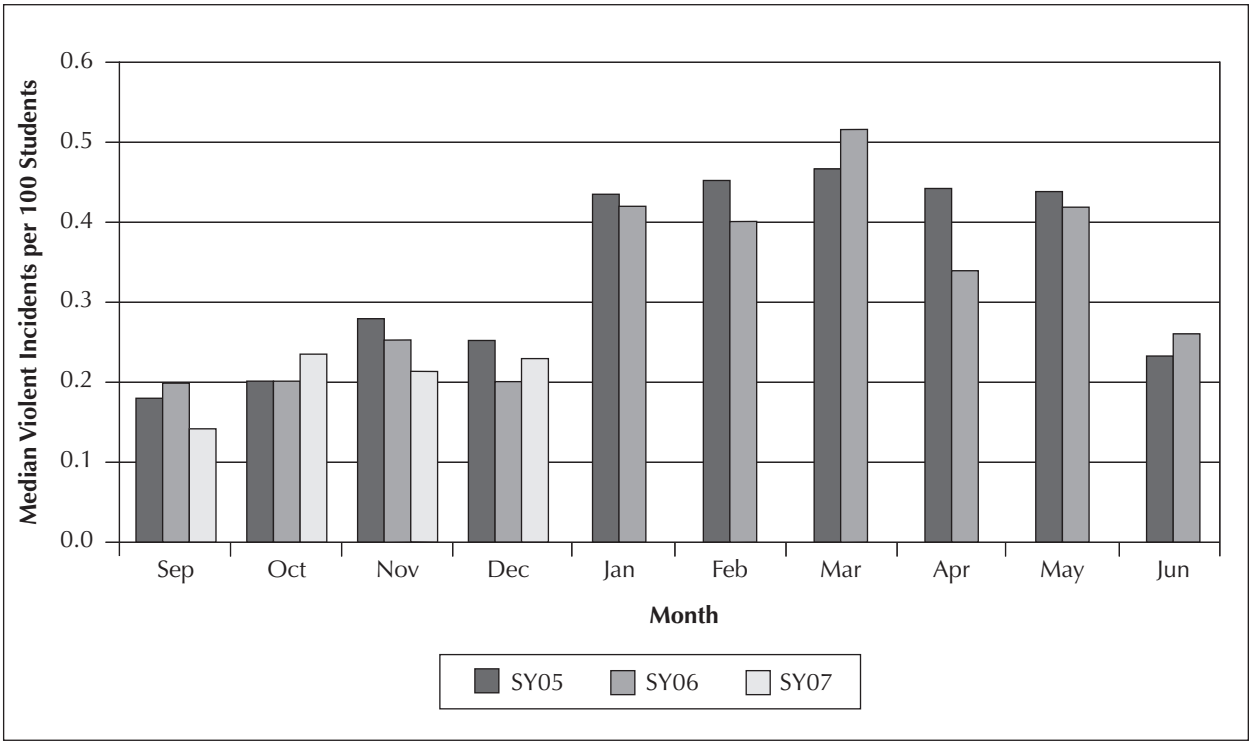


Figure 12: Median Violent Incidents per 100 Students, by Month



KPI measure that did not improve over the previous year through the first four months of the school year.

PSSA Results

Although the results included in Table 2 (see page 27) indicate that there was improvement from the 2005 to 2006 PSSA administration, it is not reasonable to conclude that SchoolStat was responsible. An upward trend in PSSA results predates the beginning of implementation. Moreover, the 2006 test was administered only five months after the beginning of District-wide implementation, and the team expects that influencing instruction via SchoolStat would take longer. This KPI will always be the most challenging to demonstrate.

Reading Levels, Benchmark Test Results, and CSAP

Three of the KPIs that are included in the SchoolStat program are not included in this analysis. First, reading levels are measured by teachers using a subjective assessment process. They are therefore subject to a degree of variability from assessor to assessor, making them a less reliable indicator for measuring academic results than the PSSA. Second, the benchmark tests were excluded because they are designed to identify areas of student weakness based only on the content taught in the previous six-week cycle. The District's instructional experts, therefore, conclude that they are not an accurate or reliable means for measuring student or school progress over time. CSAP has been excluded because, unlike the other indicators, there is not a specific target for performance. Appropriate use of Tier 2 interventions might mean that a school has more referrals to Tier 2 one year and less the following year, depending on the needs of the students. Currently, there is no data captured electronically to evaluate the quality of CSAP interventions; this is something that the KPI committee may revisit as they review the KPIs for the upcoming school year.

What Do the Regionals and Principals Think?

The SchoolStat team conducted an anonymous survey of both the Regionals and the principals in the District in March 2006, five months after launch. These key participants gave the SchoolStat program high scores overall and indicated that they believe it is a useful tool that helps them achieve their goals. The following response to the survey question below sums up this general view and is consistent with the view that the program was at least partly responsible for the KPI improvements:

SchoolStat survey question: *As a principal/regional superintendent, how useful overall is the SchoolStat process in helping you to achieve your school's/region's goals?*

Regionals: 4.7 out of 5

Principals: 4.2 out of 5

Impact on Culture

The program set out to transform the District into a data-driven organization. Based on the SchoolStat team's observations of SchoolStat meetings,[8] discussions with various District staff members throughout the period of implementation, and several formal interviews conducted by the authors in SY07, it is apparent that the participants in the program have come to better understand data and to begin to incorporate it into their management practices.

First and foremost, performance data of the type embodied in the SchoolStat KPI PowerPoints and the SchoolNet Principal's Dashboard were not previously available to Regionals, principals, or the CAO's staff in easily accessible and understandable formats. Therefore, SchoolStat offered the first opportunity for many to receive data in an ongoing fashion, representing a leap forward in itself. Second, the meeting process forced participants to review and talk about the data in a group setting, thus providing a forum to learn about what the data says and how it can be used. In this way, as could be observed during the monthly meetings, the program served as a vast professional development program that month by month raised the level of data understanding and usage across the District.

In addition, the SchoolStat team observed that the Regionals and principals began to go beyond merely understanding the data to adopting new data-driven practices, including the following: making data public; reviewing data with staff and students; planning for improvement in response to opportunities brought to light by updated data; and planning proactively in response to previous years' trends. Taken alone, any one of these changes would represent

an improvement over prior practices, but taken together, they show that the District's culture has begun to operationalize the regular use of data as part of its management routines, and this represents an important step toward establishing a data-driven organizational culture.

1. Making the Data Internally Available

"I have data posted throughout the office, and I use my SchoolStat meetings to encourage my principals to do the same. It's important to let your staff know what your priorities are and what they should be shooting for."

—Harry Gaffney, Southwest Region Superintendent

Once SchoolStat launched, the first new practice that the team observed was that a number of Regionals and principals began to post the data at their regional offices and schools. For example, several Regional Superintendents enlarged the SchoolStat graphs and displayed them along the walls of the hallways in their offices. Similarly, principals began to post the SchoolStat PowerPoints on bulletin boards in the main office to communicate to teachers and other staff the importance of improving climate, attendance, and instruction. They also began to request that the posted graphs be personalized for them by adding color coding, graphical representation of targets, and other elements that demonstrated that they understood the power of the data to motivate better performance.

Some principals also distributed data directly to teachers and staff. Early on, principals began to request that the SchoolStat PowerPoint be e-mailed to them so that they could share it with other staff members. Some principals took it a step further, such as the principal of a K–8 school who began preparing a weekly teacher dashboard for all his teachers. The dashboard includes updated data on SchoolStat KPIs such as student attendance, suspension rates, teacher absence rates, and benchmark results, as well as his own indicators, including completion of instructional activities mandated by the District's core curriculum. The data is personalized for all teachers, so that they can see how they and their students are performing relative to the school as a whole. He credits the SchoolStat program with both the idea and design of his teacher dashboard, and he believes that it has caused teachers and staff to incorporate use of data into their practices.

Finally, a number of Regionals and principals have created private "data rooms" that house large high-level graphs showing not only overall school performance but also more detailed data that is used to track progress for individual students or schools. In one school, the principal draws upon benchmark and report card data to create lists of struggling students in each grade and then uses it to track implementation of the supports being offered to these students. A Regional developed a system of symbols to identify which schools need to achieve improvements to meet performance targets for each of the KPIs; her data room prominently featured this information so that her staff knew at any moment which schools to be focusing on.

2. Reviewing Data with Staff and Students

"Some principals started talking about how great it was to share the data with their teachers and, before you know it, everyone started taking the data back to their school and using it in their staff meetings."

—LaFra Young, Central Region Superintendent

In addition to posting performance data, principals developed processes for sharing and discussing data with their teachers and other staff. At the SchoolStat meetings, most Regionals encourage principals to share both the SchoolStat graphs and the substance of the regional meetings with their teachers and other staff. To date, however, principals have been given discretion over how and whether to use the SchoolStat materials upon returning to their schools for the 30-day period between meetings. Therefore, the school-level process varies greatly from school to school.

In some schools, the principal reviews the information with members of the school leadership team, who are then tasked with sharing it with other staff either formally or informally. Other principals incorporate the data more directly by reviewing it with staff and teachers, either during school-wide meetings or during meetings of grade-level or content-area specific groups of teachers. Some principals have also invited SchoolStat team members to help present the SchoolStat data to the staff.

Often, the data review is accompanied by a discussion about how to improve performance. For example, at a recent elementary school staff meeting, teachers were asked to review the data, and were given a chart to write down any opportunities for improvement for their grade and/or classroom, the root causes for those OFIs, and the action steps they were going to implement to improve performance. In addition to helping the teachers think about how to make use of the data, these handouts allowed the principal both to track implementation of the strategies and to share them with the Regional and other principals at the next regional SchoolStat meeting.

The principal of a comprehensive high school has developed her own school-level SchoolStat process. She begins her staff meeting by sharing the SchoolStat PowerPoint from her regional meeting with her school leadership team, which includes her staff and lead teachers. The leadership team is broken out into subcommittees that each focuses on a performance area, including academics, school climate, and attendance, among other areas that reflect her priorities. Then she holds a "performance review" meeting each Friday morning where the subcommittees present, using SchoolStat and other data, on the school's progress toward their subcommittee's goals. This weekly meeting is then used to create and drive actions and processes that are designed to improve each area.

Finally, some high school principals have asked their teachers to discuss the SchoolStat data with their students in order to give the students perspective on the impact of their own behavior on the school's performance. In some cases, the principals have posted SchoolStat graphs that compare their school's performance to their peer schools in order to mobilize the natural competitiveness of their students who want to be better than their rivals. This practice matches well to a broader District initiative, called "student reflections," in which students analyze their own benchmark test results.

3. Planning for Improvement in Response to Current Data

"SchoolStat is helping us use the data we have so that we are responding to problems as we go. I love when I see school leaders in Philadelphia digging under the hood of the car, using the data to identify exactly what is holding us back and then acting on that information."

—Gregory E. Thornton, Ed.D.,
Chief Academic Officer

The SchoolStat meetings have proven to be a good vehicle for generating data-driven strategies. The process varies from region to region, but the results have been generally successful; the exchange among Regionals and principals often leads to action. For example, some Regionals ask their principals to complete simple forms during or immediately after the meetings that describe actions they can or have taken to improve performance, and then the Regionals share that information at the next meeting. In other cases, principals simply bring a notebook and can be seen jotting down ideas as their colleagues talk.

In addition, the dialogue has become more sophisticated as the participants learned how to use the data and to engage in the meetings more effectively. For example, many of the earlier discussions focused on simple incentive schemes that could be used to encourage better performance. These included positive recognition, awards, gift certificates, and other things that were publicly delivered and that were designed to encourage both emulation by and competition among teachers and students. Several Regional Superintendents also created rewards for the highest performing or most improved schools in each of the different performance areas, often a trophy or certificate that gets passed to the new leader each month. Some participants have expressed surprise that these token incentives can have such impact. However, though these strategies are not sophisticated, they can get results. As one Regional stated, "When we walk into a building, those folks cling to those trophies and they look at the data so hard each month to make sure that they are moving."

As participants became more comfortable with the process, conversations began to go deeper and to identify the root causes of poor performance, which has led to more developed strategies that might address those causes. In the East region, Regional Superintendent Dr. Marylouise DeNicola arranged for cohorts of schools to work together during the first few SchoolStat meetings of the year to create improvement plans for each of the KPIs. At a meeting focusing on student attendance in November

SY07, one school in particular had declining student attendance and was struggling to identify what to do about it. After discussing the issue with her colleagues, she eventually decided to focus on parental involvement. The group discussed strategies that included personal follow-up with parents of absentee students and the recognition of parents of students with good attendance. The principal decided to first try a program that honors parents of children with perfect attendance in order to reinforce a positive school culture regarding attendance.

There are numerous examples of actions that were taken at the school level in response to climate data. For example, schools with high or increasing numbers of suspensions introduced alternatives to suspensions such as "in-school accommodation rooms" where students can spend a day or more separated from their class. Some principals preferred using an accommodation room so that the student could do work rather than receive a day off. In response to detail-level data on students with multiple suspensions, principals decided to write letters to parents, hold personal conferences with the students, and in some cases recommend the student for CSAP, the District's system of student support and intervention.

Sometimes the SchoolStat discussion leads principals to identify a particular process or policy that needs to be changed. For example, climate discussions led principals to discover that too many school staff members had the authority to suspend children and that they sometimes applied different guidelines for making a decision to suspend. In response, principals restricted the number of staff who can suspend students, often to just the principal (for smaller schools) or the principal and an assistant principal or disciplinarian (for the larger schools). One Regional took this a step further and created a policy for the schools in her region stating clearly that no more than two staff members at a school can have the authority to suspend.

In other instances, the meeting facilitator assigned particular action steps that he or she believed would address a certain challenge being discussed. For example, after one region spent time discussing high suspension rates in many schools, the Regional tasked each principal with creating a progressive discipline policy for the school that would include alternatives to suspension for less serious initial offenses. Although the policies were to be based on each school's particular strengths and challenges, the principals were able to use subsequent SchoolStat meetings to brainstorm and share ideas with each other as they developed their plans. In another instance, following a discussion about teacher absences data, one Regional required all principals to review their detailed data and submit a list of teachers with excessive absences, along with documentation of the action taken in each instance.

4. Planning Proactively in Response to Previous-Year Trends

"The data has shown us that some problems can be anticipated. It's our job to look for trends and respond proactively."

—Al Bichner, Deputy Chief Academic Officer

The District and school leaders have begun to use the SchoolStat data to be more proactive about their strategies for the upcoming year. For example, during a District-level meeting held during the current school year, the Regionals realized that the student monthly student attendance rate dropped off significantly immediately after the PSSA examinations during the previous three years. Moreover, they isolated the annual test as the source of the trend, because it was offered in April in one year and in March in another. In both instances, the attendance rates rose during the month of the test and then dropped off significantly the next month and thereafter until the end of the school year. When faced with data that clearly indicates the existence of a post-testing slump, the administrators were driven to action.

The Regionals then set out to attack this problem, focusing on practices that were within their control, because the test date was set by the state and not likely to change in the short term. The Regionals felt that there were District and school policies and practices that sent the message to teachers, parents, and students that the school year is effectively over once the test is administered. These included the practice of report card grades being determined before the last day of classes, and proms and graduation ceremonies scheduled as early as May, even though classes continue through mid-June. From there the conversation turned to the action steps that could be taken to address these issues, including

postponing all end-of-year events until June, encouraging teachers to plan project-based lessons that would generate enthusiasm in students in the final months, and better communicating with parents the importance of attending school consistently through the very last day.

Although the discussion has focused entirely on actions within the District's control, it is also possible that the District could use this data to lobby the Commonwealth to push the testing date as far back in the year as possible to improve school performance during the last few months of the school year.

Impact on Communication

Although not specifically designed to serve as a communications network, SchoolStat, like other stat programs, has improved communication across the organization (O'Connell, 2001; Henderson, 2003). The nature of the group meeting structure has created horizontal communications channels among groups of principals and Regionals that did not exist before. It has also created a vertical set of links that connect the schools to the central administration and that facilitate a regular flow of questions, concerns, information, and policy decisions up and down the organization. Moreover, the centering of the conversations within this network on a common set of KPIs has generated a new data-centric language within the District that is based upon the SchoolStat terminology. The combination of the new networks and the common language has begun to reshape the District into a more data-driven organization.

1. Horizontal Communication

"The best parts about the SchoolStat program are the sharing of ideas and the excitement generated when a principal comes back to the next meeting and says that the idea they got from their colleague has worked at their school."

—Marylouise DeNicola, East Region Superintendent

SchoolStat has created a series of horizontal communications networks among groups of principals. Principals traditionally operate independently from one another. Even when they do have the opportunity to sit in meetings with other principals, they are usually receiving information from the central office rather than sharing it with one another. SchoolStat meetings provide an opportunity for principals to discuss common challenges and share promising practices with each other. The same is true for Regionals. In interviews with both principals and Regionals, the sharing of ideas between colleagues was repeatedly mentioned as one of the most useful components of the program. This finding was supported by the following question and responses from an anonymous participant survey taken during the spring of 2006:

SchoolStat survey question: *How useful are the monthly discussions with your colleagues in helping you identify possible solutions to challenges in the areas of attendance, school climate, and academic achievement?*

Regionals: 4.6 out of 5

Principals: 4.5 out of 5

In some cases, the meetings have sparked the creation of new lines of communication that operate outside of the regular meeting times. Principals come to know each other in the meetings and then start to interact outside of them. For example, principals have begun to visit their counterparts in other schools to observe a particular strategy in action, and have engaged in follow-up discussions by phone. Some principals have even requested that the ideas discussed across the 40 meetings District-wide be collated and sent to all principals so that they can benefit from the discussions in other meetings as well.

2. Vertical Communication

"We are always looking for ways that the central office can better serve the people in the field. I've been able to learn a lot about the issues that concern Regional Superintendents, principals, and teachers through the SchoolStat meetings."

—Lucy Feria, Deputy Chief Academic Officer

While the horizontal communication has begun to have an impact on District culture, the vertical network has taken the first steps toward becoming a focusing vehicle for identifying, framing, and addressing a wide range of questions across the

layers of management. The District is a highly centralized organization in which most policies and procedures are determined at the central office and then communicated to the school leaders in the field, where they are then implemented. A natural tension exists between those making the decisions and those carrying out those decisions, particularly where there has been no means of regular communication between them. A common refrain from those in the field is that the people in the central office are not as familiar with conditions in the schools and, therefore, policy decisions sometimes miss the mark. The SchoolStat meetings have begun to bridge this divide and to improve vertical communication flow.

For example, principals have persistently voiced concerns about the benchmark tests when reviewing the data in SchoolStat meetings. The main complaint was that many K–8 students are required to take the test on computers through an online system. Although this has important benefits, such as making the test results data available instantly for use in lesson plans, many principals voiced concern that students were performing poorly not because they did not know the material but because they had trouble taking the test on the computer. A second complaint was that many principals believe that the tests are not fully aligned with the curriculum. The principals shared their thoughts about the benchmarks with the Regionals at the region-level SchoolStat meetings, who then discussed them with the CAO during the District-level meetings, thus conveying concerns from the field to central office staff. In response, the District scheduled a meeting between the Regionals and the departmental directors responsible for the benchmark test program to work through these issues in collaboration, thus bringing expertise from the central administration and experience from the field to bear on solving the problems.

The regional offices help implement District policy both by acting as the liaison between the central administration and the schools and by providing direct support to the schools. The following example illustrates how the SchoolStat process was used to resolve confusion in the field about a District procedure. CSAP is the three-tier process designed to reduce barriers to academic achievement for struggling students.[9] Tier 1 is meant to support groups of students with similar challenges. Students who do not show progress at Tier 1 are moved to Tier 2, where an individualized plan is created and implemented. Tier 3 is an evaluation process to determine whether the children for whom Tier 2 interventions have not been effective are eligible for special education services. (See the sidebar on page 12 for more about CSAP.)

For the first several months of region-level SchoolStat meetings, many principals expressed the opinion that the data showing the number of students at Tier 2 was too low. The Regionals brought this concern to the CAO's attention, who referred it to the SchoolStat Technical Committee, which in turn asked the Office of Specialized Services (OSS), which oversees CSAP, to investigate. After a review of the CSAP database and the SchoolStat data mart, OSS concluded that many schools had not re-entered Tier 2 students from the previous year into the database at the start of the year because they assumed that the information automatically carried over from year to year. OSS drafted a brief explanation of the proper procedure, which was provided to each Regional Superintendent, who then communicated the information to principals at the next month's SchoolStat meetings.

For several reasons, SchoolStat's potential as a communication tool has not yet been fully harnessed. First, the District has not yet consciously decided to use it as a communications network beyond its focus on performance measurement. It was designed and implemented for this more narrow purpose, and its broader potential has only gradually become evident to the SchoolStat team and to District officials. Second, perhaps as a consequence of the first reason, the CAO meetings have not included representatives from other central office departments, thus causing a break in the horizontal network at the central level. Finally, the program does not yet link directly into the schools beyond the principal's involvement in region-level meetings.

One of the weaknesses that became apparent during the District-wide implementation was that principals often felt pressure to answer questions during SchoolStat meetings, even if they did not have all the information they needed. By implementing a school-level meeting, principals could better understand their school's challenges so that they would be better prepared to answer questions during SchoolStat meetings, to help identify the action steps needed to improve, and to request the

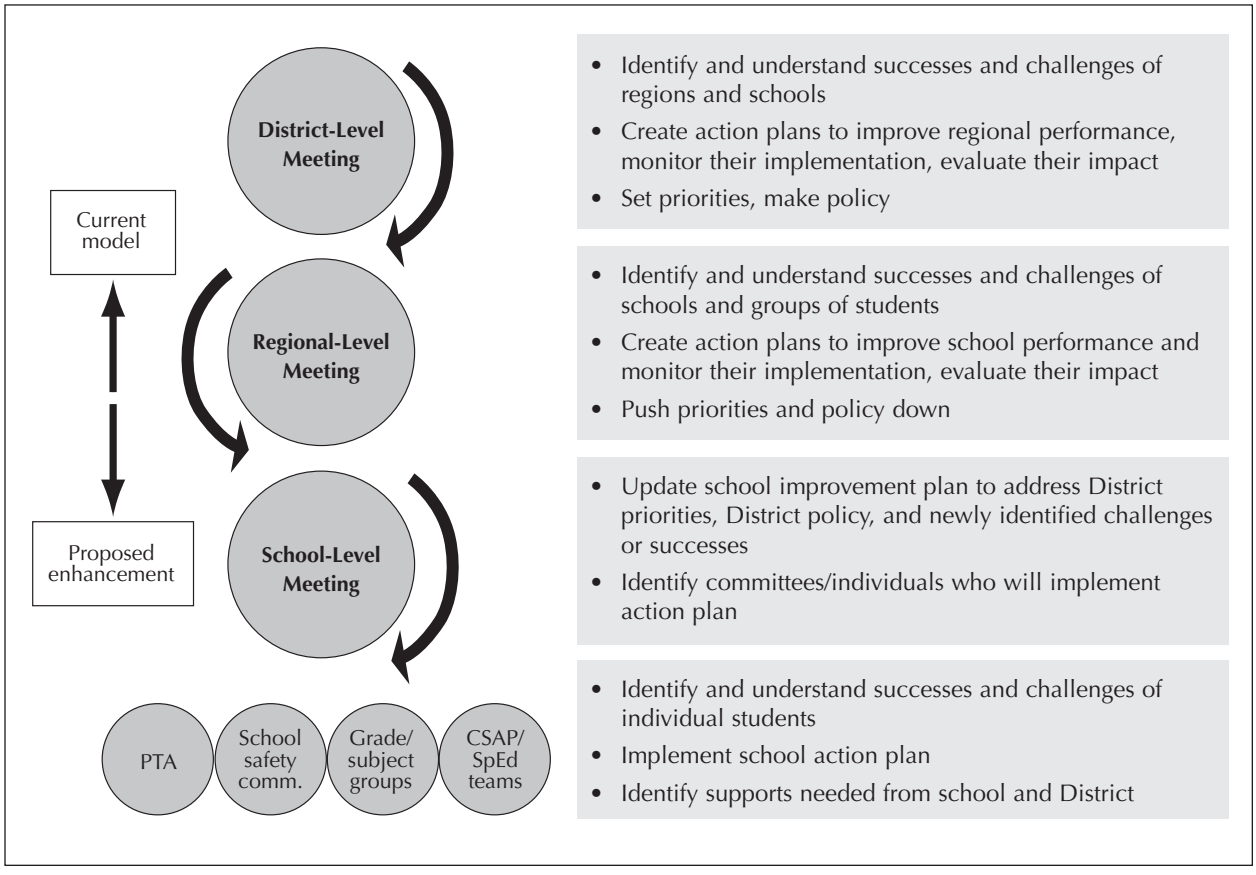
regional support needed to successfully improve performance. The leadership team would then be able to take responsibility for communicating the actions needed to the teachers and staff who would implement them. The school-level meeting would also align SchoolStat with another of the District's data-driven improvement processes—the School Improvement Plan (SIP). Each year schools are required to create a plan that identifies weaknesses from the previous year and maps out a plan for addressing them. The school-level SchoolStat meeting would provide principals with a structure for ensuring that the action steps outlined in the SIP are being implemented on schedule, while using the SchoolStat data to drive discussion about whether these actions are having the desired impact.

Figure 13 shows the current model, with the District- and regional-level meetings in place. It also shows a possible future enhancement of the program, in the form of school-level meetings at which principals meet with their school leadership team to review the SchoolStat data and the substance of the discussions from the region-level meeting, as well as the action steps for the coming month. This school-level meeting would, in turn, inform the work of the individuals actually implementing many of the action steps, represented by the bottom row of circles on the diagram.

Summary of the Program's Impact

By all measures, the SchoolStat program has begun to have its desired impact on the District's operations and culture. The performance numbers are improving just as predicted from the outset with the exception of the violent incident median rates, which have held constant. The District is becoming far more conversant in the use of data both to measure performance and to diagnose and treat problems. And the program has become an extensive communications network that has the potential to serve as a central nervous system for gathering and dispensing information. Together, these results support the premise for the program, which is that stat programs can be adapted to large public organizations like the District and can serve as the mechanism for transforming them into data- and performance-driven institutions.

Figure 13: SchoolStat as a Communication Tool



Lessons Learned and Conclusion

The authors have looked back upon their four years of experience with the Philadelphia SchoolStat program and have compiled some of the lessons that they have learned. Although much has been written about stat programs, the authors hope that their role as practitioner/participant observers in the creation of SchoolStat, rather than as strictly academic researchers, enabled them to offer additional insights. The lessons have embedded within them the realization that public sector managers operate within a context of significant political, financial, time, authority, technical, and personnel constraints. Getting SchoolStat implemented within this environment was challenging. However, the experience has proven that getting these types of performance management programs into place is possible and that they can have positive impacts. It has also brought to light certain lessons that might improve the chances of success for other public leaders seeking to implement stat programs in their organizations. The lessons are grouped into three categories:

- Lessons for the leadership of an organization creating a stat program
- Lessons for the team tasked with designing the stat program
- Lessons for individuals that facilitate the stat meetings

Lessons for the Stat Program's Leaders

1. Strong leadership is required to initiate and sustain a stat program.

The type of organizational transformation that is needed to mount a stat program requires a large number of personnel to embrace new values, technologies, processes, and job tasks. It takes a strong leader to initiate such a change and an even stronger one to sustain it as changing priorities, unexpected challenges, contrary and deeply rooted interests, and the comfort of old routines inevitably work to undermine it.

To achieve such a transformation, the organization's leader must win support or "buy-in" from the organization's staff in order to entice them to act in concert with the program. This is important because institution of the stat program is not a silver bullet that will lead to improvement if participants are merely going through the motions; they need to actively engage in the hard work of analyzing data, solving problems, and testing new strategies. Jim Collins' flywheel analogy is appropriate here—the more that a leader can demonstrate unwavering support of the stat program, the more that people see the stat program as central to all the leader's other initiatives, and the more that the leader publicizes the small victories achieved along the way, the more that his or her staff will join the leader in pushing the flywheel until eventually the momentum generated will be enough to achieve the big results (Collins, 2001).

There are several things that the leader can do to build this support. First, the leader must demonstrate unwavering commitment to the stat program through both word and deed. For example, in Philadelphia, Southwest Regional Superintendent Gaffney demonstrated the former by repeatedly stating to principals that SchoolStat was his number one non-instructional priority at the beginning of nearly every SchoolStat meeting during the pilot program. District CAO Thornton demonstrated the same type of leadership

Lessons for the Stat Program's Leaders

1. Strong leadership is required to initiate and sustain a stat program.
2. The goal of "continuous improvement" applies to the program as well as to the organization.
3. Don't let the perfect be the enemy of the good.
4. Stat programs are flexible and can be adapted to fit different contexts.
5. An external partnership can be an effective vehicle for program implementation.
6. The stat program needs to be given time for development, implementation, and results.

Lessons for the Stat Program's Designers

1. Begin the KPI selection process with a clear understanding of the relationship between the outputs and outcomes of the organization.
2. When choosing KPIs, keep quick wins in mind.
3. You can (and should) build the stat program around the technical capabilities you currently have, while identifying and working toward the technical upgrades you want.
4. There can be benefits to conducting stat meetings with groups of participants.

Lessons for the Stat Program's Facilitators

1. Don't assume participants know how to use the data.
2. Facilitators must both motivate and monitor.

for the District-wide launch a year later. He began the process by telling both central staff and the Regionals that SchoolStat was a major initiative for him and that he was going to do whatever he had to do to make it happen. Both he and Gaffney supported the talk with action by personally facilitating each of the SchoolStat meetings during the first year of implementation, rather than delegating that role to a deputy.

Second, the leader should explain to staff how the stat program is the vehicle for and is inextricably intertwined with the achievement of his or her goals for the organization. This alignment of person with method and with goal buttresses the program and further helps achieve support from the bureaucracy. In Philadelphia, Thornton arranged for kickoff presentations that were delivered prior to launch by the SchoolStat team to each of the regions that were attended by all of the principals within the region. The presentations described the core components and thereby reduced staff anxiety by transforming the unknown into the known. But more importantly, they presented SchoolStat as the CAO's plan for improving the District and for helping school leaders meet their NCLB improvement requirements.

Third, the leader must secure the financial and human resources necessary to make the program happen. In some cases, a leader may be able to seek out alternative sources of funding. In Philadelphia, for example, Thornton worked with the development office to secure a grant to help defray a portion of the costs of the first year of District-wide implementation of SchoolStat. Such funding is normally not available; even in Philadelphia, the grant lasted for just one year and represented only about 20 percent of the program's cost. Therefore, the leader will likely need to allocate scarce resources from within the organization to the stat program, and this could require painful spending cuts in other areas. For example, the District faced an unexpected budget deficit of $73 million during 2006 and needed rapidly to make cuts to staff and programs.[10] Thornton made the difficult budget decisions necessary to preserve the program just as it was beginning to get off the ground and show promising results. This reinforced the CAO's message that SchoolStat was a

priority for him, and this further motivated the staff to engage with the program.

Finally, the leader should convene the appropriate stakeholders as early in the process as possible, both to gain their expertise and to earn their support through collaborative dialogue. Thornton did this through his creation of the KPI committee, which ensured that every department had a voice in the choice of the KPIs. This process of creating the KPIs by consensus began the process of incorporating key personnel into the development effort, thus introducing them to the program and taking the first steps toward winning their support.

2. The goal of "continuous improvement" applies to the program as well as to the organization.

As described in the first section of the report, the Philadelphia SchoolStat program has evolved since inception. Although the core components remained the same, a number of major and minor adjustments were made along the way in response to feedback from participants, changing circumstances, and lessons learned from experience with the program. For example, each year KPIs have been added, removed, reformulated, and displayed differently. A different process, including new technology, was used to access and organize the data in the pilot than in the District-wide implementation. Finally, after observing that the meeting discussions during the first year of District-wide implementation were not focusing enough on problem solving, the team introduced the "Plan-Do-Study-Act" framework and provided professional development to facilitators so they would know how and why to use it.

Stat program personnel can use a variety of tools to identify opportunities for self-improvement. They can solicit feedback from participants, either through anonymous surveys, focus groups, or an e-mail account used solely by participants to share ideas or concerns. They can also schedule a regular time for all involved in the running of the program to engage in reflection and discussion. Finally, a quantitative study of impact can be used to determine which areas of performance are not improving. Once the opportunities for improvement are identified, the team can use the same problem-solving strategies promoted by the program to identify changes that need to be made.

The continuous improvement of the program is important for several reasons, the most obvious being that the improvements should drive better performance. In addition, the leadership should model the continuous improvement ethic that is at the heart of the stat program by holding themselves to the same standard and in this way move forward the gradual process of changing organizational culture. Moreover, by listening to participants and incorporating suggestions where appropriate, participants can be transformed from recipients to active partners in the program, and this in turn can generate support for the program and increase everyone's morale. Finally, meetings can get stale, particularly if the same challenges are being discussed each month, seemingly without resolution. It is important for the leadership to realize when this is occurring and work with the facilitators to determine how to reenergize the conversations.

3. Don't let the perfect be the enemy of the good.

If there is one lesson that ran through every phase of the project, it was not to allow pursuit of a better solution or practice to slow down or stop the program when a good one was readily available. Time and again, the SchoolStat team was confronted with situations where it needed to decide whether to delay some portion of the program implementation until better data, clearer graphs, more training, or any other number of potential improvements became available, or to forge ahead with solutions that were not perfect but that were good and workable and could be implemented almost immediately.

For example, it was discovered midway through the pilot that some of the absences that were included in the teacher absence data actually belonged to non-teaching staff and, unfortunately, there was no simple solution that could be implemented immediately to cleanse the data. It was decided that it was better to have an imperfect but reasonably accurate sense of the teacher absence rate to stimulate the conversation rather than to exclude teacher attendance from the program completely for the rest of the pilot.

It is important to note, however, that the rule of moving forward with good solutions rather than waiting for perfect ones is not inconsistent with the goal of continuous improvement and striving for

perfection. In the example above, while the team went ahead with the teacher attendance data as it was, it also worked with the Technical team so that the following year the non-teachers' absences were removed from the data sets and displayed as a separate indicator.

The biggest temptation is to cancel the stat meetings, especially in the first year of implementation, because of concern that some component is not perfect. Getting the meetings scheduled and sticking to that schedule, however, has many benefits. The meetings become a powerful forcing function that drives all parties to complete the tasks needed to implement the program by giving them hard deadlines that otherwise would not exist.

During the summer of 2005, the work of the KPI Technical Committee, which included determining the definition of the KPI calculations, preparing the data mart from which all data would be accessed, and designing the views for the Dashboard and SchoolStat presentations, could have dragged on well into the school year because there were so many possibilities to choose from and so many stakeholders available to give input. As the meetings were scheduled to start in November, however, the team was forced to make the necessary decisions to get the essential work done. Then, once up and running, the meetings provided valuable experience and feedback that helped to prioritize any improvements that had not been finalized by the start of the program.

4. Stat programs are flexible and can be adapted to fit different contexts.

Baltimore's CitiStat program showed that the fundamental concepts of the stat process developed in the policing world could be applied effectively to municipal government (Henderson, 2003). The SchoolStat project has thus far demonstrated that stat processes can be adapted successfully to the education context. Moreover, the Philadelphia SchoolStat model represents just one approach to incorporating a stat process into a school district. In Baltimore, for example, the school district has taken a different approach. Whereas Philadelphia structured its program around the goal of school-level improvement by focusing on meetings with principals, Baltimore has created a SchoolStat program designed to improve central administration's support to schools that features meetings among central administration staff. These two models demonstrate the variations that are possible while also inviting a look forward to the day when a district knits both types of processes together into a horizontally and vertically integrated system that incorporates all aspects of a district's administration.

Every stat program's structure can be adapted to fit the individual circumstances and goals of the organization (Behn, 2006). The Baltimore CitiStat program is based on four tenets:

- Accurate and timely intelligence
- Effective tactics and strategies
- Rapid deployment of resources
- Relentless follow-up and assessment[11]

The entire process—from staffing, to the data, to the way the meetings are run—is designed to achieve these four tenets. In his research on stat programs, Robert Behn (2005b) has identified six core drivers that he believes make a stat program successful: active engagement of the city's top executives; the breadth, depth, and freshness of data and analysis; perseverance of questioning, feedback, and follow-up; consequences for performance; a focus on problem solving; and institutional memory of the top executives. When designing a stat program, a leader should not feel the need to copy another organization's program precisely; rather, the leader should ensure that all decisions are made with the goal of achieving the four tenets, or six drivers, or whatever theory of action the leader believes will drive participants to implement data-driven actions.

To illustrate, Philadelphia's SchoolStat program incorporated design elements not present in the CitiStat/CompStat model, including the use of peer group meetings and a partnership with an outside organization for design and implementation. These are both examples of adaptations based on the specific circumstances facing the organization—first, there were too many principals to make individual meetings logistically possible, and, second, the leadership felt that the District's staff did not have the time or the expertise to design and implement the program without the help of an outside partner. When faced with this situation, the only question for a leader to consider is whether a seemingly good

design adaptation will conflict with the theory of action. In Philadelphia's case, the changes were embraced by the District's staff and likely enhanced the effectiveness of the program.

5. An external partnership can be an effective vehicle for program implementation.
Perhaps the most significant difference between the Philadelphia SchoolStat project and both the CompStat and CitiStat programs is its use of an external organization to help with design and implementation. From both the District's and the university partner's perspective, there have been benefits and challenges to this approach.

Benefits

- **Focus:** An outside organization can focus its efforts on the program without being pulled away by other agency priorities. Although some agencies might be able to assign staff exclusively to the development of a stat program, others might be constrained by financial, human resource, political, or other reasons from doing so. In these cases, an agency head could consider hiring an outside partner to do the work rather than attempt to add the responsibility to already overtaxed staff members who cannot give the program the attention it needs, particularly in the startup phase. In Philadelphia, the outsider status was particularly useful in the fall of 2006 when a large budget deficit at the District forced central office staff to redirect their attention to solving the crisis; because the Fels team was not connected to this issue, it remained focused entirely on continued implementation of the SchoolStat program.
- **Skill sets:** An outside organization brings a different set of experiences, perspectives, and skills. The District's staff brought the content knowledge and institutional understanding to the SchoolStat program while the Fels team contributed its broader management expertise, including data analysis skills and familiarity with stat programs.
- **Graduate students:** The use of graduate students to help prepare for and assist with the regional and CAO meetings proved to be a particularly effective practice. The graduate students were enthusiastic, skilled, flexible, and less expensive than full-time hires. In exchange, the students received valuable frontline experience in both public management and stat programs.

Challenges

- **Authority deficit:** In a partnership situation, the outside partner might not be given the formal authority to ensure that the organization's staff follows through on its responsibilities. Although this weakness can be ameliorated through delegation of authority by agency leaders to the partner, the arrangement can still create an awkward set of relationships. The SchoolStat project avoided this problem through close relationships between the critical District staff and the Fels team that enabled Fels to provide support while the District staff provided the direct management of the program.
- **Show of long-term commitment:** One of the challenges of using a partner to help develop and implement the program is that District staff members might perceive this to mean that the program is temporary or not a priority for the agency. The District prevented this perception through the strong and regular show of support for the project given by CAO Thornton and the Regionals.
- **Learning curve:** Outside partners need to become familiar with the mission, programs, and activities of a new organization. Moreover, regular turnover at the outside organization—for example, graduate students or consulting associates—could hamper the ability of the outside partner to develop the necessary expertise and relationships needed to move the program forward over a several-year period.
- **Outsider perception:** Having an "outsider" sitting in on stat meetings can be uncomfortable for the participants, and this might foster a defensive approach by participants rather than more positive discussions. It takes time to build a relationship of trust, and there might not be sufficient time to do this. In Philadelphia, the Fels analysts do not generally participate in the meeting discussion, and this seems to have minimized any negative reaction.

6. The stat program needs to be given time for development, implementation, and results.
Designing and piloting a performance measurement system can take an organization three years or more (Hatry, 1999). Achieving measurable results takes time as well. Participants first need to overcome a steep learning curve before they can even begin to use the program effectively. The facilitators in particular must learn through practice how to best motivate and support participants, and this takes time. Further delays can be caused by initial resistance from any of the parties involved and by the need to raise the data skill levels of the participants.

Moreover, it takes time to decide which practices should be targeted for improvement in order to obtain better outcomes. This is particularly true in the education sector, where the desired outcome—improved student learning as measured by test scores—might be definable, but the practices leading to this result are more difficult to pinpoint. Most academic outcomes rely heavily on the quality of instruction and the interactions between teacher and student, but there is disagreement among educators about what works, and a teaching strategy that is effective for one child or teacher may not work for another.

Finally, improvement time may also be impacted by the amount of control the manager has over the strategies that can be used. For example, collective bargaining agreements often define when teachers must be in school, how many absences they can take, and what kind of negative consequences can be employed when a teacher is either absent or not effective. Driving improvement in teacher absences requires creative thinking and likely a change in school culture, which can take time to nurture.

These obstacles to getting results quickly should not be used as excuses not to implement a stat program. Instead, the leader should be prepared to give the program enough time to overcome them and to begin to get the intended results. This is not easy given the constraints under which public leaders operate. For example, in Philadelphia, the team needed to provide evidence of impact on outcomes to the governing board each year to secure funding for the subsequent year. Although a stat program should be held to the same standard of measuring progress as the organization, it also must be given sufficient time to work. Anything that the leader can do to get past the startup phase, flatten out the learning curve, and start getting results is helpful.

Lessons for the Stat Program's Designers

1. Begin the KPI selection process with a clear understanding of the relationship between the outputs and outcomes of the organization.
One way to improve the KPI selection process is to consider and differentiate between "output" and "outcome" measures and then incorporate both as part of a well-though-out scheme that links them in causal chains. Output indicators measure the actions completed by the staff of the organization. They allow a centralized District to track whether staff members in the field are completing important tasks that make up their jobs. Outcome indicators measure progress toward a program's goals, and can be expressed as either intermediate or end outcomes depending on how far removed they are from the relevant outputs (Hatry, 1999). Organizations tend to have a theory of action that seeks to anticipate and explain how its actions or outputs will lead to intermediate outcomes, which will in turn lead to the outcomes that represent the goals of the organization. Therefore, picking good output and outcome measures is important to an effective performance management system. The possibility exists, however, that the causal theory is wrong and the outputs do not lead to the desired outcomes. This is one of the reasons that it is important not to rely solely on output measures and to actually test to see if the organization is achieving desired outcomes.

The anticipated link between outputs and outcomes should be tested regularly during the stat process. For example, the District purchased the instructional management system because it believed that the use of data by teachers to plan lessons would improve instruction, which would ultimately improve academic achievement. SchoolStat could easily include data measuring use of the IMS (which can be tracked electronically using log-in information) so that the District leadership could drive increased usage of the technology. A comprehensive stat program would go beyond encouraging and tracking usage; it would also investigate whether the

increased usage leads to more lesson plans being designed around weaknesses identified in the data and ultimately whether those lessons lead to increased academic achievement.

As described in the Introduction section of this report, Philadelphia started its KPI selection process with the question, "What makes a school successful?" and focused largely on the intermediate and end outcomes that characterize a successful school. The KPI team did not explicitly discuss the relationship between outputs and outcomes; as a result, the program has not laid out a clear plan for identifying which outputs drive which outcomes or for testing these theories of action. Fortunately, CAO Thornton is planning an initiative to revisit KPI selection, which will allow the team to explore the connections between outputs and outcomes and to identify additional KPIs that could be added to the program to build these linkages.

2. When choosing KPIs, keep quick wins in mind.
Nothing succeeds like success, and it is beneficial to design the stat program so that some success can be achieved early in the implementation. These "quick wins" are essential because they shore up staff morale, weaken resisters, win support from decision makers and funders, and build momentum for the program as "fence sitters are transformed into supporters, reluctant supporters into active participants, and so on" (Kotter, 1996).

The designers of a stat program can plan for the quick wins needed to bolster the program and carry it through its first year by including at least a few output indicators that are more easily influenced by the participants. It is harder to achieve measurable improvement with outcomes, which tend to be influenced by many factors, all of which may not be understood by the organization. In Philadelphia, the team did not take this principle into consideration when designing the KPIs, but was favored by fortune when student suspensions proved to be just such an indicator and showed improvement almost immediately. In addition, several of the other outcome measures, such as student and teacher attendance, although lagging by a few months, also began to show improvement, allowing for recognition of additional wins.

3. You can (and should) build the stat program around the technical capabilities you currently have, while identifying and working toward the technical upgrades you want.
Stat programs do not require sophisticated software to achieve their primary functions; Excel, Access, PowerPoint, and similar programs can support them. The SchoolStat pilot, for example, relied upon a rudimentary data process that involved importing flat text files from the District's legacy systems into Excel, performing basic calculations, and creating graphs and charts that were then copied to PowerPoint presentations. While not efficient, this process created graphs that sparked the same types of conversations generated by the more sophisticated systems and data analysis used today.

Delay is an ever-present enemy to new initiatives. At any time, personnel changes at all levels, flagging will, or the distractions that come with leadership can kill an initiative before it takes root. It is important to exploit windows of opportunity when they arise; therefore, the stat program should be launched with the available technology without waiting for the arrival of the best or better technology. Furthermore, by launching with existing technology, the stat team can gain invaluable experience with the program that leads to design changes that should be accommodated by new technology, accommodations that might not have been possible if the technology was finalized first. In this way, the technology is shaped to better fit the program over time, and the focus is allowed to shift from data to conversations about action.

However, the decision to use existing technology should not serve as an excuse to freeze the technology in its place. The benefits of the District's more advanced technology during District-wide implementation were significant and included a decrease in preparation time, access to a wider variety of information, more disaggregated data, and less human error. It is worth noting that the SchoolStat program continues even now to push improvements in technical capacity and reporting tools. For example, although the new data tools have allowed for much more rapid creation of the KPI graphs, they still cannot produce all the standard graphs and tables used in a SchoolStat presentation with one click of a mouse. Technology that can do this is available, and this is the next step that the District

will be taking to continuously improve the data preparation process.

4. There can be benefits to conducting stat meetings with groups of participants.
Unlike CompStat or CitiStat, which focused on one agency or participant at a time, the Philadelphia SchoolStat meetings are attended by peer cohorts of principals, and this has turned out to be one of its strengths. Both facilitators and participants have remarked that they greatly value sharing experiences with their peers in the meetings as well as the collegial environment that it creates. In some of the groups, it is common for principals spontaneously to break out into applause when a school achieves a solid "win" in the numbers. Principals in particular appreciate the group meetings because they reduce the isolation caused by spending so much time in their own school building. Several Regionals and principals also pointed out that prior to SchoolStat, the few meetings that they did have with colleagues often did not provide a good opportunity for conversation or a sustained focus on important matters that they have in common. Therefore, the SchoolStat meetings provide a unique opportunity for participants to share ideas and to participate in group problem solving, and this makes them feel supported in their efforts to achieve their priorities.

Finally, the group meetings foster a sense of community. Many Philadelphia participants have said that since SchoolStat began, they are more likely to pick up the phone and call a colleague from their group to get ideas or to ask for help. They will even visit a colleague's school to observe firsthand how a particular strategy is implemented. One principal described an increased sense of accountability to her colleagues, saying that "if one of us fails, we all fail." The trust that develops from this sense of community is helpful to the stat process, as it decreases the need for participants to defend their performance and instead focuses efforts on working together to improve performance.

Lessons for the Stat Program's Facilitators

1. Don't assume participants know how to use the data.
In any organization, particularly those as large as the School District of Philadelphia, stat participants will possess different data skill levels. Some will take easily to using data to identify problems and potential solutions. Others, however, will find this to be quite difficult. For example, a California study found that many teachers and other school staff members were not able to effectively analyze student data that was made available to them, and they also did not know how to craft actions in response to the weaknesses identified in the data (O'Day and Bitter, 2004).

One of the benefits of a stat program is that it can serve as a professional development program that teaches data-driven decision-making skills. A facilitator's first responsibility is to help participants understand how to analyze data: what comparisons to make; what questions to ask when looking at a graph or table; and how to interpret patterns, trends, and outliers.

The second responsibility is to help participants understand the limitations of the data—that it can be used to identify and better understand problems, but it won't provide the solutions. Finally, it is up to the facilitator to show how to make links from the observations about the data to actual strategies that can be implemented. Facilitators can help in this education process in several ways.

- **Highlighting key data points:** Even relatively simple graphs can be intimidating to people who do not have a data background. In the initial meetings, it helps to use a consistent set of clearly labeled graphs that explicitly describe what the graph is showing. Whenever introducing new graphs or data, the SchoolStat facilitators are encouraged to identify the KPI, the time period represented, the schools or regions that are improving or declining in performance, and the high and low performers relative to some benchmark. By highlighting these key data points, the facilitators help participants learn how to identify key information embedded in the data.
- **Discussing the conclusions that can be drawn:** Beyond simply understanding how to read a particular graph or table, participants need to know what kind of conclusions can be drawn from the data presented. This is essential for determining whether or not there is a problem that needs to be further investigated. For example,

when looking at a graph showing the number of suspensions issued by a school over the past five years, a principal would need to be mindful of changes in the school's population year to year. A steady number of suspensions at a school with declining numbers of students would be interpreted quite differently than one with increasing numbers. By describing the calculation used and why it's important, facilitators help participants understand the types of contextual information that are needed to draw proper conclusions from data.

The facilitator should also help participants dig deeper into the data underlying the problem so that potential solutions can be identified. A high-level graph showing declining student attendance over time signals that there is a problem, but it does not provide enough information to identify the source or cause of the problem. To get to the bottom of the matter, the facilitator might call up disaggregated data in the form of attendance rates by grade level, gender, or homeroom teacher that identifies the root source of the problem. Over time, participants learn from the facilitator, become more aware of the various data sets that exist and can be used to answer questions, and can take more initiative in identifying the data they need to make better decisions.

- **Providing a framework for action:** After gaining a better understanding of the problem, participants need to try to identify its root cause and then create actions that might address it. Philadelphia uses the "Plan-Do-Study-Act" framework to help make the process of moving from data to action clear. Some facilitators in Philadelphia have provided handouts to participants with spaces to fill in information at each step of PDSA. This helps participants see the link between the data and potential action steps. In effect, the handouts lead the principals down the path to creating an action plan that aims to address the problems brought to light by the data.
- **Questioning:** Guiding questions can be used by facilitators to lead participants through the data-driven decision-making process. In Philadelphia, the Briefing Memos provide a list of potential questions for reference during the meetings.
- **Suggesting action steps:** Particularly at the beginning of the program, a facilitator can help make the link between data and action clear by simply suggesting the action step to be taken. For example, if benchmark tests indicate that students are struggling with a particular math skill, the facilitator might ask the principal to conduct five teacher observations before the next stat meeting, looking specifically for weaknesses in teaching that might be responsible for the observation in the data.

2. Facilitators must both motivate and monitor.

Performance management is "the active, conscious efforts of the leadership of a public agency to motivate people … to produce more, or better, or more consequential results that are valued by citizens" (Behn, 2005a). Consequently, stat programs must have a motivational component. The fear of embarrassment in front of colleagues is one source of motivation. There is a danger, however, that reliance upon embarrassment will lead to defensive behavior by participants that redirects the discussions away from potential solutions and toward explanations and excuses, none of which is optimal for achieving improved performance.

Certain types of organizations have outcomes that are hard to observe because a combination of factors, both within and outside the organization's control, can impact them (Wilson, 1989). This is particularly true in the educational context, where factors such as parental involvement or IQ can impact academic outcomes. Within these types of organization, participants at a stat meeting who attempt to deflect attention from poor performance can very easily point to the numerous outside influences on outcomes. One of the tasks of the facilitator, therefore, is to find ways to move participants from dissecting the data for the purpose of defending current performance to using the data to identify ways to improve.

- **Distinguishing between the use of data for evaluation and for performance:** In Philadelphia, facilitators often remind participants about the distinction between using data for evaluative purposes and using data for performance purposes. In fact, many facilitators refer to SchoolStat as a tool that principals can use to drive improvement.
- **Establishing group norms:** Some facilitators also begin the year by generating or providing a list of group norms that encourages the use of

meeting time for proactive conversation instead of defensiveness. Where necessary, the group can review the norms during the year.

- **Responding to problems:** In some cases, participants may have legitimate concerns about a lack of resources or problematic organizational policies that hamper performance. In the first instance, the facilitators should take it upon themselves to help secure the needed resources so that participants can do their job successfully. In the latter case, facilitators might schedule a separate meeting that draws upon the SchoolStat data and meeting discussions to address broader policy questions.
- **Redirecting conversation:** If one or more participants continue to focus on defending performance or finding excuses, then the facilitator must be prepared to respond. This might take the form of simply reminding participants of the purpose of the meeting and then redirecting the conversation.

Facilitators should also be proactive in their efforts to motivate. They can use meeting time to recognize and celebrate success. They can acknowledge the challenges the participants are facing in their positions while reiterating their belief that improvement is possible. Perhaps most importantly, they can offer support in implementing any actions that are discussed during the meetings.

Even if participants embrace the program and learn how to use the data to drive decision making, they still can be distracted by the many urgent responsibilities that await them once they leave the meetings and fail to implement their next action steps. In the District, Mason Haire's famous saying "what gets measured gets done" is often rephrased as "what gets monitored gets done," since so much of the work of the managers in the field is monitoring to ensure that District policies are being implemented, and implemented well. The distinction between measuring and monitoring is central to the SchoolStat program. An organization could very easily measure its performance without holding anyone accountable. The display of measurements during a meeting must be accompanied by follow-up questions from the facilitator to ensure that conversations in a meeting translate into action after the meeting by following up at the next meeting.

As with CitiStat, one of the roles of the analyst is to take good notes during meetings so that the facilitator can follow up on agreed-upon action steps at the next meeting. Much of the tracking can be done in the meetings through pointed questions aimed at determining not only whether the action was completed, but also whether it is having the desired impact. For example, a facilitator might guide a follow-up discussion with the following questions:

- Have you implemented the action discussed last month?
- Did you experience any challenges during implementation?
- Does the data show improvement?
- If not, why not? Is it implementation or the strategy itself?
- Is a new strategy needed?

At least initially, facilitators might feel uncomfortable monitoring participant actions in this way. For example, facilitators might shy away from doing anything that appears to be disrespectful or that puts participants in an uncomfortable situation. This could be true particularly if performance management was not part of the organizational culture prior to the introduction of the stat program. Given how critical follow-up is to the success of the program, facilitators need to find a way to ask these follow-up questions in a way that they find fair and professional.

Summary of the Lessons Learned

During the SchoolStat pilot planning stage, the team's greatest concern was the question of whether principals would embrace or reject the SchoolStat process. Some stat programs have been perceived as confrontational in nature, and in the education world "data-driven accountability" is now closely associated with NCLB and high-stakes testing, both of which are unpopular with many educators. As the results of the 2006 participant survey showed, this concern turned out to be misplaced as participants quickly came to appreciate the program. The lessons learned presented in this section are certainly not exhaustive, but taken together help demonstrate some of the ways that the leaders, designers, and facilitators of a stat program can make it a positive experience for participants.

Conclusion

As the authors learned from their four-year experience with SchoolStat, launching a stat program is not an easy undertaking. An organization must have a leader with bold vision and thorough commitment to the project, a team that can design a program that meets the needs of the organization, and meeting facilitators who can effectively develop participants' skill level in data-driven decision making.

The SchoolStat program has demonstrated that the investment is worth it. A stat program can serve as a transformative vehicle for organizations seeking to become more data and performance driven. If constructed properly, it can serve as a communications network that connects an organization's disparate parts to facilitate the flow of information to the people who can put it to immediate use. And once this happens, better outcomes should soon follow.

Endnotes

1. Gaffney's team included his director of school support, Jim Madgey. The original Fels team included three Fels graduate students: James Diaz, Deane Kocivar-Norbury, and Stephanie Yablonski.
2. http://www.phila.k12.pa.us/aboutus/
3. Two of this papers' authors served on the Fels team: Fels Executive Director Christopher Patusky served as project director; and Leigh Botwinik served as the Fels project manager.
4. http://www.phila.k12.pa.us/offices/oss/servicesupport/csap.html
5. SchoolStat implementation began in late November 2005, and it is unlikely that much impact would have been felt in December. Therefore, the period of Sept–Dec 2005 is considered "before implementation" for the purposes of this analysis.
6. SY07 PSSA had not been administered at the time of writing.
7. There are few serious offenses that trigger automatic suspensions.
8. The Fels project manager attended all CAO SchoolStat meetings and numerous regional meetings during the past two years, and a Fels graduate student analyst was present at every one of the meetings. After each month's meetings, this group met to discuss what occurred, share experiences, and identify strengths and weaknesses witnessed.
9. http://www.phila.k12.pa.us/offices/oss/servicesupport/csap.html
10. S. Snyder. (10/26/2006). "School District Shortfall Worse Than Thought." *The Philadelphia Inquirer*, B-01.
11. http://www.ci.baltimore.md.us/news/citistat/index.html

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