Going Small

Progress & Challenges of Philadelphia's Small High Schools

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RESEARCH FOR *ACTION*

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Introduction

This report appears at an important moment for high school reform in Philadelphia. The School District of Philadelphia (District) and the City of Philadelphia have joined forces to reduce the dropout rate and better prepare students for post-secondary success. The District's recently adopted strategic plan lays out priorities for high school reform, particularly for the lowest-performing neighborhood high schools. The current Superintendent of Schools and her leadership team will use this plan both to build on current efforts and to take the District, and its high schools, in new directions. RFA's study, *Going Small*, which examined start-up and early implementation of the latest wave of small high school creation in Philadelphia between 2003 and 2008, provides data to inform these decisions.

The study found that parents and students are interested in small high schools and that, across admission categories, these schools are beginning to make a difference for student engagement and achievement. In addition, small neighborhood high schools seem to be a promising option for fostering success for students currently attending large neighborhood schools. At the same time, the study finds that "going small" is only a first step in high school reform. Small size does not alleviate many of the challenges faced by neighborhood high schools and more supports are needed if these schools are to capitalize on the advantages of a smaller learning environment. The early stage of these small schools' implementation makes these findings preliminary and suggests the need for further research to more fully assess impact.

Small Schools' Track Record

Over the last 10 years, a number of school districts across the country have created small high schools with maximum enrollments between 400 and 700 students. These districts have been motivated by the belief that smaller size could facilitate more positive school climate, improved teaching and learning, and better student outcomes, particularly for youth who enter high school under-prepared. The national focus on small high schools was propelled in part by an infusion of funding from the Gates and other foundations.

A decade of research has shown that small high schools can indeed improve climate, attendance, student and teacher satisfaction, and graduation rates.[1] In fact, cost studies have shown that because of small schools' ability to graduate more students than large high schools serving similar demographics, their cost per graduate is lower than that of large high schools.[2] A recent review of

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[1] Recent studies of New York, Boston and Baltimore include: Huebner, T., Corbett, G.C., & Phillippo, K. (2007). *Rethinking high school: Inaugural graduations at New York City's new high schools*. San Francisco, CA: West Ed ; Tung. R. & Ouimette, M. (2007). *Strong results, high demand: A four-year study of Boston's pilot high schools*. Boston, MA: Center for Collaborative Education; *Baltimore city's high school reform initiative: Schools, students and outcomes*. (2007). Education Policy Center, Urban Institute.

[2] Lawrence, B., Bigler, S., Diamond, B., Hill, B., Hoffman, J., Howley, C., Mitchell, S., Rudolph, D. & Washor, E. (2002). *Dollars and sense: The cost-effectiveness of small schools*. Cincinnati: KnowledgeWorks Foundation; Stiefel, L., Iatarola, P., Fruchter, N., & Berne, R. (1998). *The costs of size of student body on school costs and performance in New York City high schools*. New York City: Institute for Education and Social Policy.

research literature concluded that "small schools are more efficient or cost-effective….(because) small secondary schools manage to graduate a significantly larger proportion of their students than do large secondary schools."[3]

Small schools' record for improving achievement is mixed, but there is some evidence that they positively affect the achievement of under-prepared and/or low-SES (socioeconomic status) students in particular. A recent study in New York City found that the effect of small school size was greatest for students who were under-prepared entering eighth grade. When these students attended high schools with enrollments over 1000 and a concentration of under-prepared students, their outcomes declined precipitously. In contrast, under-prepared students at small high schools surpassed the city-wide average in attendance and test scores.[4] Leithwood and Jantzi found that all of the studies they examined "associate better outcomes for disadvantaged/low-SES students with smaller schools and most find no negative effects for advantaged/high-SES students."[5] Other studies have found that small schools more consistently improve climate than student achievement.[6]

Variation in how small high schools are implemented is likely one cause of mixed findings about such schools' academic outcomes. As Mike Klonsky says, "Small schools are the launch pad, not the rocket ship,"[7] i.e., small size is a condition that can lead to improved teaching, learning, and student achievement but size alone does not necessarily lead to better student achievement. Some research has examined what enables small schools to successfully improve achievement. Evaluations of small schools in New York City and Chicago have identified characteristics of small schools which are associated with improved achievement. These included the degree of autonomy from district requirements that small schools have been given and other aspects of the instructional supports within these schools.[8]

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[3] Leithwood, K. & Jantzi, D. (2009, Spring). A review of empirical evidence about school size effects: A policy perspective. *Review of Educational Research*, *79*(1), 464-490, 484.

[4] Foley, E. M., Klinge, A., & Reisner, E. R. (2007). *Evaluation of new century high schools: Profile of an initiative to create and sustain small, successful high schools.* Washington, DC: Policy Studies Associates, Inc.; Theroux, K. (2007, Fall). Small schools in the big city: Promising results validate reform. *Carnegie Reporter*, 12-23.

[5] Leithwood, K. & Jantzi, D., 2009, Spring, 470.

[6] Cotton, K. (2001). *New small learning communities: Findings from recent literature.* Portland: Northwest Regional Educational Laboratory.

[7] Mesa, C. (2005, Spring). Smaller school size called a launch pad for high school reform efforts. [Electronic Version]. *Philadelphia Public School Notebook*.

[8] Cotton, K., 2001; Stevens, W. D. (2008). *If small is not enough: The characteristics of successful small high schools in Chicago.* Chicago: Consortium on Chicago School Research; Foley, E. M., Klinge, A. & Reisner, E. R. (2007). *Evaluation of new century high schools: Profile of an initiative to create and sustain small, successful high schools, final report.* New York: New Visions for Public Schools.

Over the last decade, the conversation about small schools has shifted to recognize that while *going small* can be an important piece of positive high school reform, it needs to be accompanied by increased efforts to affect teaching and learning. The Gates Foundation has begun to emphasize the importance of quality teaching and instructional reform over structural changes like size. At the same time, many of the innovative high schools Gates and others recognize as having some success in closing achievement gaps are small schools.[9] Nationally, there are few examples of successful, large non-selective high schools in urban, high-need districts. According to a recent issue of the *Philadelphia Public School Notebook*, "there is no record of large inner city neighborhood high schools anywhere that have been turned around while serving the same student population without some reorganization into smaller, autonomous units. The most celebrated charter high schools are all small."[10]

Small Schools in Philadelphia

Philadelphia has a long history of experimenting with smaller learning configurations at the high school level. Six small selective admission schools have been in existence for decades; however, other efforts have focused on establishing smaller units *within* large neighborhood high schools–schools with no admission criteria other than neighborhood residency. Starting in the late 1960's, the District instituted Career Academies in some schools. In the late 1980's the Philadelphia Schools Collaborative, with a grant from the Pew Charitable Trusts, supported the creation of small learning communities (SLCs) within large high schools, and by 1992, there were 81 SLCs in 22 neighborhood high schools. Over time an array of challenges eroded the SLCs' status. These included disagreements over the degree of autonomy SLCs had or wanted, a change in district leadership, and the end of funding for the Collaborative. Most of the SLCs have since become less defined or have ceased to exist.

Beginning several years before the current wave of small school creation, youth organizing groups Youth United for Change and Philadelphia Student Union began exploring small high schools as a strategy to improve large neighborhood schools. Since then, they have been organizing for the transformation of Kensington, Olney and West Philadelphia high schools into multiple, high-quality smaller high schools.

Under CEO Paul Vallas, the District entered another phase of *going small*. The District created 25 small high schools between 2003 and Vallas' departure in 2007, bringing the total number of small high schools in Philadelphia

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[9] Gates, B. (2009). *2009 Annual Letter From Bill Gates – U.S. Education.* http://www.gatesfoundation.org/annual-letter/Pages/2009-united-states-education.aspx.

[10] Mezzacappa, D. (2009, Spring). Ackerman: Large High Schools can be Personalized. [Electronic Version.] *Philadelphia Public School Notebook*.

to 31.[11] However, these schools were created without the infusion of outside funding that characterized the development of small high schools in other cities during this same time period or SLCs in Philadelphia in the 1980's.

In addition, Philadelphia has had a growing number of charter high schools, many of which are also small schools. The first charter school opened in Philadelphia in 1997 and by 2006-2007, there were 21 charter high schools in the city. Twenty of these 21 charters are small schools. However, this study does not focus on the small charter high schools; data collected for District schools were not available for charter schools.

The most recent wave of reform, starting in 2003, is the first to create a significant number of independent small high schools in Philadelphia, each with its own principal and budget. While many of the new small school had admissions criteria, this is the first time the District has created neighborhood small high schools, i.e., small high schools with no admission criteria.[12]

It is particularly important to understand whether creating small neighborhood high schools is a promising option for the most underprepared students who typically attend the District's large neighborhood high schools, which enroll between 800 and 3000 students. Neighborhood high schools are consistently among the lowest-performing schools in the district with high dropout rates and low student achievement. In 2006-2007, 62% of all District first-time ninth grade students attended large neighborhood high schools and 9% attended small neighborhood high schools. For small high schools to significantly affect the dropout rate district-wide and improve learning outcomes for those students who are furthest behind, small *neighborhood* schools need to be successful.

This study examines how far this newest iteration of Philadelphia's small high schools has been able to go in developing positive school climate, engaging students, and improving student achievement and the extent to which it has expanded the high school options for Philadelphia's students. We hope this report can inform discussions about the role of small high school development in Philadelphia high school reform, particularly for students who enter high school underprepared, as do many students at neighborhood high schools.

For small high schools to significantly affect the drop out rate district-wide and improve learning outcomes for those students who are furthest behind, small neighborhood schools need to be successful.

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[11] In fall 2008, the Arts Academy at Benjamin Rush opened. This selective admission small high school brings the total number of small high schools in the District to 32. Also, one neighborhood admission small high school, William S. Peirce, closed during the course of the research. Neither of these schools is included in our study.

[12] Philadelphia has a complex system of high school admission categories. Descriptions of admission criteria for special admission, citywide admission, and neighborhood high schools are provided in the following chapter. We use this nomenclature of admissions types throughout our report, as this is the terminology used by the School District of Philadelphia in its *Directory of High Schools for 2007 Admissions* (as well as similar directories for previous and subsequent years).

Research Questions

The following research questions guided the study:

- What is Philadelphia's approach to creating and supporting small high schools?
- How does the School District of Philadelphia work with partners to create and maintain equitable and successful small high schools?
- What do teachers, students, and parents report about rigor and relationships in small high schools? Are there differences by admission category?
- What impact are small high schools having on student application and enrollment? What are the demographics of students who enroll at small and large high schools of various admission categories?
- What are early outcomes for first-time ninth grade students attending small high schools? How do outcomes differ across types of small high schools? How do outcomes at small high schools compare to those at large high schools with the same admissions criteria?

This Study

With the support of Carnegie Corporation of New York, Research for Action has followed the development of small high schools in Philadelphia since 2006. This report details the findings of *Going Small*, Research for Action's study of small high schools. The study examined Philadelphia's approach to, and progress in, creating and supporting small high schools during the most recent round of small schools creation between 2003 and 2008. In particular, we looked at the role played by the District; the role of partners in this effort; small schools' impact on student enrollment and high school choice; climate, teaching, and learning in small high schools from the perspectives of students, teachers, principals, and parents; and finally, student performance in small high schools. It is important to note that, because most schools in the sample were in their first years of operation as independent small schools, this research took place during a period of start-up and early implementation.

The study focuses on the 25 small District high schools which have been newly created or converted (i.e., experienced significant changes in their organization) since 2003. The multi-method research draws on quantitative and qualitative data. The chart below indicates data sources and when they were collected.

Overview of the Report

Chapter 2 discusses the context in which small schools developed and presents an analysis of the District's role in creating and supporting small schools and brokering partnerships. Understanding this context is important in

Table 1.1 Study Data Sources*

Data Sources	Fall 2006-Winter 2007	Spring 2007	Fall 2007-Winter 2008
Principal Interviews	12		10
Partner Interviews	13		14
Central Office Interviews	3		
School Staff Interviews *(largely teachers)*	20		
Student & Parent Interviews		54 students 3 parents	
School Observations *(partner activities, school opening)*		10	
School District's Annual Teacher Survey		1521 District teachers completed survey	
Application & Enrollment Data	all District high schools**		
Student Outcomes Data for first-time 9th graders (algebra passage, attendance, tardiness, suspension)	all District high schools		

*See Appendix A for more detailed information about research methods.

**Students submitted high school applications in fall 2005 when they were in 8th grade. They received acceptances in spring 2006 and enrolled in ninth grade in fall 2006.

assessing the progress these schools have made to date. Chapter 3 addresses the question, "Who do small high schools serve?" and describes findings about student applications to and enrollment in small high schools, further setting the context for understanding outcomes in small schools. Chapter 4 presents findings from an analysis of student outcomes and academic achievement. Chapter 5 presents findings from qualitative data and the city-wide teacher survey concerning school climate in small high schools. Chapter 6 examines how educators at small schools interpret the task of developing rigorous teaching and learning environments, their ideas for next steps in this effort, and the role partners have played to support strengthening instruction. The report will close with a discussion of conclusions and recommendations for high school reform in Philadelphia, based on the early implementation of these small high schools.

Chapter Two
District Context & Role in Creating and Sustaining Small High Schools

In this chapter we examine the School District of Philadelphia context for the development of the 25 small schools that are the focus of this study. This is followed by a closer look at the role the District's central office played in supporting the start-up processes of small schools and brokering relationships with partners. We illustrate how the lack of a systemic approach to school start-up and partnership, against a backdrop of inadequate funding and a tiered high school admission structure, undermined the goal of ensuring equity across schools.

We take a broad view of "start-up" in this chapter, using it to refer to a multi-year period of early implementation. All the schools in our study were in their first, second, or third year of operation when the research began. Though conversion schools had been in operation the longest (three years for most), the many implementation challenges they faced and the fact that they had not yet graduated a class that started as ninth graders post-conversion, leads us to consider them as still being engaged in relatively early implementation.

What Kinds of Roles Do Districts Play in Creating and Supporting Small High Schools?

Supovitz argues that the primary function of a district in supporting school reform is to ensure equity across schools. In addition, he notes that districts traditionally play three roles in instructional reform efforts: authority, support, and brokerage. Authority involves oversight, monitoring, and holding schools accountable; support involves helping schools achieve their goals; and brokerage involves helping schools access partners and other resources.[13] In this section, we will return periodically to these three roles as a framework for understanding the District's roles in Philadelphia during this reform.

Different districts have adopted varying strategies for carrying out these support and brokerage functions as they relate to small high schools. Some cities, such as New York, have brought in intermediary organizations to help with selecting and developing school plans, distributing resources, and providing start-up support throughout the initial phases of implementation. The Oakland, CA school district expanded its capacity to establish small schools by creating a small schools "incubator" office responsible for the development, start-up and early support of small schools. In both Oakland and Chicago, district small schools offices eventually grew to house between six and ten staff providing ongoing implementation support.[14]

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[13] Supovitz, J. (2006). *The case for district-based reform: leading, building, and sustaining school improvement*. Cambridge, MA: Harvard Education Press.

[14] Honig, M.I. (2009, Winter). Urban school district central offices and the implementation of new small autonomous schools initiatives. *Voices in Urban Education*, *22*, 13-23.

Districts have also embedded supports for new schools in the structure of the start-up model. For example, in New York City's New Century High School Initiative, small high schools were required to have "lead partner" organizations that would help to develop and support the school's vision and theme.

There is tension inherent in districts playing both the authority and support roles.[15] Districts need to both support school improvement *and* use their authority to create accountability and monitoring structures that promote equity. Ensuring equity across schools requires that districts maintain a systemic-level focus, systematically ensuring that changes in one aspect of the system do not unfairly advantage or disadvantage particular groups anywhere in the system.

Some school reform advocates identify a portfolio model of school system management as a promising district-driven approach to high school reform; this model also highlights the importance of the district role in managing the model to ensure equity. The four key values guiding the portfolio model are:

- excellence (schools prepare all students for careers and college);
- diversity (a range of schools meet different learning needs of diverse students);
- choice (students choose from a number of good high school options, thereby increasing students' engagement); and
- equity (increased equity should be an outcome of the model and equity should characterize the choice process).[16]

The portfolio literature also emphasizes the importance of a district's authority and monitoring roles, including monitoring the choice system so that it does not reify systemic inequalities, developing capacity to manage relationships with partners and providers, and monitoring school performance with the goal of closing schools that are not succeeding.[17]

District Context for Creating and Supporting Small Schools

Small high schools developed in Philadelphia against a backdrop of inadequate funding and chronic under-performance at the city's large neighborhood open-admission high schools. Within this context, the District created small high schools with the goal of increasing the number and quality of options for students. The role of the central office in the small school implementation process has implications for the success and equity of the system as a whole.

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[15] Supovitz, J., 2006.

[16] Maluk, H., & Evans, S. (2008). *Literature review: Portfolio of schools.* Philadelphia: Research for Action.

[17] Maluk, H., & Evans, S., 2008.

Inadequate Funding

Philadelphia's most recent movement toward small high schools took place in a context of financial scarcity and, in part due to the lack of financial resources, without a plan for systemic high school reform.

The District faced budget crises and cuts during the time of the study. As CEO Vallas said, "At the end of the day, it's going to boil down to [the fact that] our schools are not adequately funded. We've tried to do a lot despite not having a whole lot of funding. Eventually you're going to hit a wall."[18] A 2007 statewide costing out study determined that Pennsylvania is under-funding its schools by more than $4 billion; the study found that Philadelphia needs to spend over $4,000 more per pupil to meet the state's educational performance expectations.[19] Philadelphia's lack of resources for a systemic approach to creating small schools presents a stark contrast with other cities involved in small schools work which began with a significant infusion of out-side resources. (See **Table 2.1**.)

Table 2.1 Small Schools In Three Cities

City	# of small schools created 2002-2007	Consistent system of partnership	External foundation support for systemic change
Philadelphia	25		$0
Chicago (CHSRI)*	23		$25 million
New York City**	83	✔	$70 million

* CHSRI is the Chicago High School Redesign Initiative.
** New York also had significant increases in public funding at the same time.

This lack of adequate funding helped facilitate an unsystematic approach to developing small high schools in Philadelphia, without accompanying district-wide strategies for high school reform or for ensuring equity across schools and regions. Paradoxically, a systemic plan might have attracted resources for small schools to Philadelphia. The District's strategy for creating small high schools was built, instead, on individual opportunities for partnership and resources as they occurred.

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[18] Snyder, S. (2007, February 14). Schools chief vows to balance budget. [Electronic Version.] *Philadelphia Inquirer.*

[19] Augenblich, P. & Associates, Inc. (2007). *Costing out the resources needed to meet Pennsylvania's public education goals*. Denver, Colorado: Author.

Expanding High School Options

There was widespread agreement across the District that more high-quality high school options were needed for all students. Different stakeholders, however, had varied beliefs about small schools' role in this effort.

CEO Vallas argued for creating a system of choice for high schools in which small schools played a key role. Vallas said, "It's all about expanding choice."[20] The schools were to be rigorous, preparing students for life after high school and addressing high school dropout. After the creation of the small schools, Vallas noted, "In the past, if you did not win the lottery and get into one of the few long-standing selective admission schools, you were stuck. Well, no more. Clearly, we've dramatically expanded school choice."[21] In 2007, the then- District chief academic officer said that the District's goal was to "create a portfolio of options for high schools," but this language was not widespread among central office leaders.[22]

The District was aware that its 21 large neighborhood high schools were chronically under-performing, but a study released in 2006 created more opportunities and pressure to address dropout. *Unfulfilled Promise: The Dimensions and Characteristics of Philadelphia's Dropout Crisis, 2000-2005*, showed that between 2000 and 2005, for cohorts of first-time ninth graders, the percentage of District students earning a high school diploma in *six* years ranged between 54% and 58%.[23] In neighborhood high schools, rates were even lower than this average. Vallas hoped that by opening small high schools nearby, these large neighborhood high schools would be "depopulated" and eventually closed. Small high schools would take their place, engaging students in more personalized learning environments. Critics of this approach pointed out that until enough spots were available in small high schools, these schools might drain higher-performing students and teachers, leaving *large* neighborhood high schools in an even weaker position.

Some municipal leaders also urged the District to increase school choice and options in order to retain more working and middle class families in the city – and in the public schools.[24] Doing so was seen as key to improving the city's "economic stability and vitality."[25] The District aimed to create new high-per-

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[20] Dean, M. (2005, July 27). City high schools are going smaller. [Electronic Version] *Philadelphia Daily News.*

[21] Snyder, S. (2007, April 22). Smaller schools make grade. [Electronic Version] *Philadelphia Inquirer.*

[22] Maluk, H., & Evans, S., 2008, 1.

[23] Neild, R., & Balfanz, R. (2006). *Unfulfilled promise: The dimensions and characteristics of Philadelphia's dropout crisis, 2000-2005.* Philadelphia: Philadelphia Youth Network, The Johns Hopkins University and the University of Pennsylvania.

[24] See Gold, E., Simon, E., Cucchiara, M., Mitchell, C., & Riffer M. (2007). *A Philadelphia story: Building civic capacity for school reform in a privatizing system.* Philadelphia: Research for Action.

[25] Gold, E., Simon, E., Cucchiara, M., Mitchell, C., & Riffer M., 2007, 10.

forming schools at all levels that would keep more such families in the city school system.

Two local youth organizing groups saw *going small* as a strategy to reform and improve neighborhood high schools. Starting several years before the recent wave of small school creation, Philadelphia Student Union and Youth United for Change organized high school students to press the District to transform their large neighborhood high schools into small schools. That effort continues today.

Thus, various stakeholders' goals for developing new small high schools included: transforming high-poverty, low-performing neighborhood high schools and better meeting the needs of the lowest-performing students; keeping more middle class families in the school system; and creating a more meaningful choice system with more high-quality options. In contrast, some stakeholders equated small high schools with selectivity and feared they would undermine neighborhood high schools.

Understanding Philadelphia's New Small Schools: School Start-Up Type and Admissions Criteria

Brand New and Conversion Schools

The majority of small high schools were created by converting previously existing schools or annexes; only six were brand new.

With the goal of expanding and improving high school options for all Philadelphia students but without a source of dedicated funding, Philadelphia created or converted 25 small high schools between 2003 and 2006. The 25 District small high schools created since 2003 came into being in a variety of ways. This range of approaches to starting small schools had implications for the ways in which these schools developed and with what resources. Methods for creating small high schools included:

- **Conversion.** Most of the new small high schools were created from a previous configuration: by converting middle schools into high schools; adding a grade per year; by breaking up a large high school into smaller schools; or by giving independent status to schools that were previously linked to a large school as annexes or programs. These schools closed in June and opened in September, usually retaining the same faculty and students. Conversion schools opened with all four grades in place.
- **Brand New.** Some small high schools were created from scratch with most opening in 2006-2007. They began with just ninth graders and added a grade each subsequent year.
- **Pre-existing.** A third group of six small special admission high schools predated the most recent wave of reform. Many of this latter group are decades old.

See **Table 2.2** below for the distribution of small schools across start-up categories.

Table 2.2   **Small High Schools by Start-Up Type**

School Type	Number of Small High Schools
New	6
Conversion	19
Pre-existing	6

Small high schools also differ somewhat in enrollment size. The School District of Philadelphia defines small as under 700 students, which is higher than most other cities, where 400 or 500 is more commonly the threshold. However, most district small high schools have enrollments of less than 500 and there are six that enroll 300 or fewer students.

Setting Admission Policies for Schools

Philadelphia's public high schools, excluding charters, alternative, and disciplinary schools, can be grouped into three admission categories (special admission, citywide, and neighborhood). Like other Philadelphia high schools, small high schools have variable admission criteria. As new small high schools were being created and converted, the District was responsible for determining the admission criteria. The chart below outlines the admission criteria for District high schools.

Table 2.3   **Philadelphia High School Admission Criteria**

School Type	Admission Criteria
Neighborhood	**Neighborhood schools** admit all students within their feeder area, and additional applicants from outside their feeder area, as space allows.
Citywide Admission	Most **citywide admission schools** require that students attend an interview, meet three of four criteria related to grades, attendance, tardiness, and behavior, and are then selected by computerized lottery.
Special Admission	**Special admission schools** are the most selective, requiring that students meet their unique admission criteria requiring strong grades, behavior, attendance, and test scores. Some also require an interview, portfolio, or audition.

The chart below illustrates how the small high schools are distributed according to both admission category and school start-up type.

Table 2.4   Small High Schools by Start-Up and Admission Category

School Type	Special Admission	City-wide	Neighborhood
New	2	3	1*
Conversion	4	6	9
Pre-existing	6	-	-

* 75% neighborhood admission, 25% citywide admission

With the addition of 25 new small high schools at all admission levels, the District did succeed in making small schools more available to more students. At the same time, 2/3 of the newly created schools had selective admission criteria, limiting many students' access to them.

The six pre-existing small high schools all were special admission, whereas the new schools were spread across all three admission categories, including ten neighborhood high schools. However, the neighborhood high schools serving students with the most educational needs (i.e., the highest percentages of low-income students and students receiving special education services) were almost all in the conversion category, which, as will be show throughout this report, faced greater challenges for successful implementation.

The Central Office and Small Schools Creation

Ongoing changes in District and central office leadership made it difficult to build momentum and coherence within the small schools effort. The effort also lacked a coordinating office to focus on the needs of small high schools and on ensuring equity across small high schools and between small and large high schools.

Ongoing Structural and Leadership Change

This study took place during a period of significant turbulence within the District central office. A budget crisis was revealed in the spring of 2007 and shortly after this, CEO Vallas announced his resignation. In Spring of 2007, four of the brand-new schools were in their first year of operation; the conver-

sion schools and two other brand new schools were almost all in their third year of operation. Several months later, the Chair of the School Reform Commission[26] also resigned. Even prior to this transition, the District Office of Development was dismantled. Following this transition, the District Office of Secondary Education was eliminated. Many functions related to high schools remained in the office of the Deputy Chief Academic Officer; others, such as curriculum were moved to the Office of Curriculum. The small high schools effort continued to lack both designated central leadership and a central locus of responsibility, accountability, and support. At the same time, a high school Blueprint planning process was launched with the support of outside foundation funding. It involved the Philadelphia Education Fund as well as other community partners and the interim CEO, who was in place during the 2007-2008 school year. The ongoing change and planning activity meant that some aspects of school development and support remained in a holding pattern.

Ongoing Revision of High School Reform

The District's position on small high schools' role and on high school reform generally was characterized by continual revision throughout the time of our research. A 2006 white paper, *The Secondary Education Movement, Phase II: Redesigning Philadelphia's High Schools*, identified "small, supportive, rigorous schools and/or communities"[27] as one of five overarching anchors of Philadelphia high school reform. At this time, the small schools' development was already well underway.

The 2006 white paper was followed by several waves of planning. Building on the white paper and beginning in fall 2006, the District and the Philadelphia Education Fund coordinated the previously mentioned planning process to produce a five-year Blueprint for secondary education. It aimed to engage a broad array of stakeholders. The Blueprint, completed in fall 2008, identified both converting three neighborhood high schools into small high schools and using small learning communities and academies as strategies to improve school climate.

A new superintendent, Dr. Arlene Ackerman, began her tenure in June, 2008 and chose to begin a new strategic planning process in late fall 2008. *Imagine 2014*, a five year strategic plan, was adopted by the School Reform Commission in April 2009. The plan contains many initiatives, including some to increase personalization at the high school level, e.g., scheduling stu-

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[26] Shortly after the Commonwealth of Pennsylvania "took over" the District, the mayoral-appointed Board of Education was dissolved and replaced by the School Reform Commission, which remains the District's governing body. The SRC consists of three gubernatorial appointees and two mayoral appointees.

[27] Next Steps Associates. (2006, December). *The secondary education movement, phase II: Redesigning Philadelphia's high schools*, http://philaedfund.org/sec_ed/files/white_paper.pdf, 17.

dents as a group so that they work with a team of teachers. It also forecasts opening a small high school to prepare future Philadelphia teachers. It does not otherwise specifically address small high schools.

No District Locus for Small Schools

Several characteristics at the time of the creation of small high schools in Philadelphia shaped how Philadelphia's central office played its authority, support, and broker roles. Before the creation of small schools began, the District had developed a centralized approach to managing high schools under CEO Paul Vallas. The District had instituted a Core Curriculum for high schools, Benchmark exams aligned with the state tests, and professional development organized and provided by the Office of Curriculum and Instruction. In addition, hiring at most high schools was centralized and governed by the union contract. Thus, while research indicates that autonomy contributes to successful small schools,[28] small high schools in Philadelphia developed within the centralized structure and culture of the overall District.

While the developing small schools were shaped by the centralized initiatives named above, there was no single office within the District that was responsible and accountable for the development of small high schools. The Office of Secondary Education was theoretically responsible, but the CEO's office and the Office of Development also played key roles in developing and launching some of the new high schools. No one person or group was charged with thinking systemically about addressing supports for, and barriers to, the development of rigorous and engaging small high schools or with ensuring equity across schools and regions.

Inequities in District Support at Start-Up

The start-up supports and structural flexibility given to small schools were not consistent across schools. Brand new schools, that is, schools that were being created from scratch, received more support than schools that were converted from another configuration.

While brand new small schools received adequate support to be successfully launched, much of this extra support was gone after the first year of operation. Conversion schools received much less start-up support and most experienced a challenging launch.

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[28] Warner-King, K., & Price, M. (2004). *Legal issues and small high schools: Strategies to support innovation in Washington state*. Seattle: The Center on Reinventing Public Education; Vander Ark, T. (2002). The case for small high schools. *Educational Leadership. 59*(5), 55-60; Wasley, P., & Lear, R. (2001). Small schools, real gains. *Educational Leadership. 58*(6), 22-27.

Table 2.5 Startup Support in Brand New and Conversion Schools

Elements	Brand New Schools	Conversion Schools
Advance Planning	Began planning process 6-12 **months** before school opening	No planning time in advance
Principal	Principal hired 6-12 months before school opening	Principal often continued from previous year without additional time to manage change process
School Staff	Staff selected and hired before school opening	Staff generally stayed the same. Many new hires were carried out at District level, based on seniority
Number of Grades	Began with just 9th grade, adding 1 grade each year	Began with all 4 grades
Partner Support	Began with long-term partners	Began with short-term partners
Central Office Support	Perceived strong central office support at start-up	Challenges getting school's needs met
Autonomy	Received some autonomies (e.g. curriculum, assessment, schedule)	Lacked autonomy

The process involved creating a vision for the school and then carrying out curriculum planning, facilities renovation and hiring aligned with that vision.

Supports for Brand New Schools

The six brand new small schools created between 2003 and 2006[29] experienced a number of structural supports and advantages over conversion schools during the start-up period. These advantages allowed the typical brand new school to get off to a healthy start. In their first year, principals of such schools in our interview sample described few significant challenges and seemed pleased with the cooperation they received from central office.

The brand new schools benefited from planning processes that began 6-12 months before schools opened. Most of these schools were able to hire their principals in advance. Having the principal on board early was a critical piece of a successful start-up process. It allowed the new principals to participate in early planning efforts and to be a part of facilities renovations and hiring of their own staff.

An additional start-up advantage was the model that allowed schools to add a grade each year, starting with just ninth grade in year one. This enabled the staff to work with fewer students while the school was still developing. They also were able to envision, and then work to create, the kind of climate they wanted.

According to interviews with central office staff and principals, the planning processes usually involved the principal, a partner, sometimes central office representatives and occasionally some school staff. The process involved creating a vision for the school and then carrying out curriculum planning, facilities renovation and hiring aligned with that vision. In addition, the planning process allowed for the development of the school's policies and procedures. One principal at a brand new school commented on the importance of this pre-planning period:

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[29] With a seventh new school added in 2008-2009.

I can't imagine having less time...I think a year of planning time is necessary. If you don't just want to do things because that's the way they've always been done, you need the time.

Overall, the brand new schools were given greater flexibility with District policies than conversion schools, partly as a result of the advocacy of their high-profile partners. In accordance with the union contract, all the brand new schools were allowed to select and hire their staff. In addition, a few of these schools were allowed some flexibility with the Core Curriculum and one school was given permission not to use the regular Benchmark exams. Others still used the Core Curriculum but supplemented it in ways that related to their theme.

As stated above, brand new schools experienced more support from the central office. This was due to their high profile and because they had multiple advocates working on their behalf. The Office of Development as well as the office of the CEO and the Office of Secondary Education were all responsible for providing support.

Supports for Conversion Schools

Nineteen schools–the majority of this round of small schools creation–were conversion schools. Principals and teachers at these schools generally described a rushed, confusing, and sometimes frustrating experience launching their schools.

First, conversion schools were asked to use a more difficult start-up model. The schools were to open with all four grades at once. In most cases, they closed with one identity in June and opened in September as an independent small school but with most of the same teachers and staff and few other concrete differences. Unlike the new schools, they were immediately faced with a full complement of students and staff. Research on small high schools in other cities has found that conversion schools often make slower progress than brand new schools. For example, an evaluation of Gates Foundation high school grants found that "Converting large high schools carries challenges beyond those associated with new small schools because of the need to keep the existing organizational structures, policies and procedures operating while implementing new ones."[30] In contrast to conversion schools, new start-up schools were able to put into place strategies to create positive school climate and professional community during their first year of operation.[31] Given the start-up model these schools were implementing, they needed more resources to be successful. Much of the start-up support allotted to conversion schools was funneled into for-profit companies–called "transition mangers"– charged with facilitating the conversion process.

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[30] American Institutes for Research & SRI, International. (2004, April). *The national school district and network grants program: Year 2 evaluation report*. Washington, D.C.: American Institutes for Research, 63.

[31] American Institutes for Research & SRI, International., 2004, April, 97.

Conversion schools did not have planning time before their launch. None of the conversion schools hired their principals before the summer of the year they were to open, giving the principal no more than a month or two to develop plans for the new school. In some cases, the principal stayed the same but had no funded time to lead a process to create a new school identity, culture or curriculum. Consequently, none of the conversion schools had a planning process prior to the opening of the school during which they could refine a vision and conceptualize how to create a new identity separate from the configuration from which they were evolving. Interviews with principals and teachers at these schools indicated that they had not had focused time to develop a larger educational vision for the school.

Some central office staff recognized the disadvantages conversion schools faced and vowed to correct the process for future conversion schools. One District staff commented:

> Getting a budget early, hiring a principal early…these [conversion schools] can't do that…We've got to figure out how to do that for everybody. How do you afford it? Nobody's opposed to it.

Under the union contract, these schools were not allowed to hire their own teachers, a practice called site selection. Unless the building teachers voted for site selection, the contract dictated that half of vacant teacher positions be filled through the centralized hiring process, in which seniority plays a key role in determining placements. Many of the teachers working in the schools had worked there previously. In addition, none of the schools had autonomy from the Core Curriculum or in their scheduling and rostering so they were unable to easily implement new ideas aligned with their theme that required departing from District curriculum or standard schedules.

The majority of Philadelphia's small high schools then, did not get the resources they needed for successful start-up. Only a handful of brand new "flagship" schools received more intensive support and experienced a more successful launch, in part because the District enacted its brokerage and support roles differently in relationship to these schools.

Shared Challenges as Implementation Continued

In the later phases of this study, as schools moved beyond the first year of implementation, we began to hear more commonality in the challenges named at brand new and conversion schools. For example, both were concerned about gaining and sustaining flexibility around issues they deemed crucial to their school mission and vision; this included areas such as hiring, staff time, and curriculum and assessment.

None of the conversion schools had a planning process prior to the opening of the school during which they could refine a vision and conceptualize how to create a new identity separate from the configuration from which they were evolving.

The District's Brokering Role with Partners

Partners' role in small school creation and implementation was not as major or consistent as in some other cities.

While the District did not adopt a system-wide approach to partnership, both the District and individual schools have a range of contractual and non-contractual relationships with external groups. As Gold, et al. pointed out in 2007, "a wider variety of individuals, nonprofit groups, and civic institutions are involved with the School District than ever before, through expanded contractual and partnership relationships."[32] Throughout this report, "partner" describes many different kinds of relationships. All school stakeholders did not necessarily define *all* of the groups we discuss as partners. For example, a principal did not consider a community-based organizing group a partner and, while some District officials considered a managing organization a partner, some school staff did not.

In **Table 2.6** we classify the kinds of partners we saw in action in Philadelphia during the start-up and early implementation period for the small high schools. The first two categories, lead and collaborating, are adapted from those used in New York. The last four categories grow out of our research in the Philadelphia context.

When this study began, we expected that partners would play a major role in Philadelphia, as they did in cities like New York, where New Century High School's "hallmark strategy of school-level partnership" meant that each school had a lead partner and most had one or more collaborating partners.[33] Simmons comments on the lack of an intentional district-wide approach to partners in Philadelphia during this same time period, noting that "the multiple provider[34] and portfolio approach appears to be less a product of explicit district redesign than an additional lever for school support and intervention."[35]

Initially, the District extended its support and management capacity by brokering roles with some partners, including EMOs, for-profit transition managers, and nonprofits such as museums. In 2005, the District initiated a Small Schools Transition Project to provide support for the conversion small high schools; they identified partners as a major element in this effort. The

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[32] Gold, E. et al., 2007.

[33] Hirota, J. (2005). *Reframing education: The partnership strategy and public schools. A report to Carnegie Corporation of New York*. New York: Youth Development Fund Institute and the City of New York with the assistance of New Visions for Public Schools.

[34] Under the diverse provider model, adopted in 2001, the district turned over management of some schools to outside groups, including for-profit companies, non-profit groups, and universities.

[35] Simmons, W. (2007). From smart districts to smart education systems: A broader agenda for educational development. In R. Rothman (Ed.), *City Schools*. Cambridge: Harvard Education Press, 191-214.

Table 2.6   Typology of Partners

Partner Type	Definition	Examples
Lead	• Help school develop curriculum and theme • May be involved in hiring • May provide resources • No significant fiscal role*	• Museum involved in school planning, theme, initial hiring, and ongoing work with teachers & students • Non-profit offered services linked to school theme, curricular support, advocacy with District • ROTC provided financial and staff resources
Collaborating	• Play more focused role than lead • Collaborate around specific programs	• Universities offered dual enrollment courses or sending tutors • Social service agency provided a truancy program or after-school club
Incubating	• Takes on many lead partner roles but short-term to get a school off-the-ground	• Principal & retired staff from existing special admission school assisted with planning a new school modeled on the existing school. Retired staff continued to provide support in the school's first year.
Transitioning	• Hired by the District to help existing schools during transition to small high school status. • Goal was to help build school capacity.	• Four for-profit organizations provided transition managers to conversion schools.
Managing	• Providers with whom the District contracts to manage schools • Receive per pupil funding, hire principal, can bring in own curricula and supports • Most work with elementary and middle schools	• For-profit & non-profit organizations managed 2 small high schools.
Community	• Neighborhood-based groups with long-term investment in school & community.	• Student organizing groups advocated for small high schools and participated in planning.

* This contrasts with New York City where partners administered grants.

2006 white paper which named the goal of continuing to convert large high schools into small ones stated that one component of this effort was to "Establish strong partnerships with parents, colleges and universities, unions, employers, and community organizations."[36] As time moved on, the District coordinated partnerships less. By fall 2007, the Office of Development no longer played a role coordinating partners or assisting new schools. The transition managers' role was envisioned as three years, but, their contracts were suspended after the second year due to District budget problems.

In contrast, as noted above, all of the brand new schools had significant partners during their planning year. Most of these partners were cultivated by the central office to be a key long-term resource to the school. These partners were integral to the planning process in defining the schools' vision and providing resources and clout to support that vision.

The Office of the CEO was responsible for recruiting the lead partners and enticing them to work with the District to create a new school. The Office of Development was involved to foster the relationship with these partners who brought either in-kind or actual resources to the District. The lead staffer in the Office of Development also was a seasoned District administrator, known as someone who could make things happen in the central office. She explained that the CEO had asked her to oversee the development of these schools because, as she said "they all have partners and they are all going to be flagships…They all need tender loving care." The central office put a high priority on these new schools and with this high level support. In interviews, principals in brand new small high schools indicated that the District was responsive to their needs.

As noted above, most of the conversion schools were assigned by the central office to partners called "Transition Managers,"[37] four for-profit educational companies. Principals of conversion schools felt that the transition managers were imposed upon them and they entered the partnerships with varying degrees of trust. In addition, neither partners nor principals had much clarity regarding the transition managers' roles. The District hired a seasoned educational consultant who coordinated the District's Small Schools Transition Project (SSTP); she established weekly meetings involving principals, transition managers, and staff from various District offices involved in small school start-up (facilities, purchasing, transportation, IT, student placement, etc.). The consultant documented requests from schools and the next steps of central office staff and followed-up to ensure some accountability. Over time, some principals found their transition managers extremely helpful while a smaller group never felt that they added value to the school.

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[36] Next Steps Associates, Inc., 2006.

[37] A few of the conversion schools were managed by external partners and one was adopted by a nonprofit partner interested in the school theme.

Transition managers seemed most helpful to the school when the primary contact person assigned to the school had experience working in an urban school. Transition managers played a range of roles including providing professional development, mentoring principals, conducting classroom observations, providing teacher support, and assisting with trouble-shooting a number of ongoing challenges, including rostering and scheduling and even providing coverage when an administrator or teacher was out of the building. Interestingly, one of the key functions transition managers provided to their schools was advocating with the District for the school's needs. For example, one principal described the period of work with the transition manager as the only time he was ever "heard" by central office. Another principal said, "This person went downtown, sat in meetings, they advocated for things that we need here at [the school]. With the teacher selection process, she went with me to help downtown, help pick a teacher."

The transition manager relationships also were complicated by the politics around the approval of their contract which delayed the start of their work and led to an early end to the partnerships. As one principal commented: "We were just getting going when [the District] stopped [our partnership]. We were on a roll. I think that the [transition manager] understood where our focus was."

Some of these partnership challenges may have been influenced by ambivalent feelings among some central office staff regarding the role of for profit companies in supporting schools. One central office staff person differentiated between partners and vendors as follows. "We can't have lots of vendors. We have to have partners. Partners are people who come in with a mutual goal, and are not looking for a contract."

Conclusion

In a context of scarce resources, the District moved forward to build on opportunities for partnership and small school creation as they arose. Our research indicates that whether a school was brand new or conversion was key to shaping its start-up and early implementation. Brand new schools had a number of structural advantages that supported successful start-up. These advantages included the add-a-grade model, hiring a principal in advance, planning time, flexibility in hiring (site selection) and in curricula, greater support from the District, and strong partners. During the time of this research, the District lacked a systemic plan for high school reform, and thus had no overall strategy for partner involvement or for ensuring equity across schools. The District did succeed in creating 25 new small high schools and in making small high schools more available at all admission levels. Small schools were created within the district's tiered admission system, which also made it more difficult to equitably increase access to high school options. This chapter focused on the District context for creating small schools. The next chapter will examine who applies to, and enrolls, in small high schools. The subsequent chapters will look at what happened at the school level.

Chapter Three
Applications and Enrollment: Who is Served by Small High Schools?

Expanding "choice" for Philadelphia high school students was one of the explicitly stated goals for creating small high schools under the Vallas administration. This chapter looks at how the high school selection system operates through analysis of application and enrollment data for the 2006-2007 school year, the year six brand new small high schools opened. The analysis examines how the availability of more small schools influenced the application process and examines factors students considered in selecting high schools. The analysis also sheds light on who was being served by small high schools in the 2006-2007 school year.

Increased Interest in High School Options

Small high schools were a highly sought after option in 2006-2007. More than half of students applying to high school, applied to a small high school.[38]

Students who are interested in attending a non-charter high school *other than their assigned neighborhood school* must submit a high school application form during the fall of their eighth grade year. The form allows students to list up to five high schools of interest. The number of high school applications submitted by eighth grade students attending District middle schools has

Figure 3.1   Percentage of Enrolled 8th Graders Applying to at Least One High School, by Year
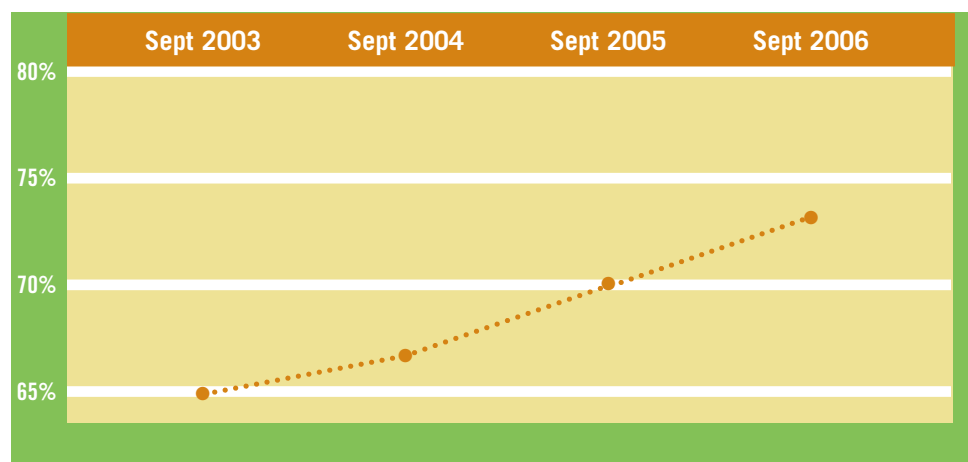
Source: School District of Philadelphia
N = 14,944 (2003), 15,389 (2004), 15,671 (2005), 14,755 (2006)

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[38] See RFA's forthcoming report *The Transition to High School: School Selection and Freshman Year Interventions in Philadelphia* (working title) for analysis of data about high school selection in 2007-2008.

steadily increased since 2003, even before new small schools were an option for students. High school applications have continued to increase since small schools began to be converted in the 2003-2004 school year. In 2003, approximately 65% of students were submitting applications to attend high schools other than their neighborhood high school; by 2006 that percentage had grown to nearly three quarters (73%). This includes applications to special admission and citywide schools (71%) as well as to other neighborhood schools (29%). This analysis focuses on 2005-2006 applications in this report for the 2006-2007 ninth grade cohort of students. Almost one quarter of ninth grade slots (24%) were in small high schools in 2006-2007.

Charter high schools have application and admission processes that are independent from the District's centralized process. Enrollment data for charter schools was not available for this report but the increase in the number of charter high schools is another indication that parents and students are interested in options beyond their assigned neighborhood high school.

By 2006-2007, small high schools were an option highly sought by students. Of those District 8th graders who participated in the selection process, over half (56%) applied to one or more small high schools. One fifth (22%) of District applicants applied to at least one of the six *brand new* small schools. These data illustrate that a large proportion of students were interested in attending small schools and that they were highly aware of the brand new schools. What is not clear is whether these students were attracted to these schools because of their size.

Why are Students and Families Interested in Small High Schools?

Students and families considered a variety of factors when deciding which schools to apply to and, if admitted, which to attend. School size is one factor, but not necessarily the most important one.

We explored reasons for enrolling in a small school in our research. We discussed high school selection with students in focus groups in four of the five schools where we conducted in-depth research. We also raised the selection issue in interviews with parents, principals and teachers.[39] The factors described by parents and students are similar to factors found in other research on choosing high schools.[40]

Perhaps unsurprisingly, most students in our sample described academic quality as the number one criterion for themselves and their parents. This came up most often in our focus groups with students at special admission and citywide high schools. Parents and students at selective schools men-

A large proportion of students are interested in attending small schools... [but it] is not clear whether these students are attracted to these schools because of their size.

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[39] See Appendix A for a full description of the sample in the second round of research.

[40] Teske et al., 2007

tioned size as a factor as well and associated it with greater personal attention for students and a safer environment. Principals and teachers at small schools also reported safety as a primary reason families chose their school. However, while students appreciated the safety of small schools, some students also perceived small size to be a downside of their high school in that it did not allow the same range of activities and social groups.

A school's theme has been found to be a key factor in other cities[41] but in Philadelphia, themes were not well developed at most schools and therefore, not a prominent selection factor for most students. However, one small school we studied had a well developed theme which did attract students to the school, suggesting that theme can be a factor.

Location was another important factor for students. Many students chose their school because they wanted to attend school close to home. Neighborhood schools had the location advantage and this was mentioned frequently in focus groups with neighborhood high school students. But the new small schools also created options in or near some students' neighborhoods. Conversely, a few students felt safer attending school outside their home neighborhood and sought schools that were not close to home.

Several other factors that students considered important included the presence of a positive or at least familiar peer group at the school. Students wanted to attend schools where they would already have friends, or where they thought they would find peers who were a positive influence. As one student explained she wanted "a good school without a lot of bad kids." Some students also desired a school that had engaging activities. A student explained "(I want) a place that has lots of activities, so you aren't just sitting in class all the time." These factors were mentioned more frequently in neighborhood schools.

However, most students attending the neighborhood high school in our focus group sample did not choose to attend their neighborhood school. Most ended up in the school by default. However, a small number of the neighborhood high school students in our focus groups had applied to and been admitted to the large career technical high schools which have citywide admission criteria. A few had also applied and been admitted to special admission schools. However, some chose not to attend because of the distance from their neighborhood. Others enrolled in schools but were asked to leave the school. Other students in the focus group had to rely on their default option when they did not get accepted to the schools to which they applied, did not apply to any high schools, or were not able to apply to high schools because of a move during 8th grade or late promotion to 8th grade.

Most students in our sample described academic quality as the number one criterion for themselves and their parents. ...Principals and teachers at small schools also reported safety as a primary reason families chose their school.

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[41] Teske et al., 2007.

Students at all types of schools indicated that they wanted to opt out of their neighborhood high school. Even students attending neighborhood high schools said they had wanted to attend another school. Nine out of fourteen students in our focus groups at a neighborhood high school said that they did not choose their school and were there by default. While students described negative perceptions of neighborhood schools in general, students and teachers at the small neighborhood high school where we did more intensive research felt that their school had improved significantly after becoming small.

Limited Selection and Limited Competition

Three-quarters of students applied to a high school other than their neighborhood high school. Fewer than half were admitted to any high school to which they applied.

Understanding what attracts students to certain high schools over others tells only half the story. Once students submit applications, they must be selected in order to attend a school of their choice. One goal of creating additional small schools and increasing students' high school options is to create competition among schools for students. However, our data shows that competition exists in both directions: selective schools—both large and small—compete for the top 20% of students while the remaining 80% of students vie for a limited number of remaining slots.

The number of students interested in options other than their neighborhood high school greatly exceeds the number of slots available at both selective and other neighborhood high schools. While 73% of District 8th graders submitted a high school application in fall 2006 (to begin high school in 2007), fewer than half of them (49%) were admitted to any high school to which they applied. In other words, fifty-one percent (51%) of applicants did not have a choice within the District other than to attend their neighborhood high school or apply to a private or charter school.

Small schools were among the high school options that were in demand. With the exception of a few small neighborhood high schools,[42] all small schools—across admission categories—receive more applications than they have slots. In 2006-2007, these schools had extremely low acceptance rates, some as low as 15%.

Not surprisingly, in subsequent rounds of high school applications (for the 2007-2008 school year), new small high schools experienced the greatest increase in student applications in comparison to other small and large schools. For example, applications to one small high school with approximately 125 ninth grade seats rose from 617 in 2006 to 1,038 in 2007. The only new

All small schools— across admission categories—receive more applications than they have slots.

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[42] Students may apply to a neighborhood high school that is not their own neighborhood high school. Neighborhood high schools must first admit all students from the catchment area and if any seats remain, can admit students from outside the catchment area.

small neighborhood high school, also with approximately 125 ninth grade seats, received 1,556 applications in 2006 and 3,637 in 2007, making it the most in-demand high school in the District. The principal of one new small high school shared that they were averaging 15 prospective students shadowing (ie., following another student) each day in the months leading up to the deadline for high school application.

At the same time, the creation of brand new small schools led to a decrease in the number of applications received by the pre-existing and conversion selective small schools—schools that were in existence before the brand new small schools opened. These schools experienced slight declines in applications in 2006 and 2007. Therefore, their acceptance rates increased by 2-3%. In the end, 28% of all high school applicants were accepted to a small high school that was not their default neighborhood school. About 1000 additional 9th grade students were admitted to small neighborhood high schools, usually because they lived in the geographic catchment area of the school. Therefore, these students generally did not "choose" to attend a small high school.

While many of the small high schools received an abundance of high school applications from 8th graders, these schools—as well as some of the large schools—were accepting many of the same students. Twenty percent (20%) of applicants were admitted to *more than one* of their desired high schools (large and small). Schools competed for these students and as a result of this competition it was not always easy for schools with special admission criteria to enroll their ideal cohort of ninth graders the following fall. Some of these schools found that too few applicants met the schools' admission criteria and those that did chose to attend one of the city's more established, well-known, "schools of choice" rather than a less-established small school. The principal of one small high school explained,

> *We have over 1100 applications. And we know some of the students won't fit the criteria. And some of the students who we would like to take will have the opportunity to choose other schools…We end up every year, so far, not having the quota [enough students who meet admission criteria], because we have more small schools in Philadelphia.*

This quote suggests a mismatch in the current high school application and enrollment process: some special admission schools cannot enroll enough students who meet their stated criteria, while students not meeting the special admission school criteria but who desire to select their school cannot find a place. As data in the next section shows, this may lead some small special admission schools to be more flexible with their admission criteria, admitting students who have more remedial needs.[43]

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[43] An upcoming RFA report (*The Transition to High School: School Selection and Freshman Year Interventions in Philadelphia)* (working title) confirms this finding through an analysis of the numbers of students who meet the admissions criteria for the schools in which they are enrolled.

But the experience of the school described above requires more investigation to determine how widespread this experience is among special admission schools and to understand the causes. For example, it is possible that problems in the timing of the application process itself are preventing qualified students from accessing available slots. Schools whose top choices go elsewhere are not notified until late in the school year, or later, and must scramble to contact students on their waiting list.

A number of other problems are also possible. First, some special admission schools are more in demand than others and students and parents are generally not well aware of the numbers of applications received by schools. Those receiving fewer applications may need to improve recruitment and marketing strategies so that their schools are selected by a greater number of students and all schools may need to be more transparent about the number of applications received and their acceptance rates. But, there could also be a mismatch between admission requirements and the qualifications of large numbers of District 8th grade students. Addressing this mismatch as well as the shortage of high-quality non-selective school options is an important equity issue for the District.

Enrollment in Small High Schools

In light of these application and admission patterns, who is enrolling in small high schools? At the time of this study, nearly one-third of all School District of Philadelphia high school students were enrolled in one of the District's 25 new or conversion small schools or one of its 6 pre-existing small schools. The three high school admission categories, described in the introduction are helpful in understanding how students arrive at a particular small high school. Two thirds of small schools (66%) in Philadelphia are either special admission or citywide admission, while one third (33%) are neighborhood admission high schools.[44]

Figure 3.2 displays how many first-time ninth grade students were enrolled in small and large schools by admission categories at the time of our report. It is notable that while there is greater access to small schools than ever before, 60% of small schools seats remain in citywide and special admission schools. The majority of students in the school district are enrolled in large neighborhood high schools.

Addressing the mismatch between admissions requirements and the qualifications of large numbers of District 8th grade students as well as the shortage of high quality non-selective school options is an important equity issue for the District.

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[44] See Chapter 2 for a description of admission criteria at each type of school.

Figure 3.2 **Enrollment of First-Time Ninth Graders in 2006-2007**

# of Students	Neighborhood	City-wide	Special Admission

9419 (Neighborhood, Large)
1410 (Neighborhood, Small)
1070 (City-wide, Large)
866 (City-wide, Small)
1281 (Special Admission, Small)
1066 (Special Admission, Large)

Small | Large — Small | Large — Small | Large

Small neighborhood and special admission schools appear to serve students with more academic needs than the large schools *within their admission category.*

Academic Preparedness

Small neighborhood and special admission schools enroll the same or more students needing a remedial math course than large schools. Small citywide schools enroll fewer students needing remedial math than large citywide schools.

Our analysis used math courses taken in ninth grade to determine students' academic preparedness for ninth grade. District policy requires first-time ninth grade students to take algebra but students needing remedial math work (as identified through 8th grade test scores) are also given intensive and strategic math. Therefore, the percentage of first-time ninth graders enrolled in intensive/strategic math is an indication of the number of under-prepared students enrolled by the school.

Figure 3.3 below shows the variation within and across admission categories in the percentage of first time ninth grade students enrolled in intensive/strategic math. Differences exist between large and small schools in each category but the differences are in opposite directions. Small neighborhood and small special admission schools enroll more students in need of remedial math than large schools with the same admission criteria, although the difference is slight for neighborhood schools. These schools then, particularly small special admission schools, appear to serve students with more aca-

In spite of the competition for seats in Philadelphia's small high schools, they serve the same or slightly higher percentages of special education students than do large schools *within the same admission category.*

% of Students	Neighborhood	City-wide	Special Admission

Chart values:
- Neighborhood: Small 51, Large 50
- City-wide: Small 41, Large 79
- Special Admission: Small 21, Large 7

(x-axis labels for each group: Small, Large)

Source: School District of Philadelphia
N= 15,112

demic needs than the large schools *within their admission category*. For special admission schools, this may be the result of the challenges some special admission schools have enrolling students who meet their criteria.

On the other hand, small citywide schools enroll only half as many students in need of remedial math as large citywide schools, which suggests they are serving a population of students more prepared for high school math than large citywide admission schools. Large citywide admission schools enroll a larger percentage of students in remedial math than any other category of schools including large neighborhood high schools.

Special Education

Philadelphia's small high schools serve the same or slightly higher percentages of special education students[45] than do large schools within the same admission category.

Our data indicate that in spite of the competition for seats in Philadelphia's small high schools, they serve the same or slightly higher percentages of special education students than do large schools within the same admission category. This is important because some educators are concerned that small

[45] Note: this does *not* include students identified as gifted.

Figure 3.4 Special Education Enrollment 2006-2007 as a Percent of First-Time Ninth Grade Enrollment

% of Students	Neighborhood		City-wide		Special Admission		District-Wide
20	20	19					17
15			14	14			
10							
5					7	2	
0	Small	Large	Small	Large	Small	Large	Combined
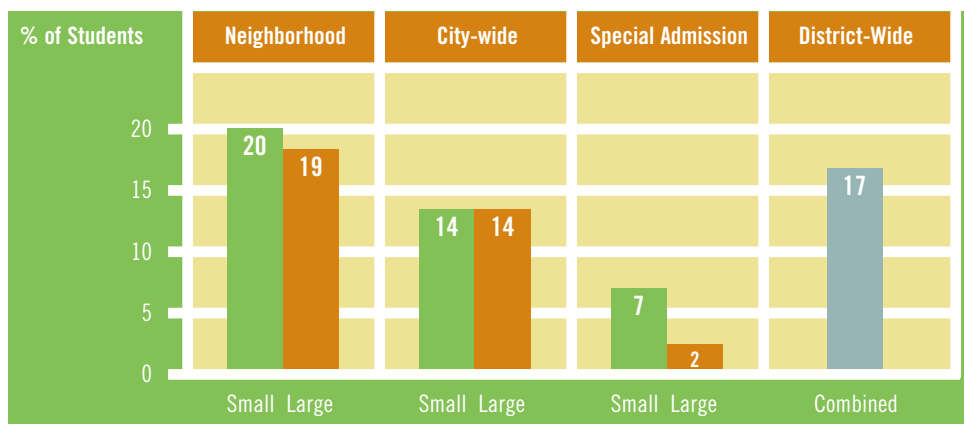
Source: School District of Philadelphia, N= 15,112
Note: Does not include students classified as mentally gifted

high schools will "cream," and select the most high-achieving students. The difference is greatest between large and small special admission schools. However, it is important to note that both large and small neighborhood schools serve greater numbers and higher proportions of special education students than other admission categories.

English Language Learners

Large high schools of all admission types enroll higher percentages of ELL students than their small counterparts.

Figure 3.5 displays the enrollment patterns for students classified as English Language Learners (ELL). Large high schools of all admission types enroll higher percentages of ELL students than their small counterparts. One possible reason for the under-enrollment of ELL students is that the School District of Philadelphia allocates ELL staffing and support services according to enrollment. As the enrollment of small high schools is, by definition, "small," the number of staff is also limited. In addition, ELL students and their families tend to be concentrated geographically in certain areas of the city, making it more challenging for schools drawing from the entire city to draw large enough concentrations of ELL students to hire a full-time ELL teacher. One principal described the dilemma:

We do not have a full ESL teacher and we don't even have an ESL aide right now...there needs to be, in my opinion, a floor [i.e., minimum number of ELL staff] below which you can't [go below]...Hav[ing] an aide one day a week because you only have 6 ESL kids is a great way to not grow your ESL program...How can you have less than one ESL teacher?

Figure 3.5 English Language Learner (ELL) Enrollment in 2006-2007 as a Percent of First-Time Ninth Grade Enrollment
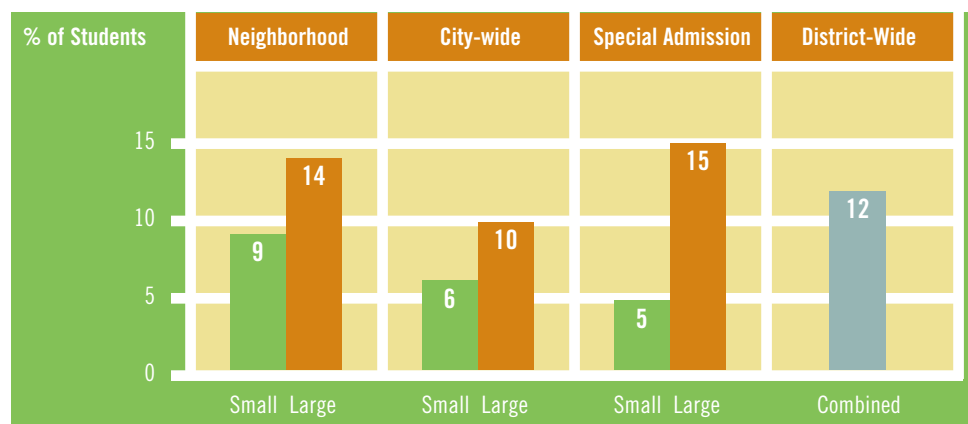
% of Students	Neighborhood	City-wide	Special Admission	District-Wide
Small	9	6	5	
Large	14	10	15	
Combined				12

Lacking the supports for ELL students then makes it challenging for small schools to attract these students. The District's staffing formula creates a dilemma for small high schools—without increasing their ELL population, they can't provide more supports and it is difficult to increase the ELL student population without being able to promise adequate supports.

Race & Ethnicity

African American students are more proportionally represented in small special and citywide admission schools than in large schools of the same category. White and Asian students are disproportionately represented in both small and large special admission schools.

Table 3.1 displays high school enrollment of first-time ninth graders in the 2006-2007 school year by race/ethnicity for the District as a whole and by high school size and admission category.

Several important patterns emerge about racial distribution in small high schools. First, African American students' representation in small special admission school is much greater than their representation in large special admission schools, although in both cases they are represented at lower rates than in the District as a whole. While only 46% of ninth grade students at large special admission schools are African American (approximately 490 students) 61% of first-time ninth graders at small special admission schools are African American (777 students). African American students are disproportionately represented in small citywide admission schools (76% of ninth graders or 659 students) relative to their percentage of the total population in

Table 3.1 Percent First-time Ninth Graders Enrolled in Philadelphia High Schools by Race/Ethnicity in 2006-2007

	District-wide	Special Admit		City-wide		Neighborhood	
		Large	Small	Large	Small	Large	Small
White	12	21	25	10	10	11	11
African American	66	46	61	68	76	67	69
Latino	15	9	7	16	11	17	20
Asian	6	22	6	6	2	5	0.4
Other Groups	1	1	1	.28	1	1	1

Source: School District of Philadelphia   Total Valid Cases (N) = 15,112

An analysis of application and enrollment data shows that there is significant interest in high school options beyond one's neighborhood high school but the demand for options other than the neighborhood high schools exceeds available slots.

the District (66%).

Meanwhile, White and Asian students are disproportionately represented in both small and large special admission schools, relative to their population in the District. One quarter of the ninth graders (270 students) in these schools are White, while White students make up 12% of the District's student population. Twenty-two percent of ninth graders in these schools are Asian (234 students) while Asians comprise 6% of the Districts student population.

Enrollment in neighborhood high schools is determined largely by the demographics of the neighborhood. While large neighborhood high schools exist in every section of the city, small neighborhood high schools are not as evenly distributed. Three small neighborhood high schools, in fact, are located in a neighborhood with high concentrations of Latino residents. Therefore, it is not surprising that Latino students' enrollment at small neighborhood high schools (20% of ninth graders in small neighborhood high schools, or 968 students) is high compared to their overall representation in the District (15%).

Summary

In summary, an analysis of application and enrollment data shows that there is significant interest in high school options beyond one's neighborhood high school but the demand for options other than the neighborhood high schools exceeds available slots. In 2006-2007, 73% of students applied to schools other than their neighborhood high school and 51% were not accepted at any of their choices. Students' and parents' interest in small high schools has been particularly high. While the creation of more small high schools has slightly increased the acceptance rates at some small high schools, many small

schools still get four to five times more applications than they have seats.

At the same time, interview data reveals that some small special admission schools have trouble enrolling a cohort of students that meets their admission criteria suggesting that many schools are competing for the same pool of highly qualified students, while excluding the majority of students from consideration.

Small high schools appear to be enrolling student groups across a range of achievement levels indicating that they are flexible with the stated criteria. Neighborhood and special admission small high schools serve a greater percentage of students that need remedial supports in math in ninth grade compared to large schools within their admission category. All small schools serve the same or greater numbers of special education students than large high schools within their admission category. While the reason for this is unclear, it does seem to indicate that small high schools are not "creaming" within their admission categories.

African American students are also more adequately represented in small than in large special admission schools and are disproportionately represented in citywide admission schools in relation to their population in the District. However, White and Asian students are disproportionately represented at both small and large special admission schools. Latino students are disproportionately represented at small neighborhood high schools relative to their population in the District though this is likely related to the location of the small neighborhood high schools.

ELL students, however, are significantly underrepresented in small high schools. This may be due in part to the lack of services available for them at small high schools.

The next chapters report on what it means to be accepted and enrolled in a small high school. What difference does school size make for student academic achievement and engagement in school? What is the learning environment in Philadelphia small high schools, and what is needed to continue developing the rigor at these schools?

Chapter Four
Student Outcomes in Small High Schools

Philadelphia's small high schools were at an early stage of development in 2006-2007, the year for which we collected student outcomes data. Four of the schools were brand new schools in their first year of operation while the remaining schools were in their second or third year. Qualitative data already discussed suggests that many were still developing their academic program and experiencing significant challenges due to the lack of resources available for start-up. Nonetheless, the following student outcomes analysis revealed some hopeful trends in the progress of small high schools, both for developing student engagement as well as helping students succeed academically.

Methodology

The quantitative analysis discussed in this chapter focused on first-time ninth grade students, excluding repeat ninth graders, to maintain consistent comparisons across school admission categories. Special admission and city-wide schools typically do not have repeat ninth grade students. The analysis included indicators of student engagement (student attendance, tardiness, and suspensions) as well as achievement outcomes (algebra passage). Rates of absenteeism, tardiness, and suspensions are important because they are predictors of high school dropout.[46] One limitation of using these data as climate indicators, however, is that collection of this information may vary based on individual schools' policies for recording attendance and tardiness. Small schools, because of their small size, may have a record keeping advantage, thus more reliably capturing absences. In addition, principals at all types of schools may have incentives not to report suspensions.

Algebra was selected as an indicator of academic achievement[47] because algebra is a gateway to college preparatory course work and because ninth grade performance is predictive of future performance and high school success.[48] Passing Algebra I is also a predictor of high school promotion and eventual graduation. We were not able to use test scores because none of the new schools had yet taken the state-wide assessments (PSSA) which is administered in 11th grade.

The analysis presented here is a very early snapshot. While ninth grade performance is important, and low performance correlates with high risk of dropout, we will need to see if the patterns reported in this analysis hold in later years for this cohort and subsequent cohorts of students, particularly as new high schools become more well-established.

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[46] Balfanz R., & Neild, R. 2006.

[47] English classes also went by a variety of names in the SDP dataset making it difficult to verify that the content of the courses were similar.

[48] Allensworth, E., & Easton, J. (2007). *What matters for staying on-track and graduating in Chicago public high schools.* Chicago: Consortium on Chicago School Research.

Table 4.1 Large & Small High Schools by Admission Category

School Type	# of Large Schools	# of Small Schools
Neighborhood	21	10
City-Wide	4	9
Special Admission	3	12

Understanding Student Outcomes—Importance of Admission Categories

The story of small school outcomes is not a straightforward story because of the varying degrees of selectivity among Philadelphia high schools. As described earlier, small and large high schools fall into three admission categories: special admission, citywide admission and neighborhood admission. School outcomes differ substantially by admission category, regardless of the size of the school. In our analysis, special admission schools had the most positive climate and academic outcomes of any admission category, regardless of size. City-wide admission schools had the next most positive outcomes while outcomes for students at neighborhood schools were the most concerning.

Because of the differences between admission categories, and the fact that many small high schools are selective (including both special admission and citywide), our analysis compared outcomes in small and large schools within admission category. Small special admission schools were compared to large special admission schools. Small citywide admission schools were compared to large citywide admission schools and small neighborhood high schools were compared to large neighborhood high schools.

It is also important to point out that most of the small citywide admission schools have a college preparatory focus while most of the large citywide admission schools focus on Career and Technical Education (CTE) as well as on post-secondary preparation. The previous chapter reported that fewer students at small citywide schools take remedial math courses compared to large citywide schools suggesting that they serve different populations. Thus small size is not the only difference between large and small citywide admission schools.

Another factor complicating the analysis is the small number of schools in some of the analysis categories (size by admission criteria). For example, there are only three large special admission schools. In addition, there is variation on some outcomes within admission categories. While most small city-wide admission schools have 100% of their students taking algebra, one city-wide admission school serving 70% special education students had only 45% of students enrolled in algebra. To account for this variation and to ensure that one outlier school does not overly drive the comparisons of small vs. large

Figure 4.1 **Median % of First-Time Ninth Grade Students Passing Algebra or a Higher Lever Math Course**

% of Students	Neighborhood		City-wide		Special Admission	
	Small	Large	Small	Large	Small	Large
98					98	
93			93			92
92						92
81				81		
75	75					
67		67				

Source: School District of Philadelphia   N= 11,251

within each admission category, we refer to percentages in the median school rather than an overall percentage of students throughout this discussion. It should also be noted that the analysis included the pre-existing small special admission schools in the special admission category.

Benefits for All Small High Schools

The analysis suggests several benefits for all small high schools, across admission categories. First-time ninth graders at small high schools are more likely to pass algebra or a higher math course and are less likely to be suspended. While these findings are true across all admission categories, the differences between small and large schools were greatest for citywide high schools.

First-time ninth graders are more likely to pass algebra or a higher level course at small high schools than large high schools, particularly those at small citywide high schools.

As **Figure 4.1** shows, between 6 and 12% more students pass algebra or a higher course at the median small high schools than at the median large high schools across all school types. The difference in algebra passing rates is greatest when comparing small and large citywide high schools but also notable at

Figure 4.2 Median % of First-Time Ninth Grade Students Suspended at Least Once in 2006-2007
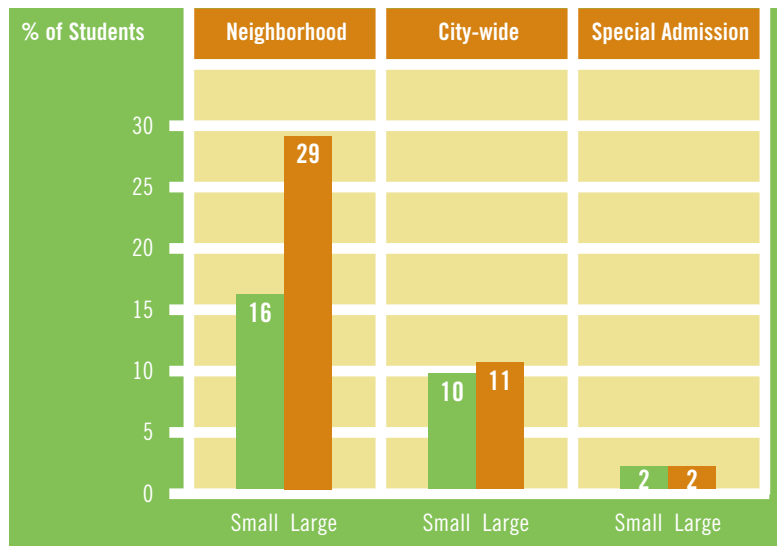
% of Students	Neighborhood		City-wide		Special Admission	
	Small	Large	Small	Large	Small	Large
	16	29	10	11	2	2

Source: School District of Philadelphia
N= 15,112

neighborhood and special admission schools. Ninety-three percent (93%) of students at the median small citywide school pass algebra compared to 81% at the median large citywide school. However, we know that small citywide schools serve more students who enter ninth grade prepared for algebra. Only half as many students at small citywide schools as at large citywide schools were enrolled in remedial math.

Seventy-five percent (75%) of students pass algebra at small neighborhood high schools while only 67% pass algebra at large neighborhood schools. This difference is more striking when considering that small neighborhood high schools have a higher proportion of students that entered ninth grade needing remedial math and they also serve a higher percentage of special education students than large neighborhood high schools.

Ninety-eight percent (98%) of first time ninth-grade students at the median small special admission schools pass algebra compared to 92% of students' at the median large special admission school. Again, the finding is more important when considering that small special admission schools serve three times as many students needing remedial math as large special admission schools and higher proportions of special education students.

Small schools, particularly small neighborhood schools, suspend the same or fewer first-time ninth grade students than large schools.

Figure 4.2 shows that suspension rates were the same or lower for small schools across all admission categories. Again, the differences were greatest for neighborhood high schools. The median small neighborhood high schools

The fact that 8% more students at small neighborhood schools pass alegbra than at large is especially striking because small neighborhood high schools have a higher proportion of students that entered ninth grade needing remedial math and they also serve a higher percentage of special education students than large neighborhood high schools.

suspended 13 percentage points fewer students than the median large neighborhood schools. The median small citywide high school and small special admission school suspend the same or slightly fewer students than their large school counterparts though the total percent of students suspended and the small vs. large school differences were much less than for the neighborhood school.

Benefits for Citywide Admission Small High Schools

A number of differences in outcomes related to student engagement were seen between small and large citywide admission schools. As noted above, these schools differ not only by size but by thematic focus and level of academic preparation of students entering. Therefore, differences in outcomes cannot be attributed solely to size differences. However, these schools are important to pay attention to as they serve a group of students who may not be able to access the special admission schools and therefore provide an important alternative to neighborhood high schools.

Small citywide schools were less likely to have high levels of absenteeism and truancy problems than large citywide high schools.

Small neighborhood schools and special admission schools have similar or greater levels of these challenges than large high schools.

High absenteeism (more than 20 absences in a year) was markedly different for small citywide admission schools which reported 11 percentage points fewer students with significant absenteeism than large citywide admission

Figure 4.3   Median % of First-Time Ninth Grade Students with 20 or More Absences* in 2006-2007
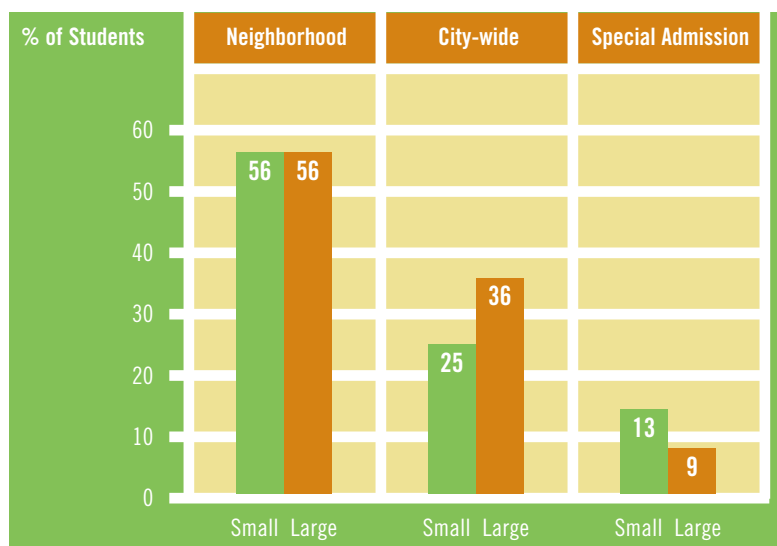
Source: School District of Philadelphia   N= 15,112

*Excused and unexcused absences. We considered total absences (excused and unexcused) because we were interested in student engagement and their overall opportunity to learn.

schools. As **Figure 4.3** shows, 25% of students at small citywide schools were absent 20+ times while 36% of students at large citywide schools had this extreme rate of absenteeism. This difference did not hold true for neighborhood and special admission schools. Both small neighborhood and small special admission schools had slightly more students with chronic absenteeism than their large counterparts A later section discusses the troublingly high rates of absenteeism for all neighborhood high schools.

This pattern described above held when looking at truancy (20+ unexcused absences in year), although the differences were smaller. **Figure 4.4** shows that small citywide admission schools had seven percentage points fewer truant students than large citywide admission schools. Again, there were no reductions in truancy at small neighborhood or special admission schools. Truancy rates at these schools were slightly higher than their large counterparts.

Fewer students at small citywide and special admission schools were chronically late to school than in large citywide schools.

Small neighborhood schools had higher rates of chronic tardiness than large neighborhood schools.

Even more pronounced were the differences between large and small citywide admission schools when it came to chronic tardiness (20+ tardiness/year). **Figure 4.5** shows that while 53% of students at large citywide schools were late 20+ times/year, only 27% of students at small citywide schools had this amount of tardiness in a year. Students at small special admission schools were

Figure 4.4 **Median % of First-Time Ninth Grade Students Truant* in 2006-2007**
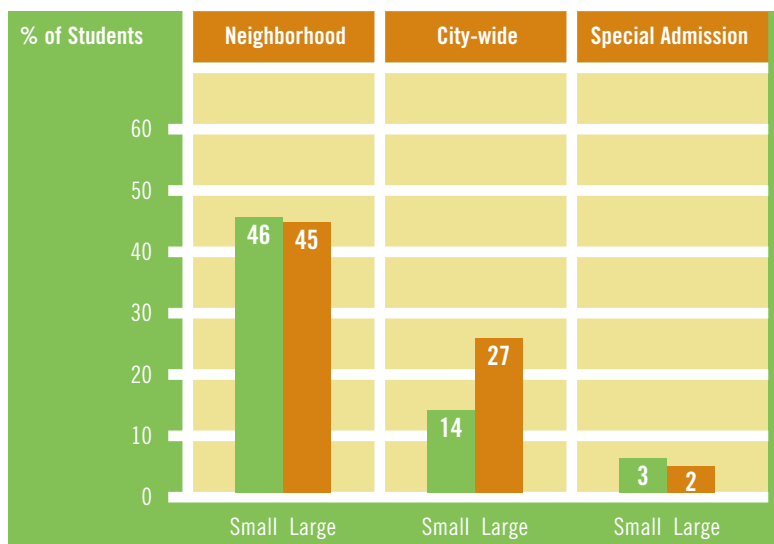
Source: School District of Philadelphia
N= 15,112
*Truancy is defined as 20+ unexcused absences

also less likely to be chronically late as compared to large special admission schools. These differences in chronic tardiness suggests several possible dynamics; students may be more engaged at small citywide and special admission schools or they may live closer to these newer schools and/or are able to access more direct public transportation to these schools. On the other hand, those at small neighborhood high schools were 19 percentage points more likely to be chronically late than those at large neighborhood high schools.

Troubling Indicators for Small Neighborhood High Schools

Neighborhood small high schools demonstrate the same or higher numbers of students with high levels of absenteeism and tardinesses than large neighborhood high schools.

Figures 4.3, 4.4, and **4.5** suggest some troubling indicators for small neighborhood high schools. This was particularly evident in the data with regard to chronic tardinesses and absenteeism. And, even while small neighborhood schools suspend fewer first-time ninth graders than large neighborhood schools, their rates of suspension are still high. The data suggest that small neighborhood high schools are not yet demonstrating progress over large neighborhood schools in engaging students. However, these schools face unique challenges. They were among the conversions schools which received

Figure 4.5 **Median % of First-Time Ninth Grade Students Tardy 20 or More Times in 2006-2007**

% of Students	Neighborhood		City-wide		Special Admission	
	Small	Large	Small	Large	Small	Large
	52	33	27	53	22	29
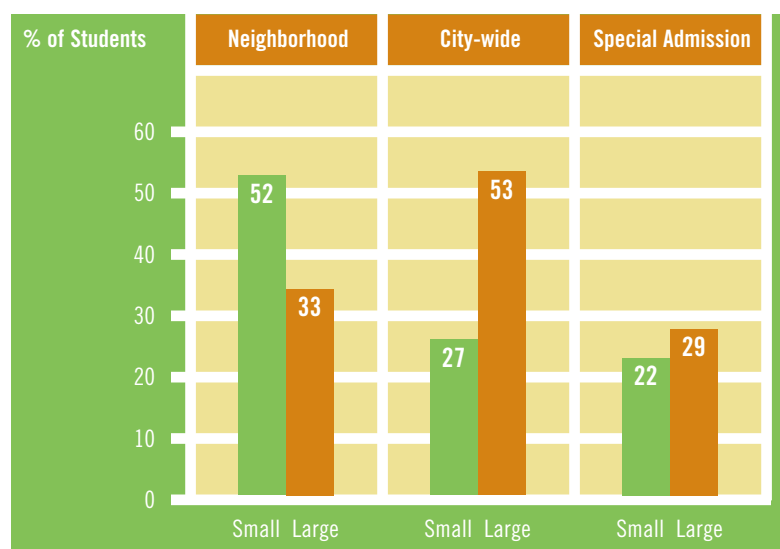
Source: School District of Philadelphia   N= 15,112

the least support in their start-up phase. Also, as neighborhood schools, they face many systemic barriers to success.[49] These data suggest that small size did not provide enough of a boost to overcome other systemic challenges to reform, at least not during the start-up phase.

Summary

In sum, the early indicators of improving ninth grade student engagement and achievement in Philadelphia's small high schools are mixed. Some of the schools in the sample had only just opened while the rest had been open three or fewer years. Therefore, it is too early to come to strong conclusions about the impact of these schools. Further research following the current cohort and subsequent cohorts of high school students is needed to understand whether and how small high schools are making a difference for student outcomes beyond the ninth grade.

The data provide evidence of improvements in some areas and for some types of small high schools but do not demonstrate improvements across the board. First-time ninth grade students passed algebra at higher rates at small high schools and were less likely to be suspended. These differences were seen at all types of small high schools, including neighborhood high schools. It is important to note these signs of progress in small neighborhood schools because reform of neighborhood high schools in a tiered admission system like Philadelphia has proven difficult but is critically important for reducing the dropout rate and creating an equitable high school system.

On the other hand, we did not find evidence that small size had affected a number of indicators for small neighborhood high schools. Overall attendance patterns, truancy and tardiness in small neighborhood high schools were all the same or higher than in large neighborhood high schools. These mixed findings suggest that while small size may be helping these neighborhood high schools lay a foundation for improvement, it is only one of many reforms needed for these schools.

Small citywide admission schools, on the other hand, appear to be providing a consistently positive alternative to both large citywide admission schools and neighborhood schools. First-time ninth graders attending small citywide admission schools were almost certain to take algebra or a higher level math course in ninth grade, and were more likely to pass algebra than students at large citywide high schools. Fewer students were suspended, or had serious tardiness, absenteeism or truancy problems in these schools compared to large schools with the same admission criteria.

Of course, it is important to remember that there are other differences besides

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[49] See RFA's forthcoming report: Gold, E., et al. (2009). *The transition to high school: School selection and freshman year interventions in Philadelphia* for an analysis of data about high school selection in 2007-08.

size between large and small citywide admission high schools; large citywide high schools focus on both CTE and post-secondary preparedness and serve a population of students more in need of remediation in math, while small citywide high schools have a college prep focus and serve a population of students less in need of remedial math. Nonetheless, small citywide schools appear to be providing a safe and more rigorous college preparatory alternative to neighborhood high schools and large citywide admission schools.

Special admission schools appear to be doing fairly well, whether the school is large or small. However, first-time ninth grade students are slightly more likely to pass algebra when they are at a small special admission high school than a large special admission high school, and slightly less likely to be suspended or chronically tardy to school.

The picture of small schools progress at this early stage in their development is mixed and school outcomes are highly correlated with the school's admission category. Nonetheless, within admission categories, small high schools appear to be making small but potentially important improvements for their students. The benefits of small neighborhood high schools are particularly important as currently, nearly 70% of District students are enrolled in large neighborhood schools. The next two chapters provide additional evidence of the positive climate within small high schools. Our interviews with students, parents, teachers, and administrators help fill in the story of small schools in Philadelphia by describing the dynamics and processes behind the student outcomes described in this chapter.

Small citywide schools appear to be providing a safe and more rigorous college preparatory alternative to neighborhood high schools and large citywide admission schools. Within admission categories, small high schools appear to be making small but potentially important improvements for their students.

Chapter Five
Building on Relationships to Create the Conditions for Learning

As discussed in the previous chapter, students in Philadelphia's small high schools are less likely to be suspended and more likely to pass algebra than in large high schools. This chapter looks at the climate of small schools. By climate, we mean the quality of relationships in the school building between teachers and students, among students and among teachers, as well as perceptions of safety in the school. Research on small high schools has consistently shown that small schools, in contrast to large high schools, can more easily create a positive school environment and that this positive climate helps create the conditions that make learning more likely to occur.[50]

Climate issues are particularly important in Philadelphia's neighborhood high schools which have a roughly 37% dropout rate.[51] All but one of the District schools identified as persistently dangerous by the Pennsylvania Department of Education in 2006-07 were large neighborhood high schools. If Philadelphia's small neighborhood high schools demonstrate improvements in climate, they may be able to better retain students and reduce dropout.

Qualitative data from small high schools[52] as well as the city-wide teacher survey data corroborates the findings of the student outcome data reported in the previous chapter. Healthy school climates exist or were developing in small high schools across admission categories, in spite of the lack of resources. Qualitative findings detailed in this chapter provide insights into the ways small size supports healthy school climate and the intentional efforts made by schools to capitalize on size to create a healthy climate. These dynamics and strategies are important to understand as reformers decide whether climate can be improved and sustained in large high schools.

Many factors comprise a healthy school climate but three conditions appear to be particularly important for students. These conditions are: teacher

If Philadelphia's small neighborhood high schools demonstrate improvements in climate, they may be able to better retain students and reduce dropout rates.

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[50] Cotton, K. (2001). *New small learning communities: Findings from recent literature*. Portland: Northwest. Regional Educational Laboratory; Osterman, K. F. (2000, Fall). Students' need for belonging in the school community. *Review of Educational Research*, *70*(3) 323-367; Stewart, E. B. (2007). Individual and school structural effects on African American high school students' academic achievement. *High School Journal*. Chapel Hill, NC: University of North Carolina Press.

[51] School District of Philadelphia. (2009, February 2). *Imagine 2014* "Just the facts."

[52] See Introduction and Appendix A for a summary of qualitative data.

support,[53] a sense of belonging or peer acceptance,[54] and safety.[55] Supportive relationships with teachers and a sense of belonging and safety with peers seem to be particularly beneficial for the achievement of disadvantaged students in high-poverty schools[56] beginning with their successful navigation of the transition to ninth grade.[57] However, research has also found that a sense of belonging is generally weaker in urban schools[58] and that students in urban districts experience fewer positive relationships when they transition to high school. These school climate factors are related to student disengagement and eventual dropping out of school.[59]

Climate is also important for teachers. A sense of trust and collegiality among teachers has been identified as a key factor in school improvement and school change.[60] At the heart of positive school climate, then, are positive relationships between teachers and students and among students.

The following sections will discuss climate in small high schools as compared to large high schools, as well as differences between small high schools of different admission categories. We focus particularly on the development of supportive student-teacher relationships, a sense of belonging and community, a sense of safety for students, and a sense of social trust developing among teachers and administrators in small high schools.

At the heart of positive school climate, then, are positive relationships between teachers and students and among students.

[53] Becker, B., & Luthar, S. (2009). Social-emotional factors affecting achievement outcomes among disadvantaged students: Closing the achievement gap. *Educational Psychologist, 37*(4); Fredricks, J. A., Blumenfeld, P., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109.

[54] Becker, B., & Luthar, S., 2009; Faircloth, B., & Hamm, J. V. (2005). Sense of belonging among high school students representing 4 ethnic groups. *Journal of Youth & Adolescence, 34* (4); Booker, K. (2006). School belonging and the African American adolescent: What do we know and where should we go? *High School Journal*. Chapel Hill, NC: University of North Carolina Press; Stewart, E. B. (2007). Individual and school structural effects on African American high school students' academic achievement. *High School Journal*. Chapel Hill, NC: University of North Carolina Press.

[55] Brophy, J. (1988). Research linking teacher behavior to student achievement: Potential implications for instruction of Chapter 1 students. *Educational Psychologist, 23*(3); Dupper, D., & Meyer-Adams, N. (2002). Low-level violence: A neglected aspect of school culture. *Urban Education, 37*(3); Stewart, E. B., 2007.

[56] Booker, K., 2006; Osterman, K. F., 2000, Fall; Stewart, B., 2007.

[57] Newman, B., Lohman, B. J., Newman, P. R., Myers, M. C., & Smith, V. L. (2000). Experiences of urban youth navigating the transition to ninth grade. Sage Publications, Inc., *Youth and Society, 31*(4), 387-416; Newman, B., Myers, M., Newman, P., Lohman, B., & Smith, V. (2000). The transition to high school for academically promising, urban low-income African American youth. *Adolescence, 35*(137), 45-66.

[58] Osterman, K. F., 2000, Fall.

[59] Osterman, K. F., 2000, Fall; Newman, B. et al., 2000; Newman, B. et al., 2000; Booker, K., 2006; Stewart, E. B., 2007.

[60] Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement.* New York: Russell Sage Foundation; Payne, C. M. (1997). *"I don't want your nasty pot of gold": urban school climate and public policy.* Evanston, IL: Northwestern University; Payne, C. M., & Kaba, M. *So much reform, so little change: Building-level obstacles to urban school reform.* Evanston, IL: Northwestern University Institute for Policy Research.

Student-Teacher Relationships

Students in small schools across all admission categories described caring and supportive teacher-student relationships.

The small school environment, across all admission categories included in our research, broke down the anonymity that students might experience in a larger school. Across schools, students felt that all the teachers knew them, and that at least one, but typically more than one, teacher cared about and supported them. The relationships they developed with teachers also allowed some students to interpret critical but constructive feedback as caring.

Teachers and students reported that they knew each other by name. One student stated "Teachers know your names. It feels like they care." Several teachers made comments like the following:

> *If you're in a large comprehensive high school you barely know the kids who are coming through your door and you don't see them all the time. I see my students at least three times a day outside of my classroom… whether they like it or not, there is more of a personal relationship there.*
> *—Teacher, neighborhood small high school*

Students and teachers frequently cited teachers being able to individualize and personalize their approach to working with students in small high schools. We heard that teachers were able to provide more individual attention to students than might be the case in a large school. A student in a small neighborhood school stated, "There are less students, so they pay attention to you more." Students at a conversion special admission school reflected similar sentiments, "You get individual attention at a small school," said one. "You don't get that at a big school unless you play sports." Another stated "Some teachers at other schools don't have outside contact with you. But here, teachers have time to talk to you, and they are open to that." Thus, across admission types, students reported receiving more individualized attention from their teachers.

Students also described feeling that their teachers were aware of their progress, holding them accountable when they slacked off and recognizing when they had made progress. Teachers agreed. One teacher at a small neighborhood high school explained, "You know the students are learning. You know when they do well and when they don't." Students at a small city-wide school stated similarly, "Teachers stay on top of us; it's hard for you to fail at this school." Many students interpreted this closer monitoring as a sign of caring and support for their success. As one student stated, "They make sure you're on top of what you're supposed to do. Sometimes it's hard but sometimes you need that." As one student at a small special admission school stated, "One teacher, she's not even my main teacher but if she sees I'm not

doing something she says 'you need to go to class,' 'you need to do your work and learn and go to college.' I think she cares a lot about us." Supportive relationships with teachers allowed students to interpret critical but constructive feedback as caring.

Students and faculty at small citywide and special admission schools suggested that the small school environment could also lead to more positive recognition of individual students. As one student at a small citywide school stated, "Everyone knows everybody…everybody can be a leader and be recognized for it." In another small school, the principal recognized students for any and every accomplishment during morning announcements to create a sense of school spirit.

At the neighborhood schools, teachers and staff commented on personalizing responses to student misbehavior. For example, a non-teaching assistant (NTA) at a small neighborhood school shared that, "Being small makes a big difference because you get to know the personalities of each student and how to handle them when they are misbehaving." Although some students disliked the lack of anonymity that led to tighter monitoring of their behavior, they appreciated the attention and support. As one student at a small neighbor-

"Everyone knows everybody…every body can be a leader and be recognized for it."
— A Student

Figure 5.1   How many other teachers at this school talk to students about life at home?

Source: School District of Philadelphia N= 1521

About Half   Most or All
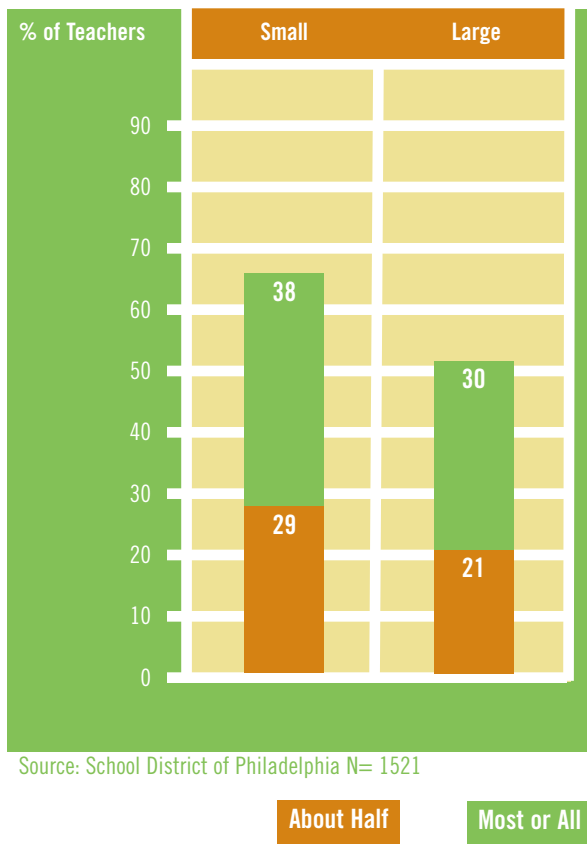
hood high school noted, "People catch you at everything in a small school. You get in trouble more because teachers are right on top of you, but then you know everyone and each other…it's a good thing."

The personalized environment students described also meant that their teachers knew about their lives outside of the classroom. Students experienced teachers as being interested in their overall well-being and many students also had close relationships with at least one teacher in their school with whom they could talk about personal challenges. As one student at a citywide admission school stated "They know everything about you. They know things about you before everyone else in the school knows. They can look at you and tell when you're hurt and you don't feel good." A ninth grade student at a small neighborhood school commented, "Teachers are more involved with you than in middle school. Teachers want to know what's wrong." A student at the same neighbor-

Teachers and students consistently attributed the positive teacher-student relationships in their schools to small size, but a few small schools also intentionally developed structures to help foster teacher-student relationships.

STRATEGIES FOR CREATING SUPPORTIVE TEACHER-STUDENT RELATIONSHIPS

Intentional efforts to create positive relationships between students and faculty created opportunities in the school day to more fully personalize learning and ensured that someone was looking out for every student.

- **One structured way of creating teacher-student relationships was in four-year advisories,** where students stay with the same advisor through high school. In one small school, students met in a group with their four-year advisor two periods a week to discuss socio-emotional topics and develop deeper relationships. One teacher described it as being a "life coach" to students during that time. The advisor was responsible for developing relationships with the students' families and would often learn more about students' home lives in order to provide support. Advisors would stay with the same group of students for their four years of high school.

- **Relationships were also supported at one school by a summer institute** in which teachers and students began to get to know each other. A number of the small schools we heard about organized summer orientations so that students were oriented to the culture of the school before their first day.

- **Principal modeled relationship building.** Finally, a principal at one small school described one of his strategies for developing relationships and a sense of community with students. He stands at the main entrance to the school each morning and afternoon, shaking hands and greeting every student by name as they enter or exit the school building. The principal explained, "And it sends such a huge, powerful message to the students, you're valued as an individual, you're valued as a member of this community."

hood high school stated, "There aren't that many people so you can get closer to the teachers." This created a context of trust in which students could appreciate the closer monitoring of their work and behavior.

The District teacher survey also indicates that teachers at small high schools had stronger relationships with students than teachers at large high schools. While this is true across all admission types, we highlight these findings for neighborhood high schools where it is particularly important to improve school climate. **Figure 5.1** shows that 67% of teachers at small neighborhood high schools reported that they believed half or more of the teachers talk to students about their lives outside of school, compared to 51% at large neighborhood high schools.

Teachers and students consistently attributed the positive teacher-student relationships in their schools to small size, but a few small schools also intentionally developed structures to help foster teacher-student relationships. The discussion in the text-box describes several common strategies and factors for building strong teacher-student relationships.

Student-Student Relationships

Students in small high schools describe a strong sense of belonging and community.

The word 'family' was used repeatedly in our interviews with teachers and students to describe the atmosphere in the small schools. For example, a student at a citywide small school commented, "It's a family environment. Everyone knows everybody. Everybody works with everybody." The word 'family' connotes feelings of belonging and community which characterize a healthy school climate. While small neighborhood high schools continued to struggle with climate issues, students and teachers at these schools still felt and observed a greater sense of belonging:

> *I like a smaller school better…I don't feel like an outsider.*
> *–Student, small neighborhood school*

> *You get to know more people in a small school. You get to know more people faster. You fit in quicker. –Student, small neighborhood school*

> *Small schools allow more interpersonal relationships. It also helps kids identify with something and feel a part of something. That doesn't happen in bigger schools. –Teacher, small neighborhood high school*

> *The students really have built strong relationships with each other. If a student is absent for a certain number of days, the other students will notice and ask the teacher if they have phoned the student's house to see where he/she is. –Teacher, small neighborhood high school*

Students also described a greater tolerance for difference in small schools, compared with large schools. In one focus group a student said "Everyone is friendly. My old school was separated by race. Here, everyone is a family." Another student in the focus group continued, "It's a nice environment. You can be yourself without people attacking you." A third student added, "People in other schools may hate you for some reason. Here…you can be yourself and no one will judge you."

This greater tolerance for difference was described at two other schools as a lack of cliques. When a focus group discussed this issue, one student said, "You know how other schools have popular kids and losers, but here, you still talk to everybody." Another continued saying, "…You won't get made fun of…there are different groups of friends, but everybody's friendly."

While this language was used by some students at small neighborhood high schools to describe their school, these students were less likely than students at other types of small schools, to describe a sense of community in their schools. A few students reported being bullied or knowing of other students who were being bullied.

A few students at small schools also expressed a downside to the closeness they experienced in their school: a lack of privacy. Some students complained that if they had a problem with one teacher it could affect their relationships with other teachers as well. Students also talked about other students knowing more about their personal lives than they felt comfortable with. As one student stated "Their business becomes your business. I'm not saying it's too close…but it's too close. Everybody knows everybody." In spite of these critiques, most students in our focus groups appreciated the sense of belonging and support they experienced in their schools.

While small neighbor-hood high schools continued to struggle with climate issues, students and teachers at these schools still felt and observed a greater sense of belonging.

STRATEGIES FOR CREATING A SENSE OF COMMUNITY

Some small schools developed intentional strategies to create a sense of belonging for students. Strategies included: developing extra-curricular activities for students, sponsoring school-wide events that pertained to the school's theme, or organizing student cohorts that traveled together for the whole day. Partners were also able to contribute to the development of school community through helping to sponsor school-wide events and promoting a school theme. A strong school theme seemed to enable a school to rally around a particular set of activities and develop a common identity. One teacher also commented that community was fostered by having spaces in a school building where students and teachers could gather for conversations.

Again, most students attributed the closeness they felt with their peers to small size but at some small high schools, administrators were thinking more intentionally about how to create a sense of community. The text box on page 50 describes some of the strategies they used.

Perceptions of Safety

Students and teachers reported a greater sense of safety in small schools over large high schools. This was particularly true at neighborhood small high schools.

Underlying feelings of belonging and community is a sense of safety. Existing research supports the connection between feelings of peer acceptance, belonging, and a reduced feeling of "risk" on the part of a student.[61] As students feel known, accepted, and part of a community, they also feel safer.

Students, teachers, and parents across schools commented on the greater safety of small versus large schools. Students at one small neighborhood high school

Figure 5.2 How safe do you (teachers) feel in the hallways of the school?

% of Teachers	High School Size	
	Small	Large
90		
80	43	
70		
60		21
50		
40	39	40
30		
20		
10		
0		
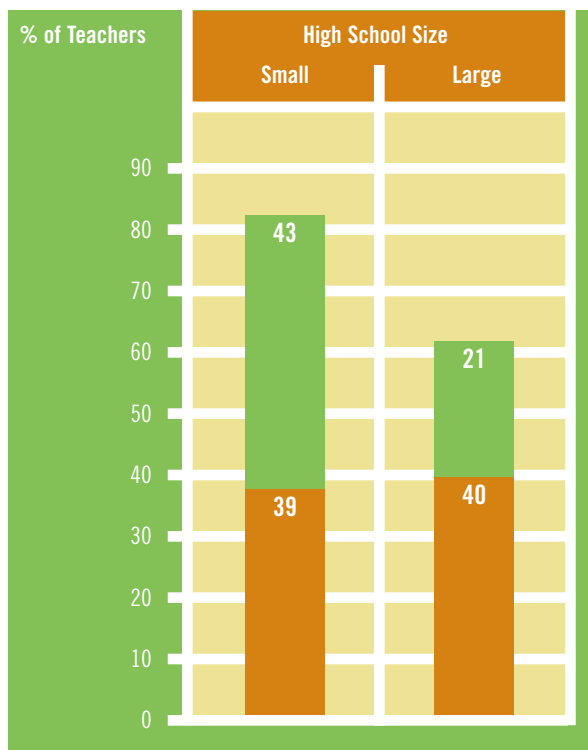
Source: School District of Philadelphia
N= 1521

Mostly Very

Figure 5.3 How safe do you (teachers) feel in the classrooms of the school?

% of Teachers	High School Size	
	Small	Large
90		
80	46	
70		31
60		
50		
40		39
30	37	
20		
10		
0		
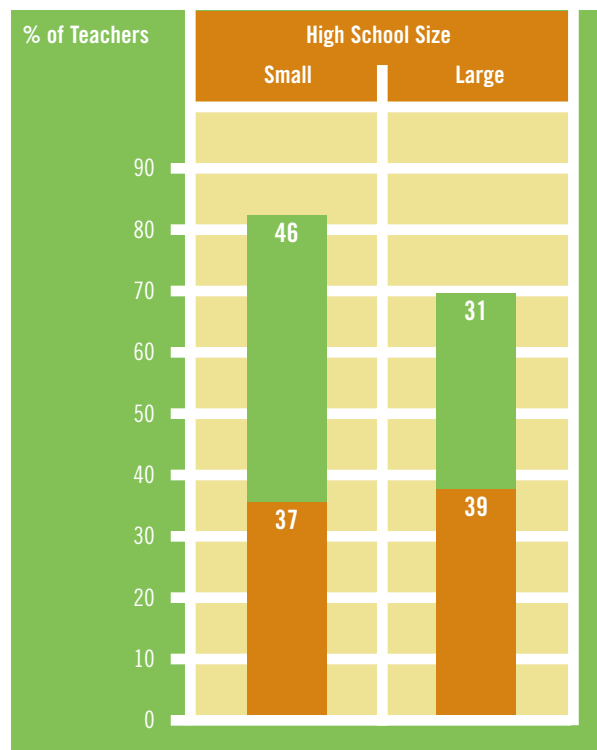
Source: School District of Philadelphia
N= 1521

Mostly Very

[61] Osterman, 2000.

commented on the change from a large school saying, "When it was a large school there used to be fights everyday. It was crazy. You could just leave. Now it's easier to learn." A student at a small citywide school shared that, "I like it because everyone knows my name. It makes me feel more comfortable. Now, I'm getting involved in more things…It made me do more work because I know the person sitting beside me." These quotes illustrate the ways in which a sense of safety can contribute to improved student performance.

These comments about increased safety are echoed in data from the District teacher survey. From teachers' perspective, a safer environment contributed to more focus on teaching and learning. Teachers at small high schools were more likely to say that they and their students felt safer in both the hallways and in their classrooms than teachers at large schools. This difference was even more pronounced at small and large neighborhood high schools, where 82% of teachers in small neighborhood high schools said that they felt safe in the school hallways compared to 61% in large neighborhood high schools, a difference of more than 20 percentage points (**Figure 5.2**). Eighty-three percent (83%) of teachers in small neighborhood schools felt safe in classrooms, compared to 70% in large neighborhood high schools (**Figure 5.3**).

Similarly, teachers in small schools were more likely than teachers at large high schools to say that their students felt safer in small high school hallways and classrooms: 70% of small neighborhood high school teachers thought students felt safe in school hallways, compared to only 44% in large neighborhood high schools (**Figure 5.4**); 80% of teachers in small neighborhood high schools reported that they thought students felt safe in classrooms compared with 68% in large neighborhood high schools (**Figure 5.5**).

These findings provide encouraging evidence that students' and teachers' sense of safety in small neighborhood high schools is positive. However, despite positive reports from teachers and students, small neighborhood high schools continue to face greater challenges in this area than citywide or special admission schools, where teachers were even more likely to report feelings of safety in their schools and among their students.

As one neighborhood high school student described the change from a large to small school size, "There are fights, but not as much as it used to be… ."

We did not hear about particular strategies for improving safety in small schools beyond the strategies described above for building a sense of community and supportive teacher student relationships. One exception was the suggestion of a small neighborhood school teacher to hire more Non-Teaching Assistants (NTAs) at her school.

Eighty-two percent of teachers in small neighborhood high schools said that they felt safe in the school hallways compared to 61% in large neighborhood high schools—a difference of more than 20 percentage points.

Relationships among Faculty

Relational trust among teachers in small high schools is greater than in large schools, but it is not a given; other structural supports are needed to develop a collegial working environment.

A sense of support, belonging, and safety is important for students. For teachers, a sense of trust in the individuals with whom they work is important. Bryk & Schneider[62] found that when "relational trust" exists among adults in a school, they find their work more meaningful and are more engaged, and the school has a greater capacity for teaching and learning.

Relational trust differs from trust in personal relationships because it is situated in a professional workplace. It centers on the role expectations that adults in a workplace have of each other and trust that these expectations will be met. Bryk & Schneider found that particular factors underlie relation-

Teachers in small schools were more likely than teachers at large high schools to say that they and their students felt safer in small high school hallways and classrooms.

Figure 5.4 **According to teachers, how safe do students feel in the hallways of the school?**

Source: School District of Philadelphia
N= 1521

Mostly Very
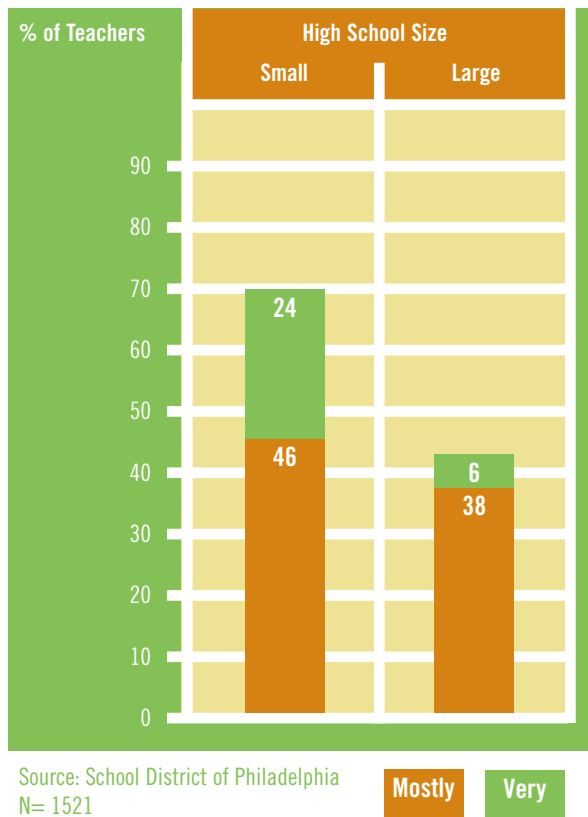
Figure 5.5 **According to teachers, how safe do students feel in the classrooms of the school?**

Source: School District of Philadelphia
N= 1521

Mostly Very

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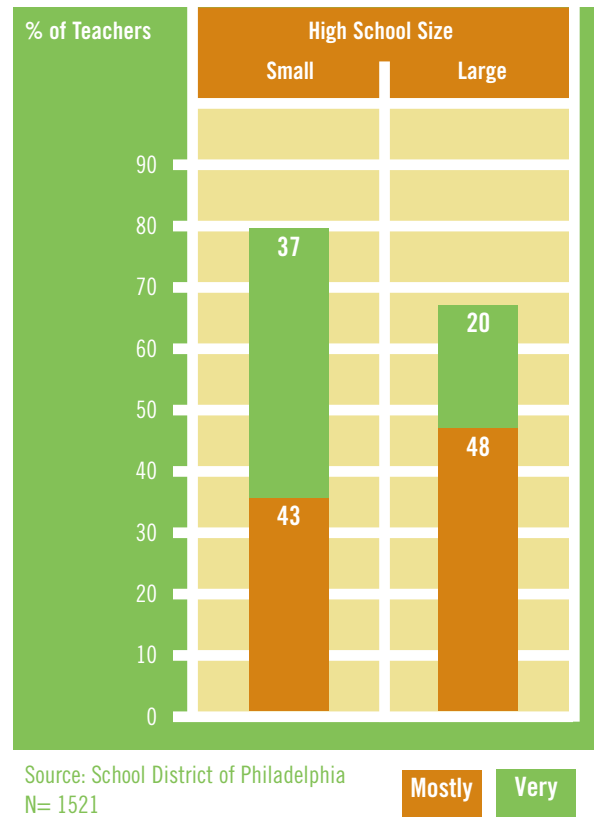
[62] Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement.* New York: Russell Sage Foundation.

al trust. Teachers decide to trust their colleagues when they feel respected by them and perceive they are competent at their jobs, willing to go beyond their 'official' role for others, and have integrity in their work.[63]

Data from the District teacher survey suggest that relational trust exists to a greater degree in small high schools than large high schools in Philadelphia. Our qualitative data describes the strength of this trust. Similar to the experience of students reported above, teachers at small schools had a greater opportunity to form relationships because of the small size of the faculty and the greater need for faculty to work together and cooperate. At the same time, there was variation across schools in the degree of relational trust described in small high schools. Other structural supports and strategies also contributed to the development of relational trust.

Relationships among teachers at four of the five small schools where we conducted in-depth research were described as collegial or close. For example, a teacher at a small neighborhood high school stated, "Overall, we are very collegial and cohesive… . We communicate frequently and most of us have very amicable relationships with one another; many of us are genuine friends even outside of school." Data from the teacher survey supports that trust among teachers was widespread in small high schools. Eighty-six percent (86%) of small schools teachers agreed or strongly agreed on the District survey that teachers at the school trusted each other. This was notably different from responses by teachers at large high schools where only 67% reported that they trusted each other. The same pattern is seen when comparing small and large neighborhood high schools (82% compared to 67%). We also heard in our

Teachers at small schools had a greater opportunity to form relationships because of the small size of the faculty and the greater need for faculty to work together and cooperate.

Table 5.1 Teacher Respect and Support in High Schools

	All		Neighborhood	
	Small	Large	Small	Large
I feel respected somewhat or to a great extent by other teachers in the school	94%	91%	94%	91%
Most or all of other teachers in the school help to maintain discipline	67%	54%	45%	26%
Most or all other teachers in the school take responsibility for improving the school	51%	34%	49%	30%
Most or all other teachers in the school feel responsible for helping each other do their best	42%	39%	48%	36%

[63] Bryk, A. S., & Schneider, B., 2002.

qualitative data, as well as in survey data, that teachers in small schools were more likely to express a sense of mutual respect and support. A teacher in a small citywide school described the way in which mutual respect among teachers allowed for healthy discussion and debate of educational issues among faculty:

> Relationships among teachers are very respectful. It's different than any other school. There are disagreements academically and professionally but it's kept at a professional level. We have arguments about legitimate academic issues in staff meetings. It stays professional and doesn't turn personal.

Table 5.1 displays teacher responses to survey items related to the amount of respect and support teachers experience from each other. Again, teachers in small schools were more likely to feel respected and supported by their colleagues. However, at both small and large high schools, less than 70% of teachers agreed with 3 of the 4 survey items. This suggests that significant numbers of teachers do not experience these conditions in schools. Differences in teachers' self-reported experience of respect and support from their colleagues between small and large neighborhood high schools were more pronounced than between small and large schools of other admission categories.

Cooperation among teachers seemed particularly important for establishing trust in small schools where the size of the faculty was limited. Teachers described the additional responsibilities they were required to take on and the challenges it created when teachers were absent. A neighborhood high school teacher stated," The staff is very close because they have to be. They have to rely on each other because there are so few of them." A teacher in a special admission school stated similarly, "There are a few of us so we all work very hard on a lot of things. ...In traditional high schools, people get tired. It's much more stimulating when working closely with colleagues."

Again, teachers attributed strong relationships with colleagues to the small size of the faculty but we heard that there were other conditions that supported relational trust as well. The text box on page 56 describes some of these other conditions.

Conclusion

The optimal socio-emotional conditions for learning—supportive teacher-student relationships, a sense of belonging, safety, and relational trust—were present and developing in small high schools, including neighborhood small high schools, and were more likely to exist in small rather than large high schools. However, while a smaller school size made it easier for these conditions to develop organically, there were limits to how strong climate and rela-

Differences between teachers' self-reported experience of respect and support from their colleagues in small and large neighborhood high schools were more pronounced than between small and large schools of other admission categories.

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tionships could become without some structural supports and intentional strategies in place. In addition, while a sense of community in a school creates the conditions for learning, instructional practices within the school need to capitalize on these conditions for learning to occur. The next chapter will examine the development of "rigor" in small high schools.

CONDITIONS CONTRIBUTING TO RELATIONAL TRUST AMONG TEACHERS

Start-Up Advantages

- Survey results and interviews showed that teacher-teacher trust varied across small high schools. This makes it important to understand other factors that might contribute to trust among teachers. One important factor is school start-up. Key start-up advantages included:

  → The ability to choose staff at some small schools increased the likelihood that all teachers and administrators shared a similar mission, values, and commitment to the school.

  → Similarly, a start-up planning period allowed teachers in some new small schools to come together around the mission and values, develop consistent policies and procedures with their administrator, and have a voice in shaping the school.

Common Planning Time

- Teachers also pointed to the importance of common planning time which created space for collaboration and discussions of important issues. However, schools that described more collegial relationships were able to make better use of this planning time.

School Leadership

- Finally, teachers often placed their relationships with each other in the context of their relationship with the school administrator. The principal often created the context for trust and collaboration, although some teachers also described collaborating without any support or leadership from the principal in this area.

Chapter Six
Rigor in Small High Schools

As noted in Chapter 4, within every admission category, first-time ninth graders at small high schools were more likely to pass algebra than first-time ninth graders at large high schools. This chapter draws on qualitative and teacher survey data to look more deeply at the context within which these algebra classes took place. It examines the status of "rigor" in small high schools, including administrators' and teachers' perceptions that more needs to be done to increase rigor and their suggestions for how to create more rigorous teaching and learning environments.

Teaching and Learning: From Relationships to Rigor?

The data in the previous chapter suggest that strong relationships are creating a foundation for learning in many of the small high schools in our study. There was some variation, with small neighborhood high schools facing more challenges to building relationships and school climate, but overall a consistently positive picture emerged across the small schools in our study. The picture of teaching, learning, and instruction is more varied. This finding matches research on small high schools in other cities. As researchers in Chicago note, "There is an important difference between changing the collegiality and affective character found in schools, which small size seems to improve, and transforming how teachers work together and with their students."[64]

Researchers and advocates name rigor as one of the pillars of small high school reform. Many definitions of rigor cite the goal of fully preparing students for post-secondary education and the workforce. But what does rigor look like at the school or classroom level? Definitions of rigor are often varied or unarticulated, which means that even assessing the presence of rigor can be challenging.

New Visions, an organization that works with both the public and private sector in New York City to support education reform and small high schools, states that a rigorous instructional program enables "every student to master challenging skills, content knowledge, and state standards through relevant, individualized, in-depth, and inquiry-based teaching."[65] In their 2007 study, Policy Studies Associates (PSA) measured rigor in New York's small schools in terms of (1) students' perceptions of teacher expectations and (2) teacher assessments of how well the school's curricula was aligned with the state Regents' exam.[66] In another study of New York small schools, WestEd measured rigor in terms of students' access to advanced courses and attainment of a Regents' diploma.[67]

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[64] Stevens, W. D. (2008). *If small is not enough: The characteristics of successful small high schools in Chicago.* Chicago: Consortium on Chicago School Research, 17.

[65] Foley, E. M. et al., 2007, 1.

[66] Foley, E. M. et al., 2007.

[67] Huebner, T., Corbett, G. C., & Phillippo, K. (2006).

Another way to measure rigor is to assess whether indicators of student learning and achievement improve over time. When PSA examined indicators of student learning in small schools, they identified factors beyond size that contributed to developing rigor. The most important school level influence on student performance was a variable describing school processes which they titled "quality of instructional systems." The processes that were positively correlated with student performance included (1) perceived alignment of instruction with Regents' standards, (2) staff agreement on educational focus, (3) effectiveness of principal leadership, (4) quality and amount of professional development, (5) teacher influence on school policy, and (6) professional collaboration on instruction. Qualitative research in a subgroup of New York's small schools indicated further conditions important for positive student outcomes. These included "small enrollments, close student-teacher relationships, adult mentoring of youth, extension of student learning outside the regular school setting and school day, and the use of data to review progress."[68]

Similarly, a study of successful small high schools in Chicago emphasized the importance of factors beyond size if schools are to impact student achievement. Researchers found that "how adults work together in small schools is a crucial factor in raising student achievement…(and) that collective work on improving instruction is a key lever for raising achievement."[69] In particular, they found that three school characteristics were present in schools with comparatively high student achievement. These characteristics, all of which overlap with the New York research, were: (1) strong teacher professional communities engaged in developmental practices (i.e., working collaboratively on common instructional issues), (2) deep principal leadership (for monitoring, organizing, and sustaining collective work), and (3) teacher influence on shaping developmental practices and collaboration. Student supports may also play a significant role.[70]

According to a recent study, dedicated small schools offices in Oakland and Chicago helped lay the groundwork for the above characteristics there.[71] These offices played both bridging and buffering roles between schools and the central office. As part of their bridging role, they advocated for district policy and practice changes to further implement the district policy promising small schools autonomy. Such autonomy can be used to support rigor. For example, it enabled schools and the educators in them to implement innovations around instruction and the larger instructional systems.

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[68] Foley, E. M. et al., 2007, 56.

[69] Stevens, W. D., 2008, 2.

[70] Stevens, W. D., 2008.

[71] Honig, M. I., 2009, Winter.

Differing Understandings of Rigor at Philadelphia's Small High Schools

All interviewees agreed rigor was an important goal for high schools; they offered differing definitions for rigor.

How did principals and teachers at Philadelphia's small high schools think about rigor? The definition(s) a teacher or school adopts also have different implications for what teachers do, and value, in the classroom. The following discussion draws on interviews with principals and teachers at the five schools where we conducted in-depth research, as well as on interviews with a broader group of small school principals. All of the educators affirmed rigor as a goal. Across all kinds of high schools, the most commonly cited definitions of rigor involved engaging students in critical thinking. Yet there was also a great deal of variety in how participants defined rigor, both across and within schools and admission categories. See the box below for a sampling of principals' explanations of rigor.

Some of the principals' definitions of rigor describe outcomes while others describe a means of getting there. One rests on whether key courses are in place, whereas others focus on what happens in students' minds or on developing a school culture of inquiry and intellectual challenge. One definition measures rigor during high school by how well students succeed after graduation. Some definitions of rigor are harder to measure than others; it is easy to count the number of Advanced Placement (A.P.) course offerings and harder to assess the presence of deep understanding.

The studies discussed above operationalized rigor in part by examining alignment between curriculum and state standards. In Philadelphia, the District's Core Curriculum is aligned with state standards, but respondents saw the Core Curriculum's connection to rigor in different, sometimes conflicting,

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Principals' Definition of Rigor

- "Cognitive tension"
- Students successfully complete college
- A.P. courses
- "When you ask questions that make kids think more deeply"
- "Meaningful projects that *build* towards a deeper understanding"
- "Holding high expectations…and pushing them to meet those expectations…but also supporting and scaffolding so students can reach (the goal)"
- "Implementation of our Core Curriculum, full implementation…with fidelity"

ways. At one high school, a teacher said that rigor means "adhering to the Core Curriculum." Another teacher at the same school said that it was important instead that education be "challenging on every level….having high expectations and keeping them high. I don't teach to the Core Curriculum. I don't trust it. I think that it's degrading."

While it is reasonable that different schools may have varying definitions of rigor that reflect their individual school context and mission, dialogue about, and development of, shared understandings among educators *within* schools is important. Galiatsos notes:

> *Across the nation, one of the biggest challenges facing high schools is creating and maintaining rigorous curricula and instruction. In many cases, they vary widely not only from school to school, but also from classroom to classroom. Often there is a lack of shared understanding of what constitutes high-quality teaching and learning.*[72]

Developing such shared understanding takes time. When New Visions discovered a lack of shared understandings of instruction in New York City, they relied on professional development and started cross-school teacher networks to help educators develop content knowledge and instructional expertise.[73] Many of the educators at Philadelphia's small high schools, however, had not had opportunities to develop shared instructional knowledge and expertise within or across small high schools. Recognizing the need to develop shared understandings of rigor, one principal noted that her staff would be discussing this question at a professional development in the near future. She said, "We need to come to some common understanding."

Building Rigor

Most principals and teachers interviewed felt that more work was needed to increase rigor in their small high school. Principals and teachers interviewed identified four key strategies for increasing rigor.

We hypothesize that educators' definitions of rigor would be similarly diverse in a sample of large schools. Across and within admission categories and start-up models, there was also wide variation in educators' assessments of rigor at their schools. However, some of the new schools which had received planning time seemed to have the most developed approaches and shared understandings.

The approaches to increasing rigor offered by the educators centered around four areas, often echoing the quality of instructional systems index which PSA linked to student performance. The bulleted items below stem from our data; related items from the New York study are listed in italics.

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[72] Galiatsos, S. (2006). *Reforming high schools: Lessons from the new century high schools initiative, 2001-2006.* New York City: New Visions for Public Schools, 16.

[73] Galiatsos, S., 2006.

- Building shared school culture *(staff agreement on educational focus)*
- Strong leadership *(effectiveness of principal leadership)* and committed staff
- Providing opportunities for teacher collaboration *(professional collaboration on instruction)*
- Allowing flexibility and teacher influence *(teacher influence on school policy)*

Below we elaborate on the four approaches to increasing rigor drawn from our interview data.

Start-up advantages, including the ability to select staff, provided greater opportunity for faculty to develop shared understanding of rigor.

Shared School Culture

Brand new schools start-up processes were helful in developing a shared school culture.

New schools generally did have more opportunity to develop common understandings of rigor and shared philosophies of instruction than did conversion schools. Advantages inherent in new schools' start-up process meant that new schools could create their approaches to pedagogy, curriculum, and rigor from scratch and then hire staff and structure programs aligned with that vision. Planning time and the early hiring of principals provided the possibility to develop and implement this vision.

Teachers at small schools, including neighborhood schools, were more likely than teachers at large schools to indicate that their school was building a culture where teachers set high standards for their own work and were committed to improving their teaching.

Teacher survey data revealed that at small neighborhood high schools 61% of teachers reported that most or all of the teachers in their school were trying their best to improve their teaching; this is significant when compared to 46% of teachers at large neighborhood high schools. (See **Figure 6.1**.) Sixty-four percent (64%) of teachers at small neighborhood high schools said that most or all of the teachers in the school set high standards for themselves, compared to 46% of teachers at large neighborhood high schools. (See **Figure 6.2**.)

Teachers emphasized that creating common understandings and shared culture are important to creating rigor.

According to a teacher at a new school, "Because of the small staff, [being] hand-selected and a new school, we all share an idea of what is rigorous." This teacher referenced how start-up advantages, including the ability to select staff, provided greater opportunity for faculty to develop shared understanding of rigor. In contrast, a teacher at a conversion neighborhood high school said, "It's very individual. I don't think there's an overall educational or academic culture that permeates the whole school." A teacher at the same school cited the lack of up-front planning time as an obstacle to developing

rigor. "The other small schools had a year of lead time. We did not have that kind of planning time. The transition was really rushed and done hastily. The theme and mission need work to be clearly defined." Thus, while teachers across school types indicated that shared culture and understandings could provide an important foundation for instructional change, the teachers at schools without this foundation cited this gap as an important barrier to working together to improve instruction.

Leadership and Staffing

According to teachers, the process of building a shared culture needed to be supported by school leaders.

Many teachers emphasized the importance of having a principal who is an instructional leader and can help a school move from vision to reality. A teacher at a conversion neighborhood high school described the impact of a *lack* of leadership: "We can come up with a wonderfully clear vision and mission. If we do not get leadership, we won't get what we need [to make it happen]."
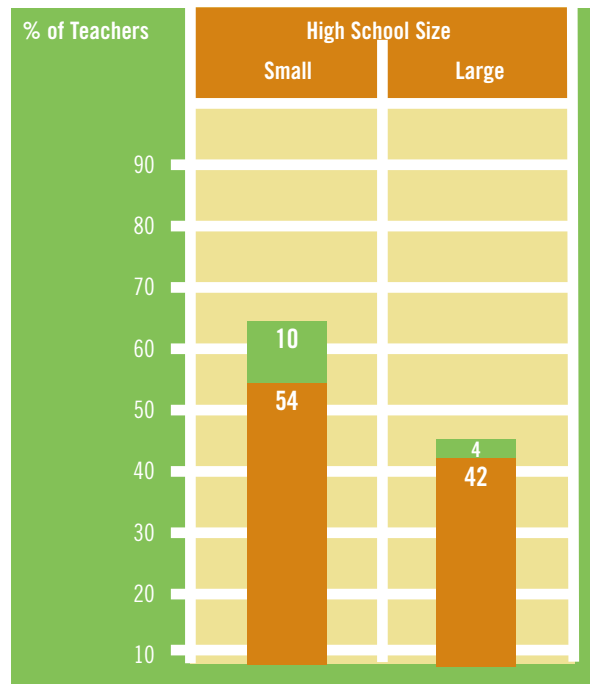
Figure 6.1 **How many teachers at your school are really trying to improve their teaching?** (Neighborhood High Schools)
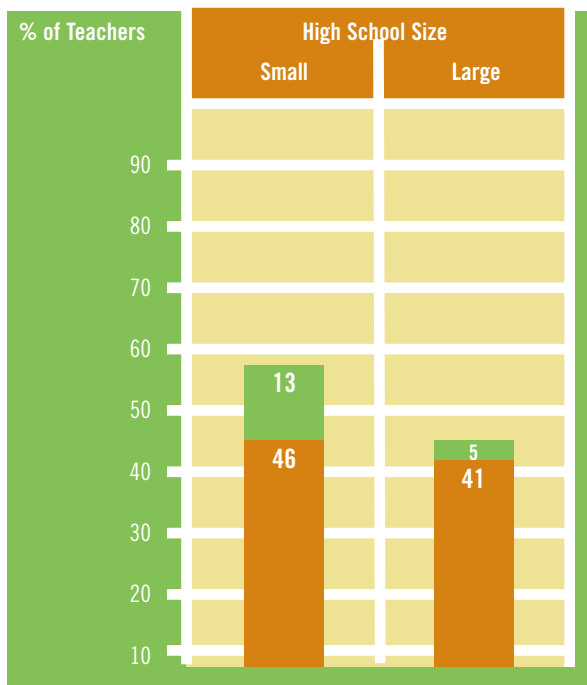
Source: School District of Philadelphia
N= 1521

Figure 6.2 **How many teachers at your school set high standards for themselves?** (Neighborhood High Schools)

Source: School District of Philadelphia
N= 1521

Teachers at the five schools where we conducted in-depth research described a mix of experiences with principals. At the two new schools, teachers described a facilitative leadership style. "[Our principal] has an open door policy…You can give [the principal] an idea and [the principal] will implement it the next day." At another school, teachers described a principal pulling people together to work toward a common vision. At two of the conversion schools, teachers perceived that their principal did not have the experience or time to be an instructional leader. One teacher said:

> There are some instances when our hands are tied by an administration that isn't an instructional leader. Someone who doesn't have the experience or the type of personality I guess… . Instructional leadership is sorely lacking so we're all beating our heads into the wall and really can't do some things without support. That's a real big issue, especially in a school where we have a lot of young, new teachers.

Many teachers noted that the lean staffing that often characterizes small schools negatively impacted principals' ability to provide instructional leadership. Researchers have corroborated "the increased workload associated with having a smaller staff" once schools are restructured.[74] Teachers both at schools with and without an assistant principal (A.P.), spoke of the importance of this role. A teacher at a new small citywide high school said, "The District was reluctant to give us an A.P. because the school was small. But without an A.P. we would be just treading water. Having good administration is key to a good school."

Teachers at small high schools were more likely than teachers at large high schools to say their school had positive instructional leadership and effective administrator-staff collaboration.

While there was variation in satisfaction with school leadership in our qualitative sample, overall teachers at small high schools appeared to be more satisfied with their school leadership. At small high schools, 86% of teachers agreed that their school leadership sets high standards for learning versus 73% of teachers at large high schools. At small *neighborhood* schools, 84% of teachers agreed with this versus 72% of teachers at large *neighborhood* high schools. (See **Figure 6.3**.)

Teachers at small neighborhood schools were also more likely to say that staff at their school work with administrators to make their school work. Seventy-two percent (72%) of teachers at small *neighborhood* high schools agreed that the principal, teachers, and staff collaborate to make their school run effectively, compared to 62% in large *neighborhood* high schools. (See **Figure 6.4**.)

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[74] Stevens, W. D., 2008, 5.

Teachers believe staff needs to be committed to school mission.

Teachers also articulated the importance of staff being committed to the small school model and their individual school mission, particularly because, as noted above, teachers at small high schools are often stretched thin. A consultant working on curriculum with one small high school described the issue:

> *You have a limited number of teachers and if teachers are not committed to the small school approach and don't get on board, that's a huge problem. We have 14 teachers and if half are doing the minimum [you're in trouble]. Fortunately we have a lot of strong teachers.*

Teacher Collaboration

Teachers in small high schools were more likely to report collaborating with other teachers during the prior 12 months than were teachers in large high schools.

Figure 6.3   The leadership at this school sets high standards for learning (Neighborhood High Schools)

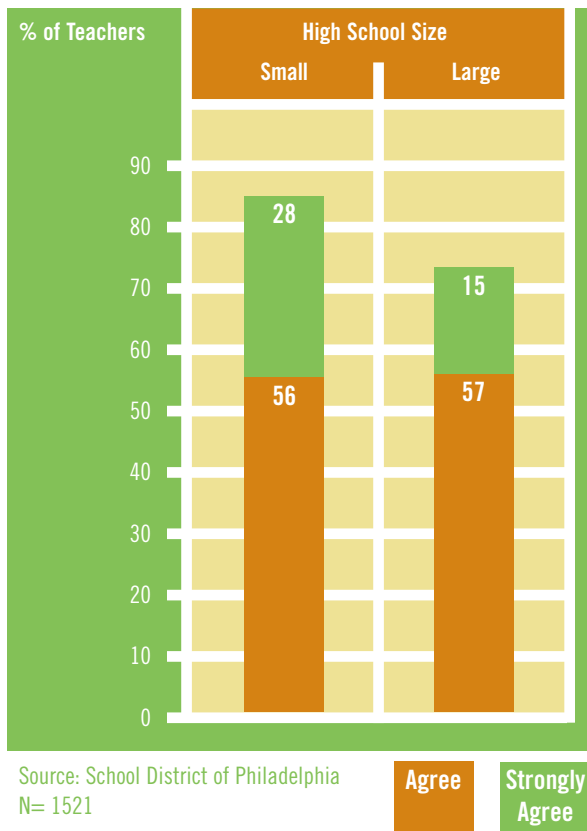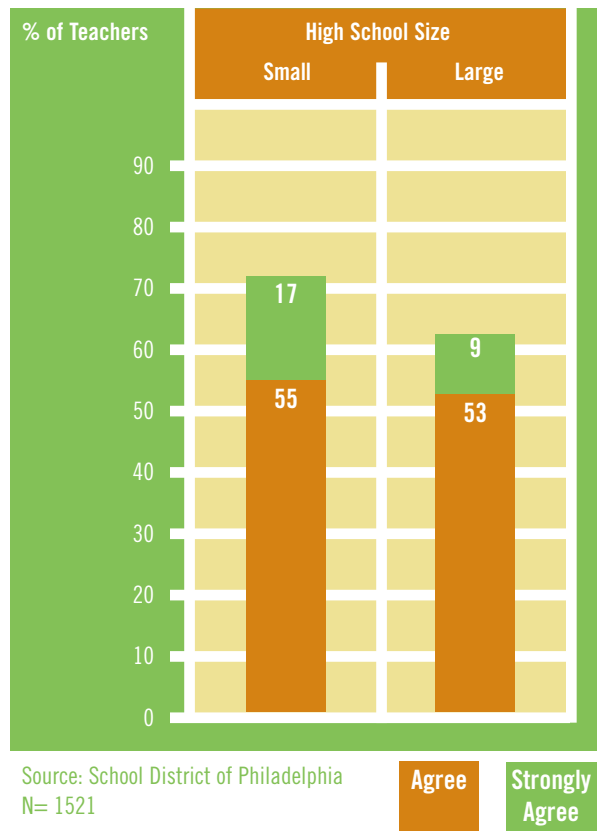| % of Teachers	High School Size	
	Small	Large
Strongly Agree	28	15
Agree	56	57

Agree   Strongly Agree

Figure 6.4   Principal, teachers, and staff collaborate to make school run effectively (Neighborhood High Schools)

% of Teachers	High School Size	
	Small	Large
Strongly Agree	17	9
Agree	55	53

Agree   Strongly Agree

While our interviews suggested variation in the extent to which small high schools implemented common planning time, teacher survey data indicate a difference in favor of small schools in terms of frequency of teacher collaboration. Thirty percent (30%) of teachers at small neighborhood high schools said they had collaborated more than five times in the past 12 months, compared to only 23% of teachers at large neighborhood high schools. (See **Figure 6.5**.) Twenty-seven percent (27%) of teachers in large neighborhood schools reported that they never collaborated with colleagues, compared to only 16% at small neighborhood high schools.

The teachers and principals interviewed cited common planning time as a key to developing rigor, whether they had common planning time or not.

Educational experts agree that quality instruction requires "time for teachers to plan and work across content areas."[75] As Louis and colleagues point out, "Research on school effectiveness and school change suggests that formally scheduled time is necessary to implement significant change agendas and to maintain innovation."[76]

At a conversion neighborhood high school that did not have common planning time (only weekly faculty meetings), a teacher said, "There's not nearly enough planning time. We needed to plan interdisciplinary units for [our theme] and the Core Curriculum, but there was no information on how to do it or time to talk about it." Teachers at this school described collegial relationships, but without dedicated time, they were not able to build on these relationships to impact instruction.

Though teachers at all five of our in-depth research schools told us that they wanted common planning time, only three of the five schools had common planning time when this research began in 2006-07. However, in 2007-08, with a new principal on board, a fourth school implemented common planning time. In early 2008, the principal of the fifth school expressed plans to implement common planning time in 2008-09. These changes suggest that schools are recognizing the importance of common planning time. Furthermore, the changes indicate the important role the District can play in creating conditions that support rigorous teaching and learning. One principal told us that the school was pursuing the option of "banking time"[77] for common planning due to the encouragement of District central office staff to do so. Policies at the central office help to shape what can happen at schools and impact schools' ability to build rigor.

[75] Next Step Associates, 2006, 23.

[76] Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, *33*, 762.

[77] When schools bank time, teachers get small amounts of additional non-teaching time on a frequent basis (e.g., 15 minutes each day) that is "banked" to create an amount of time (e.g., an hour once a week) that can be used for meeting together.
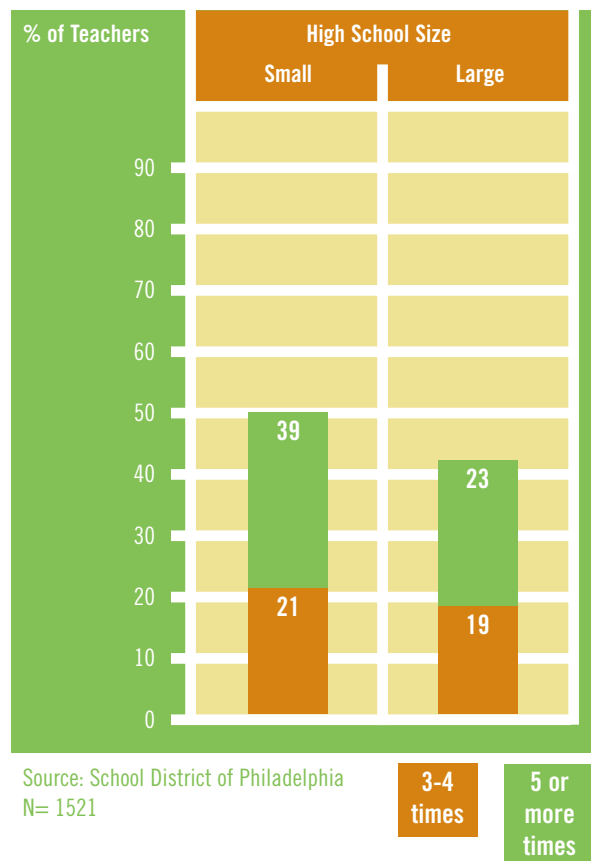
Schools in the study used their common meeting time to focus on instruction. One school with weekly planning time and many student behavioral needs largely used its time to address student needs through the District's Comprehensive Student Assistance Process (CSAP). "There's not a lot of common planning time when it comes to instruction," said one principal. The school principal planned to bank time the next year to "talk about developing good quality instruction." One school described the time as split between CSAP, small group, and whole group teacher meetings.

The existence of common planning time alone does not guarantee systematic school improvement. For example, common planning time can be used for a range of academic, social, and behavioral support activities such as CSAP, or for administrative tasks and updates.

While these processes and tasks are important, if most of the common planning time is used for CSAP or administrative work, rather than to focus on instructional issues, this limits the possibility for instructional change. As

Figure 6.5 **In the past 12 months, how many times did you particpate in regularly scheduled collaboration with other teachers on issues of instruction?** (Neighborhood High Schools)

% of Teachers

High School Size
Small | Large

Small: 39 (5 or more times), 21 (3-4 times)
Large: 23 (5 or more times), 19 (3-4 times)

3-4 times | 5 or more times

Stevens notes, the combination of teacher collective work in professional communities, strong principal leadership and teacher influence on this work operate together to impact instruction across schools.[78] Limited teacher meeting time forces schools to choose one necessary activity over another.

In two of our five intensive research schools, the faculty was able to implement common planning time due to the involvement of a key partner to the school.

At these two schools, partner staff worked with the students for one 50-minute period or one afternoon per week which allowed the principal and faculty to meet together for planning purposes without requiring that the teachers "bank time" elsewhere during the week. These two partners were unique in that they had staff resources to directly mentor and teach students on a weekly basis during the school day. In both cases, the partner and their work with students was key to the theme of the high school. However, other themed high schools with theme-based partners in our study did not have this option, as the partnership was not designed for partner staff to work directly with students (nor would there have been adequate numbers of partner staff to make this an option).

Flexibility & Teacher Influence

Research has identified district flexibility and increased local school control in areas such as hiring, school scheduling, budgets, professional development, and instruction as important for creating successful schools.[79] One study found that teacher influence in these areas is one of three features correlated with gains in student achievement.[80] Another study of successful small urban high schools found that two important components of the schools' success were (1) developing strategic school-level designs to implement particular instructional models; and (2) flexibility from traditional administrative practices and contracts around hiring, staffing, and time.[81] District flexibility then allows individual schools to implement appropriate instruction-related designs.

Teachers and principals noted that "one-size-fits-all" policies can hinder educators' ability to create rigorous learning environments and to fulfill their school's mission. Brand new schools had more flexibility than conversion schools.

District flexibility allows individual schools to implement appropriate instruction-related designs... Brand new schools had more flexibility than conversion schools.

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[78] Stevens, W. D., 2008.

[79] Shields, R., & Miles, K. (2008). *Strategic designs: lessons from leading edge small urban high schools*. Watertown, MA: Education Resource Strategies; Stevens, W. D., 2008; Tung, R., & Ouimette, M. (2007). *Strong results, high demand: A four-year study of Boston's pilot high schools*. Boston: Center for Collaborative Education.

[80] Stevens, W. D., 2008.

[81] Shields, R., & Miles, K., 2008.

As a teacher at a conversion neighborhood school said, "If the district is really serious about small schools, they need to rethink their formula and how they allocate money, funds, and resources." Educators wanted more flexibility to adapt or add to standardized curricula and assessments in order to meet their school's context-specific needs related to theme curricula, school mission, etc. With District permission, some of the new schools added to, or altered, aspects of the Core Curriculum. One new school was able to use Benchmark projects, rather than District assessments. Another was able to offer two social studies courses in ninth grade because this fit their theme. The new schools' advance planning time enabled them to formulate ideas about how and why to adapt the Core Curriculum to fit their school mission.

Banking time for professional development provides one example of District flexibility. Once the District sanctioned this as a strategy, it allowed several schools in our study to schedule weekly common meeting time, potentially allowing teachers more influence in instructional designs and in school decisions in areas including curricula and pedagogy.

Figure 6.6 **Teachers have opportunities to influence what happens in this school**
(Neighborhood High Schools)

% of Teachers	High School Size	
	Small	Large

Small: Strongly Agree 13, Agree 63
Large: Strongly Agree 8, Agree 51

Source: School District of Philadelphia
N= 1521

Agree   Strongly Agree

Teachers at small neighborhood high schools were more confident of their ability to influence their high schools.

District teacher survey data indicate that teachers at small neighborhood high schools were more likely than teachers at large neighborhood schools to perceive that they could exert influence within their high school. Seventy-six percent of teachers in small neighborhood schools agreed or strongly agreed that "Teachers have opportunities to influence what happens in this school," versus only 59% of teachers at large neighborhood schools. (See **Figure 6.6**.)

Obstacles to Rigor

The teacher survey data indicate that, from teachers' perspectives, small schools are doing a better job than large schools in creating a foundation for rigorous learning environments. However, in interviews, teachers and principals at small schools cite a number of obstacles to increasing rigor.

In interviews, teachers talked about a lack of flexibility around curriculum, the need for their school to be able to select and hire its own teachers, and the sense that teacher allocation formulas do not fit small schools. The lack of time for teachers to meet was also a challenge, as described above. Another prominent obstacle was classroom management; despite improved relationships, principals or teachers at some schools still cited student behavior as a challenge. Lastly, principals and teachers at three conversion schools cited challenges related to teacher quality, including the high rate of teacher turnover and the ongoing need to provide intensive support to new teachers.

This section has outlined four school- and district-level factors named by small school teachers and administrators as important to building rigor:

- shared school culture
- strong leadership and staffing
- teacher collaboration
- flexibility and teacher influence

These were present to varying degrees in the different small schools we studied.

At some schools, individual principals or groups of educators developed additional strategies for strengthening instruction. For some, this included a focus on the Core Curriculum and other existing District tools. At one conversion citywide admission school, for example, the principal wanted teachers to implement strategies—like word walls or vocabulary lessons—that linked to the Core Curriculum. Schools also made efforts to develop curriculum that linked to a school theme. One new special admission school in particular engaged teachers in an ongoing intensive collaboration around issues of

school pedagogy, curricula, and mission. As we examined strategies schools used to increase rigor, we found that partners played a prominent role at some schools. This will be discussed in more detail in the following section.

The Role of Partners in Promoting Rigor

In many cities, partners played an important role in supporting the development of new, small high schools. Below we examine the role of partners in relation to rigor and instruction. While partners' role in Philadelphia was not as comprehensive as in other cities, we do find significant examples of partnerships supporting the development of rigor.

The Range of Partner Roles

School partners provide a wide range of services and resources – from one-time events to ongoing deep involvement throughout the school year.

As noted above, partners' work can provide meaningful support for, and input into, strengthening curriculum and instruction at small high schools, but only some partnerships achieve that level of involvement. Other partners provide non-academic services that are focused on climate or on students' social or behavioral needs.

As discussed in Chapter 2, we are using "partner" to indicate a wide array of contractual and non-contractual relationships with both individual schools and the District as a whole. This discussion of partners' roles stems from data collected during spring 2007 and winter 2008 (rounds two and three of the research), so it does not include transition managers whose contracts were no longer in effect by then.

The list below provides a typology of the range of partners in terms of organizational type, services provided, funding sources, and the impetus for beginning the partnership.

Some partner efforts support individual teachers or provide enrichment for specific groups of students.

A number of programs work with interested teachers or students spread across a number of schools. Some provide professional development to teachers or send "experts" into the classroom to focus on specific areas such as playwriting or biology. Another model is to involve students in off-site programs. Partners might be universities which provide dual enrollment

Types of Partners

- Colleges and universities
- Non-profit social service agencies
- School reform organizations
- Museums
- Arts groups, e.g., theater groups
- Hospitals, businesses and other internship sites
- Individual volunteers
- For-profit education companies (e.g., Princeton Review, Kaplan K12)
- EMOs (educational management organizations)
- ROTC, National Guard
- Faith partners
- Community-based organizations
- Community-organizing groups

Programming/Services

- Dual enrollment programs
- After-school programming
- Professional development/teacher mentoring
- In-class support and tutoring
- Service learning
- Activities for students during teachers' common planning time
- Advocacy with District
- Curriculum development
- Advisory boards
- In-school enrichment programs
- Dispute resolution programs
- Support to student government
- Career workshops

Funding Sources

- Title One funding, e.g., for professional development services
- Grant money
- State funding
- National Science Foundation
- School District of Philadelphia (with various funding streams)
- Volunteer time
- Contracts with school or District

Partnership Impetus (multiple may be relevant)

- Mission of partner
- School theme/focus
- Personal connections with partner organization (e.g., of principal or staff)
- Designated District or partner funding

opportunities for students to take college courses. Other partners run programs that provide academic enrichment or support for college-going after school, on weekends, or during the summer. Some of these programs are very selective and may only draw two or three students from any given high school. Some colleges, universities, and faith-based organizations send volunteers to work in classrooms tutoring or assisting teachers. These programs can be very useful for the individuals they serve. They are less likely, however, to impact a critical mass of teachers and students and build overall school capacity, which could then enhance teaching and learning across the school.

Strategies for Rigor

A number of strategies schools used to enhance rigor school-wide relied on intensive collaboration with partners. Schools with clear themes seemed well-positioned to attract this type of partnership.

Much of the partners' engagement with their schools took place through provision of targeted programs or services like those described above. Yet we also found that when schools did have programs or strategies with a school-wide focus, these did often involve partners as well. Partners at one conversion neighborhood school helped make teaching more interactive by providing coaches that engaged in an ongoing cycle of teacher observation and feedback. At another conversion neighborhood school, the principal welcomed the opportunity to partner with the Coalition of Essential Schools, a reform organization that brought expertise to the school's efforts to increase rigor. Partner organizations worked with teachers at a conversion special admission small school to write new curricula linked to their theme and also mentored new teachers. Finally, a partner's facilitation of common planning time at one school made ongoing reflection and collaboration possible. We found that significant engagement with instruction was most likely for lead partners and also if the school had a clearly defined theme and/or pedagogical approach.

These partnerships which worked more intensively with teaching, learning, and curriculum at the school level were more likely to build school-wide capacity or to develop interventions that could become rooted in school culture. Such broader and deeper partnerships and interventions are more sustainable. Some schools are creating their own partnerships to improve rigor in their school by bringing in outside partners with extensive experience working in schools. It is a challenge for individual schools to fund these programs. In one case, an external management organization (EMO) provided professional development and teacher-coaches as part of its work with a school.

Schools with clear themes seemed particularly able to attract strong partners who were committed to their theme or focus and brought related expertise. Of course, in the case of several of the new schools, partner organizations and the District collaborated from the beginning to develop a new school that would relate to a theme. However, not all thematically-focused schools attracted partners. One arts-themed school had very few partners in the arts; those they did have provided extracurricular opportunities or worked with individual teachers and their classes. None of their partnerships were both curricular and school-wide. Its status as a neighborhood conversion school made it less high profile and likely less noticeable to potential partners. Some teachers at this school attributed this absence of partners to a lack of capacity at the school level, due in part to the many challenges this neighborhood con-version school faced. The principal's role is also key in attracting and keeping partners. The arts school went through leadership transition and may now be better positioned to develop partnerships.

Sustainability of Partnerships

Questions about the long-term sustainability of partnerships cut across all the partnership categories.

Some partnerships are designed for short-term purposes, but schools and partners often faced challenges in sustaining partnerships they envisioned as long-term. Sometimes a funding source ended. Personnel changes for either the District or the partner could move a partnership from strong to shaky. At one non-profit, new leadership questioned why the partner was working so closely with a school. Or, when a teacher with personal connections to a part-ner departed, so did the impetus for the partnership.

Partnerships were created and sustained in a variety of ways. Some individu-als volunteered, e.g., a consultant and advisory board member who worked intensively on teacher support and curriculum development at one school. In some cases, the District central office financed partnerships or programs, e.g., dual enrollment programs and occasionally other programs. In other cases, schools scraped together money for partnerships out of their own budgets or received grants.

Reciprocity is one factor that may contribute to sustaining partnerships. New Visions notes that one consistent element in all of the successful collaborating partnerships in the New Century High Schools Initiative is that "the relation-ship is built on the strengths of both the school and the organization and both benefit due to the partnership."[82] As one principal put it: "This is critical: part-nerships can't be K-12 schools with their hands out. They're not sustainable that way….Partnership has to be something that does enrich both institutions."

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[82] *New visions for public schools: Characteristics of lead and collaborating partners in the new century high schools.* http://www.newvisions.org/schools/downloads/partnercharacters.pdf

Summary

There are indications in our data that Philadelphia's small schools were moving in the right direction to build rigor. The schools had higher rates of algebra passage. Teacher survey data indicated that some key conditions for improved achievement were more common in small than large neighborhood schools, as well as in small vs. large schools across admission categories. These conditions include a climate that supports teaching and learning (e.g., perceptions of safety, teacher collaboration, and student engagement). These data are early indicators of potential success in these schools and many questions remain about how they will continue to evolve.

Our data indicate the importance of teachers and administrators within schools having shared understandings of their school mission, of rigor, and of what good instruction looks like. They need time and leadership to develop these shared understandings, as well as time to collaborate in an ongoing way by looking at data, observing in each other's classrooms, and problem-solving about challenges they face in instituting their vision of instruction and rigor.

Interviews with principals and teachers at small schools produce clear recommendations about what is needed to move to the next level of rigor in their schools, and their ideas are supported by research in other cities about building rigor. They identify the following as necessary to enhance rigor: building a shared school culture, leadership and appropriate staffing, teacher collaboration, flexibility and teacher influence.

Partners have played an important role at some schools, when conditions align to facilitate this, including funding, school leadership, theme, and/or school and partner capacity. In many cases, partners collaborate with a school on a specific program. In a few cases, they have had significant impact on instruction. Partnerships are often fragile and depend on funding, personnel, and priorities at both the school and partner organization, and/or on District support.

"This is critical: partnerships can't be K-12 schools with their hands out. They're not sustainable that way. Partnership has to be something that [enriches] both institutions."

- A Principal

Chapter Seven
Conclusion and Recommendations

Between 2003 and 2008, the School District of Philadelphia initiated the creation or conversion of 25 small high schools. This effort took place during a time of overall scarce resources in the District and without significant outside funding. The District did succeed in making small high schools more available to a broader range of students. Whereas in the past, small schools existed only in the most selective special admission category, after this round of small school creation there were nine citywide admission small high schools and ten neighborhood small high schools without admission criteria. These, along with the six new or conversion special admission schools and the six existing special admission schools brought the total number of small high schools in the District to 31.

The School District of Philadelphia, along with the City, has prioritized the goals of reducing the high school dropout rate and increasing students' post-secondary readiness. Our research took place early in the life of these schools, but these initial findings show that small high schools appear to be a strategy that offers promise in addressing these goals. And, in particular, this research indicates that creating small neighborhood high schools may provide a foundation for addressing the climate and academic challenges that plague large neighborhood high schools.

However, the lack of both resources and systemic planning limited the effort's potential. This initiative moved forward without a locus of operations or accountability in the District, an overall plan to ensure access and equity, or a coherent partnership strategy. These limitations contributed to a lack of equity in start-up. Conversion and neighborhood schools, the schools that needed the most resources and support, received much less than was needed for a robust start-up.

Despite the creation of more small schools, there still are not enough high-quality high school options for students and families. Student demand for admission to schools other than their neighborhood high school outstrips the supply.[83] Approximately three-quarters of District eighth grade students apply to high schools other than their neighborhood high schools, but only half the students who apply get accepted to any school.

Key findings about relationships, climate, student engagement, and achievement at small schools include:

→   Across the different admission categories of District high schools, small schools were characterized by positive relationships and climate. At all small schools in the qualitative sample, interviewees reported positive relationships between and among teachers and students. Students at all small

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[83] See also the forthcoming RFA report *The Transition to High School: School Selection and Freshman Year Interventions in Philadelphia* for further discussion of this issue.

high schools were less likely to be suspended. On the District teacher survey, teachers in small schools reported greater feelings of safety, as well as stronger and more respectful relationships with students.

→ There are indications that small high schools are moving towards increasing student engagement and creating more rigorous teaching and learning environments. In some schools, teachers and students interviewed reported that the improved climate is leading to better conditions for teaching and learning. In small citywide schools, in particular, fewer students were chronically absent, late or truant compared to large citywide schools. On the teacher survey, teachers at small schools were more likely to report that their school leadership set high standards for teaching and learning, that they collaborated with other teachers, and that all teachers at their school were trying their best to improve teaching.

→ Across admission categories, students were more likely to pass algebra at small high schools. When comparing large and small citywide high schools, there was an especially strong differential in favor of algebra passage at the small citywide schools.

→ Because of their start-up advantages (e.g., up-front planning time, the ability to select and hire teachers), brand new schools tended to be further along than conversion schools in terms of building a shared culture of teaching and learning. At some brand new, and a few conversion, schools partners played a strong supportive role in building school capacity to transform teaching, learning, and curriculum.

→ At some schools, outside partnerships have played an important role in building rigor, e.g., by assisting with curriculum development, providing teacher coaches, or providing teachers with common planning time.

At the same time, not all findings were positive.

→ Small neighborhood high schools *and* large neighborhood high schools have high percentages of students with alarming rates of absenteeism. Small neighborhood high schools have a higher rate of students with serious tardiness problems than do large neighborhood high schools.

→ Teachers and administrators at most small schools felt that more work was needed to make schools rigorous and to improve teaching and learning. Even though most schools were not yet rigorous enough, teachers and administrators could articulate what was helpful in building rigor and what next steps were needed. They identified the following as key to building rigor:

→ creating a shared school culture with shared understandings of school mission and instruction;

→ having a strong school leader and staff committed to the school's mission; common planning time for teacher collaboration on instruction and for teachers' work with student data; and

→ providing flexibility for the school to make decisions in areas such as rostering, the schedule of the school day, creating common planning time, staffing, and the use of the Core Curriculum.

Recommendations

The District should continue to support and strengthen small schools within the context of its overall high school reform efforts.

Continuing to support small high schools makes sense. The District and its staff have already devoted considerable resources, thought, and energy to creating these high schools. Students are showing high interest in entering these schools. Our early research indicates that the small high schools are showing signs of progress and possibility. And, finally, assuming that schools receive solid start-up support, creating small neighborhood high schools, i.e. schools with no admissions criteria, appears to be a strategy with some promise for serving underprepared students. A dedicated small schools office within the central office, such as those created in Oakland or Chicago, could better coordinate policy and supports for, and knowledge sharing among, schools.

The District needs to adopt an explicit strategy for equitably distributing resources and providing high quality education options for all students.

→ Recent District strategic planning documents mention a portfolio of schools model.[84] Equity is one key value and goal of a portfolio model. The District's 2009 strategic plan cites the goal of a system where "opportunities are made equal"[85] with "equitable allocation of all District resources"[86] as a guiding principle. Whether a portfolio of schools approach is adopted or not, the District needs to monitor data across all types of schools to assess progress towards the goals of reducing dropout and closing the achievement gap. The District needs to make changes where necessary to avoid inequity.

→ Equity needs to be a key factor as the District makes decisions on overall high school reform as well as changes at specific schools. In particular, there should be a focus on providing adequate resources and support for change at neighborhood schools.

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[84] For example, the draft report by the Work Group on Interventions for Successful and Failing Schools, generated in January 2009 as part of the District's strategic planning process.

[85] School District of Philadelphia. (2009, April). *Imagine 2014: Building a System of Great Schools.* Philadelphia: School District of Philadelphia, 8.

[86] School District of Philadelphia, (2009, April), 9.

→ One equity concern raised by some is that small schools may cost more per student to operate than do large schools. Research has shown that this is not necessarily the case and that when small schools operate effectively, their cost per graduate is lower because they graduate more students.[87] Collecting data that shows cost per graduate would help assess the costs and benefits of schools of varying sizes.

→ There are a large number of students who are not admitted at any of their high school choices. One strategy to address this could be to increase the number of high-quality school choices without selective admission criteria or widen the kinds of criteria used.

Schools need the tools, resources, and flexibility to focus on instruction.

→ Conversion schools in particular need the supports and the planning time they did not receive up-front, so that they can work more intentionally on school mission and building rigor. The District and schools could draw on partners in this effort; however, individual schools need to play an active role in selecting their own partners.

→ Schools need the ability to select their own teachers in order to maximize buy-in to the school mission or theme.

→ Small schools need flexibility with accountability in terms of rostering, scheduling the school day, and adapting the Core Curriculum.

→ Common planning time (i.e., for teacher collaboration on instruction and analysis of student data) is key for school improvement. The District is facilitating the creation of common planning time. It can also encourage schools to use the time to focus on instructional issues and can help schools to share best practices for scheduling and using the time across schools.

Schools can continue to develop school climate and rigor by being intentional about capitalizing on the opportunities provided by small size.

Several small schools in the study developed intentional strategies to capitalize on the opportunities provided by size to personalize learning and nurture a sense of community and rigor in the school. Four-year advisories, summer orientations, theme-oriented school-wide activities all help to deepen the sense of community and belonging students feel in their school. Thoughtful use of common planning time to discuss student data, instruction and develop a common vision of rigor for the school can both impact teaching and learning and help build a sense of shared school culture and collegiality among faculty.

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[87] Lawrence, B. et al., 2002; Bigler, S. et al., 2002.

This research took place relatively early in the life of these small high schools. Future research is needed to assess the ongoing small schools effort as part of the District's overall high school reform strategy and to scale up promising strategies.

Research could contribute to ongoing reform by:

→ Looking at outcomes at small and large high schools in all admission categories beyond this very initial period.

→ Conducting further investigation of the reasons for some of the differences reported here, e.g., the lower suspension rates at small schools, the higher rates of algebra passage at small schools, and the higher tardiness rates at some categories of small schools.

→ Investigating successful models for building rigor and producing better student outcomes and disseminating what is learned throughout the District.

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Appendix A
Research Methods

Going Small is a multi-method study. School District archival data was analyzed to answer questions about student outcomes and trends in high school enrollment and application. Several rounds of qualitative data collection and analysis were conducted to answer questions about school context, start-up and early implementation, stakeholder perceptions and partnerships.

Student Outcomes Analysis

For this analysis, we consider only first-time ninth grade students attending non-charter public high schools. We focus on first-time ninth graders because previous research has shown that the freshman year is critical for predicting eventual high school graduation. We analyze a variety of student outcomes by school size and school type (special admission, citywide admission, and neighborhood) to determine whether size and/or school type matter for student outcomes in the District. Then, we conduct subgroup analyses on all outcome measures to determine differences by race/ethnicity, gender, special education, and English-language-learner (ELL) status.

All data presented is descriptive; it describes what is going on in the study cohort of 2006-07 first-time ninth graders in the District. The analyses presented in this report are primarily frequency tables, which report the percentages of students in a school type category for each outcome of interest. Additionally, some of the analyses are presented using the median school within each school type category to ensure that one outlier school does not overly drive the comparisons of small vs. large schools.

Sample Size

There were 16,167 first-time ninth graders in the District in 2006-07. Of those students, 15,112 had enrollment, attendance, suspension, special education status, and demographic data (gender, race/ethnicity). There was substantial missing data for the ELL status variable. Some students were entered as "." (missing) and others were entered as a zero value; all missing values were excluded from our analysis so the sample size for all ELL analyses is 11,633.

Additionally, 78% of the first-time ninth grade students were enrolled in at least one math course in 2006-07. The math course analysis is based on the 12,518 students who were enrolled in math. Twenty-two percent of students did not appear to be enrolled in math during the year and were missing math grades for all marking periods. We do not know why this was the case.

School Size and Type

We constructed variables to simultaneously represent school size and type, breaking each school type into large and small schools for a total of six school categories (small special admission, large special admission, small citywide, large citywide, small neighborhood, and large neighborhood). The threshold for small schools was set at a total enrollment under 700 students in the study year, based on the District's definition.

Students sometimes attend more than one high school in a school year. For all analysis by school type, we assigned each student to the school that they attended for the most number of days during the 2006-2007 school year.

Disciplinary and alternative schools were not included in the study.

Math Course Enrollment and Passage

Students receive three marking period grades as well as a separate final math grade; our analysis uses the final math grade. Thirty students in the entire sample received a final math grade from more than one school, and these students were omitted from the analyses.

Controlling for first-time freshman status, we analyze patterns of math course-taking and course grades. We focused on enrollment and passage in algebra and in courses above algebra. We also considered patterns in intensive or strategic math courses. Intensive/strategic math is a specific intervention in the School District of Philadelphia for ninth graders who enter high school below grade level in math, i.e., scoring basic or below basic on the PSSA. Such ninth grade students receive a "double dose" of math by taking both algebra and strategic or intensive math.

Basic Indicators of Student Engagement

We analyzed attendance and behavior indicators to gain a basic understanding of student engagement across school types—using absence, tardy, and suspension rates. We considered students' total number of absences and tardies in their ninth grade year. We also constructed variables for "high absences" and "high tardies" for students with 20 or more absences or tardies during the school yearFor suspensions, we focused on whether or not a student had any out-of-school suspension during the school year.

Subgroup Analyses

- **Race/ethnicity:** We used the four biggest race/ethnic groups in our analyses—

Black, White, Latino, and Asian. Other categories recorded in the District administrative data include American Indian and Other but student numbers in these categories, when broken down by school type, were too small to conduct a meaningful analysis.

- **Gender:** We analyzed gender differences.
- **Gender*race/ethnicity:** We analyzed gender*race/ethnicity interactions.
- **Special education:** We defined special education as those students in the District data who were listed as "served," "unserved," and "exited." The District classifies special education students as those who are "served" and "unserved" but we thought it was important to also include students who were "exited" at some point during their ninth grade year.
- **English-language-learner (ELL):** We used the dichotomous District classification of ELL status in our analysis.

Applications & Enrollment Analysis

Application and enrollment data were analyzed for a four year period, beginning with the 2003-2004 school year. The primary analysis for this report, however, used application data for fall 2006 and fall 2007 and admissions data for the 2006-2007 school year. Individual-level data on high school applications and admissions were obtained from the Office of Student Placement and the Information Technology department of the District. These data were merged with student enrollment data obtained from the Office of Research and Evaluation.

The applications analyses included students who were identified as 8th graders enrolled in District schools in 2005-2006 or 2006-2007. The admissions analysis included 8th graders at District schools who were admitted for fall 2006. It did not include students who were in charter, parochial or private schools or outside the District but applying to District high schools for fall admission.

The application database contained information regarding all the high schools to which an 8th grader had applied. An admissions indicator signaled whether the student had been accepted at each school to which they applied. The analysis also compared applications received by schools of different sizes.

Teacher Survey Analysis

We conducted a comparative analysis of the teacher responses on the district-wide teacher survey administered by the District in the spring of 2007

grouping teacher responses by large and small high schools. We then created a subset of responses from teachers at large neighborhood high schools and small neighborhood high schools. First, survey responses from teachers in all small high schools were compared with teachers in all large high schools on a variety of survey items. We then repeated this analysis, limiting the comparison to the subset of responses from small and large neighborhood high schools. Our analysis focused on specific questions that were most relevant to the indicators we identified, which fell into four categories: safety and climate, teaching and learning, school improvement, and student engagement.

Qualitative Methods

There were three rounds of qualitative data collection, consisting of interviews, focus groups and observations during the 2006-2007 and 2007-2008 school years. Most data collection activities involved teams of two or three researchers going to each school.

During 2006-2007, we conducted the following qualitative research activities:

- Fall 2006 interviews with 12 small high school principals and 3 central office staff.
- Spring 2007 in-depth research at 5 high schools, chosen to represent different admission criteria and start-up experiences. In-depth research included 20 interviews with school staff (mainly teachers) and 3 with parents, as well as focus group interviews with 54 students, and 10 school observations.
- Interviews with 15 partners involved at both the in-depth sites and the broader group of schools.

During 2007-2008, we conducted:

- Winter 2008 interviews with 10 principals and 14 partners who work with their schools. Nine of the 10 principals and 3 of the 14 partners were also interviewed in the first round.

The initial group of 12 small high schools chosen for principal interviews was selected based on creating a sample to reflect the diversity of admission categories (special admission, citywide admission and neighborhood) and start-up methods (new and conversion) in the District. Partner interviews in the first round were partners most closely involved in school start-up, largely transition managers for conversion schools and the lead partners at the new schools. We also reviewed District documents related to small high schools including the District's guide to high schools, District and school websites, District press releases, and the District's draft white paper for high school reform.

The five schools chosen for more in-depth research were selected to reflect the range of start-up methods, admission criteria, geographic diversity, and partner involvement. At those schools we sought to interview the building representative, a teacher with a close working relationship with the partner, a teacher or counselor well-informed about applications and admissions at that high school, and a teacher who could speak to the school theme and its role in curricula. School observations included two major categories: (a) the start of the school day and (b) one event or class related to the school theme and/or a partner's work at the school.

During Round Three we returned to a larger group of school principals for interviews. This time, we sought to interview a broader group of partners as well, returning to key lead partners who were still involved, but also interviewing collaborating partners involved in specific initiatives. In particular, we sought to interview partners involved with curricula and instruction.

After each round of data collection, interview notes were completed by referring to the digital recording available of each interview. During and between each round of fieldwork, the team of researchers met to discuss emerging themes and to use them to refine ongoing research and analysis. Interview data was coded using Atlas ti. data analysis software. Coded data was then analyzed to identify important themes and discrepant cases.

Two interim products provided the opportunity to develop and report on initial analyses that could inform the next phase of the research. In winter 2007, we developed a powerpoint *Going Small: Start Up and Early Implementation of Small High Schools in Philadelphia* and presented it to multiple audiences. The initial focus on school start-up highlighted the importance of the brand new and conversion categories as a framework for understanding the experience and outcomes of small schools. In January 2008, *Informing High School Choices: the Progress and Challenges of Small High Schools in Philadelphia,* focused on initial findings from the in-depth school research and, in particular on the role of relationships and personalization at the small high schools. In November 2008, *Teacher Perceptions of Small High Schools* was released. This report drew on findings from an analysis of the District teacher survey.

For the final report, we triangulated data across the three rounds of qualitative research, the teacher survey, and the student outcomes data to present as full a picture as possible of small high schools in Philadelphia.

Authors

Tracey Hartmann, Ph.D., and Senior Research Associate, has worked on a variety of evaluation and policy research projects at RFA, particularly those focused on youth development initiatives for adolescents. She served as co-team leader of this project. Her research interests include school community partnerships, parent involvement initiatives and youth development initiatives which support urban school reform and/or create high quality educational opportunities for all youth. She currently leads several other projects focused on high school age youth including an evaluation of a dropout prevention program and a scholarship guarantee program. She earned her doctoral degree in Human Development from the University of Pennsylvania in 2004.

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Shani Adia Evans, M.S.Ed. is a Ph.D. student in Education, Culture and Society at the University of Pennsylvania's Graduate School of Education. She is broadly interested in the relationship between schools and social stratification. Most of her research has focused on urban high schools and school choice policy. Prior to beginning doctoral studies, she was a Senior Research Assistant at RFA. Her RFA projects have included a study of the ninth grade transition in Philadelphia public high schools, an evaluation of a high school based after-school program, and the documentation of Philadelphia's collaborative high school reform blueprint planning process. Prior to joining RFA, she worked in a variety of educational settings and served as a Peace Corps volunteer.

Clarisse Haxton, a joint Ph.D. student in education policy and sociology at the University of Pennsylvania, served as a Research Consultant on the *Going Small* project. Her research interests include the ninth grade transition, school choice, high school reform, information access, the relationship between families and schools, immigrants, and program evaluation. She is committed to both quantitative and qualitative research. Her dissertation explores the high school selection process in Philadelphia.

Holly Plastaras Maluk, Ph.D. and Research Associate, has a background in educational anthropology. Her scholarly interests center around improving equity in schools, high school reform, and understanding racial diversity in schools as an asset to students' growth and learning. Her doctoral research in anthropology examined the prevalence and tenor of cross-race friendships at two racially diverse public high schools in Nashville, TN. At RFA, recent projects have included a qualitative study of *Effective Organizational Practices for Middle and High School Grades*. Current projects include an evaluation of a small high school in Philadelphia and its theme-based partnerships, as well as the final year of a five-year evaluation of New Jersey GK12, a partnership between Rutgers University and K-12 schools that engages middle school students in hands-on science projects.

Ruth Curran Neild, Ph.D. is a Research Scientist at the Johns Hopkins University. Her scholarly interests, broadly speaking, focus on improving educational outcomes for urban youth through transforming their school experiences. She has published in the areas of high school choice, teacher quality, the ninth grade transition, high school reform, and high school graduation and dropout. She is committed to communicating clearly about research findings to practitioners and policy-makers and is a frequent presenter at conferences and workshops.

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