



NEW CENTURY HIGH SCHOOLS

Evaluation Findings from the Second Year

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Executive Summary

The New Century High Schools (NCHS) initiative so far has launched three rounds of new small high schools in New York City, working in collaboration with the Department of Education of the City of New York (DOE), the teachers' and principals' professional associations, and a consortium of funders led by the Bill and Melinda Gates Foundation. New Visions for Public Schools is administering the transformation effort on behalf of its partners. This report presents evaluation findings based on data collected during the first two years of the initiative, which were school years 2002-03 and 2003-04. The findings address the operations and results of the 12 schools launched in the initiative's first year (known here as the Cohort 1 schools) and the 18 schools launched in the initiative's second year (the Cohort 2 schools).

The second year of the NCHS initiative brought two major challenges. The most immediate of these was finding space and facilities for the new schools. Because the creation of the new schools coincided with a district-wide surge in high school enrollment, the NCHS schools found themselves competing for scarce space and facilities within the over-crowded older schools that the new schools were slated to replace. The second challenge was the change in the DOE regional administrative infrastructure, which disassembled the high school superintendencies that in the Bronx had housed the core technical support personnel for the Cohort 1 schools. Although that support arrangement had been planned for extension to Brooklyn and the Cohort 2 schools, these plans had to be changed when the high school superintendencies were eliminated in 2003. New Visions and its partners responded to both challenges with informal negotiations, interventions, and adjustments needed to keep the new schools on track toward on-time openings and acceptable levels of program operations.

Who Attends New Century High Schools?

In school year 2003-04, the initiative's second year, the 30 NCHS schools enrolled approximately 4,284 students, of whom 66 percent were ninth-graders, 28 percent were tenth-graders, and the rest were upper classmen. Fifty-four percent were girls. Fifty-two percent were Hispanic, 40 percent were black, and the rest were classified in other racial and ethnic categories. The gender and racial/ethnic enrollment patterns of the Cohort 1 and Cohort 2 schools were very similar.

For purposes of understanding student characteristics, the evaluation compared students in the small high schools to students in the host high schools in which the small schools were located. These comparisons showed that the two groups of students displayed very similar racial/ethnic characteristics, except that the NCHS students were slightly more likely to be black and female.

Data available from DOE on the demographic and educational characteristics of Year 1 students in Cohort 1 schools paint a mixed picture of educational risk and potential. First, these students were very likely to be from low-income families (79 percent eligible for free lunch) and to score in one of the two lowest (of four) proficiency categories on statewide tests administered in the eighth grade (with 80 percent scoring at these levels in reading and 83 percent in math). Even so, Bronx NCHS students' eighth-grade test scores in both reading and math placed them at a significantly higher level of academic proficiency than that of their peers in the Bronx host high schools. NCHS students in Cohort 1 Bronx schools in Year 1 also attended school more frequently as eighth-graders than did students in comparison schools (91 percent, compared to 81 percent). And NCHS students in this group of Bronx schools were less likely to have been suspended as eighth-graders than were comparison students.

Students' self-reports of their attitudes toward education were very positive, but their actions did not always bear out these attitudes, according to their teachers. Teachers who assessed students in Cohort 1 schools in the schools' first year reported higher levels of academic barriers for these students than did the teachers who assessed students in Cohort 2 schools during those schools' first year. Teachers in both sets of schools said that students' greatest barriers to high academic achievement were their failure to complete homework and their tardiness.

What Changes Did Cohort 1 Schools Experience in Year 2?

The evaluation examined each cohort's implementation of the 10 principles of effective small high schools, as identified and disseminated by New Visions. In the case of the Cohort 1 schools, the evaluation examined changes in these schools from Year 1 to Year 2, based on survey responses, classroom observations, interviews, and focus groups.

Academic program. A central focus of this analysis was the level of instructional challenge or rigor evident in the educational program of the Cohort 1 schools. Students reported that the level of challenge was high and indeed their Year 2 ratings of academic challenge were at the same high levels as in Year 1. They also believed that their courses were preparing them well for the Regents exams, and they said that they worked hard in class. Teachers agreed with their students that their classes were challenging, and also reported that their curricula and assessments were better aligned with Regents standards in Year 2 than in Year 1.

Classroom observation data, collected in English language arts classrooms indicate that, as in Year 1, instructional approaches continued to be traditional, with the most common instructional strategy consisting of teachers telling or

giving information to students. The most common performance goal in these classrooms was learning facts, definitions, and content. Teachers' questioning strategies indicated that they continued to focus on memorization and recall of facts in their interactions with students.

A noteworthy shift in teachers' practices in Cohort 1 schools was their increased use of their common planning time to discuss instruction with their colleagues, with 55 percent of teachers reporting that they usually or always used their planning time for this purpose (up from 39 percent in Year 1). Although teacher ratings of professional development remained the same as in Year 1, teachers said that more attention was given in Year 2 to supporting teachers in implementing what they learned in professional development.

Learning environment. Although students reported very positive peer relations in Year 1, their ratings on this scale were even higher in Year 2, with increased percentages of students reporting that students at the school care about one another and decreased percentages reporting that serious fights occurred at the school.

Teachers' years of teaching experience increased slightly in Year 2, indicating the addition of another year of experience for most teachers, but NCHS teachers on average remained substantially less experienced than the citywide teacher average. In Year 2, teachers continued to report a strong commitment to and understanding of their schools' educational focus.

Even as the Cohort 1 schools increased in enrollment and added grades, they maintained the intimate learning environments described in the Year 1 report, with high student-reported ratings of student-teacher relationships. Ratings on individual items related to this relationship either remained the same or increased somewhat in Year 2. Teachers also reported positive relationships with students, which included providing extra time and support for students who needed such help.

Reactions to schools' advisory periods continued to be mixed, with wide differences in reactions among both students and teachers. In general, both groups agreed that advisories lacked structure and coherence. Teachers were more likely, however, to express frustration with advisories, while students reported in focus groups that the value of advisory periods depended almost exclusively on the personality and abilities of the advisory teacher.

Having spent a year getting accustomed to their new school, students in Cohort 1 schools became more involved in school affairs in Year 2, although their level of involvement was still relatively low. Student councils were the focal point for involvement. Students reported more opportunities to participate in school activities such as sports, clubs, and after-school activities than in Year 1. They also reported more opportunities to expand their learning outside of school

through internships or part-time jobs arranged by the school, often with the involvement of the school's partner.

Support infrastructure. In their second year, many principals reported that they had grown in their jobs, although many found that administrative demands interfered with their desire to be instructional leaders. Overall, teachers reported about the same level of instructional leadership activities provided by their principals in Year 2 as in Year 1. In one important change, however, teachers reported a greater amount of feedback and more relevant feedback in Year 2 from principals following observation of their classrooms.

Teachers and principals reported that more computers were available in classrooms than in Year 1, and students reported that teachers incorporated technology into instruction with greater frequency.

Relationships. Community partners were neither more nor less involved in the schools in Year 2 than in Year 1. As in Year 1, partners perceived their organizations to be more involved in the schools than was reported by principals. In interviews, partners voiced concern with what some saw as the narrow focus of their involvement with the schools. Partners' survey responses indicated that their major roles were in after-school programming and in fund-raising.

Cohort 1 schools in Year 2 reported that they were more active in reaching out to parents than in the previous year, and parents responded by becoming more involved in school affairs. All schools employed parent liaisons, as recently required by DOE.

Both principals and teachers talked about hostility between the NCHS schools and the host high schools, but disagreed about the severity of the problem. Teachers reported a decreased level of hostility from host schools since Year 1, and principals reported more hostility. In focus groups, teachers said that the tension stemmed from overcrowding in the host schools and from their staffs' resentment at giving up space and resources to the small high schools.

How Are Cohort 2 Schools Implementing the Principles of Effective High Schools?

Using the same research methods as were used with Cohort 1, the evaluation team also examined the operations of the 18 Cohort 2 schools, all of which opened their doors in September 2003. In some instances, the evaluation compared these schools to the Cohort 1 schools during Year 1, when they were also in their first year of operation.

Academic program. Students in Cohort 2 schools in Year 2 consistently reported that their classes were challenging and were preparing them well for

Regents exams, although their rating of the difficulty of in-class and homework assignments was a bit lower than that of students in the Cohort 1 schools in Year 1. Teachers' ratings of academic rigor were comparable to those of their counterparts in Cohort 1 schools in Year 1. Teachers in Cohort 2 schools were more likely than their Cohort 1 counterparts to say that their curriculum and instruction were aligned with Regents standards and assessments.

Findings from observations in English language classrooms indicated very similar types of instruction in Cohort 1 and Cohort 2 schools, except that observers recorded more instances of teachers using class time for discipline in Cohort 2 schools. In another difference from Cohort 1 schools, Cohort 2 classrooms were less likely to use narrative texts and textbooks and more likely to use students' own writing and non-academic materials.

Most teachers, although fewer than in Cohort 1 schools in Year 1, said that their schools had formal arrangements that provided opportunities for them to discuss instruction. About the same percents of Cohort 2 teachers and Cohort 1 teachers in Year 1 actually used these arrangements to discuss instruction. Teachers also reported about the same amount of feedback and guidance as they tried to implement new ideas in their classrooms. In focus groups, teachers expressed concerns about the lack of time for professional collaboration and the lack of opportunities to participate in professional learning outside of school.

Learning environment. Students in Cohort 2 schools provided slightly more positive responses to questions about the quality of peer relations than did students in Cohort 1 schools in Year 1, and fewer students reported serious fights in school than were reported by their Cohort 1 peers.

The profile of teacher experience in Cohort 2 schools almost exactly matched the comparable profile in Cohort 1 schools at the same stage of operation.

As in the Cohort 1 schools, students trusted their teachers and said that they believed that they were known by them. Similarly, almost all teachers said they recognized and addressed students' talents and needs in the classroom. A substantial majority said that they used different instructional materials with students of different abilities.

As in Cohort 1 schools, teachers in Cohort 2 schools reported being confused and ambivalent about advisory periods. This reaction stemmed, they said, from a lack of direction, curriculum, and structure, although negative reactions were not reported by all teachers.

Teachers reported that they shared a common vision for their school and clear expectations for students, comparable to reactions voiced in Year 1 by

teachers in Cohort 1 schools. Almost all students agreed that they knew what they were expected to learn in their high school.

Students in Cohort 2 schools were less likely than their counterparts in Cohort 1 schools to report that they had a variety of available extracurricular opportunities. But students in Cohort 2 schools reported higher levels of involvement in school-related activities, such as community service and helping out in the school office, than did their Cohort 1 counterparts during their first year. Principals reported that they employed structures such as town hall meetings to engage students in decisions about the school, including decisions on advisory periods and disciplinary policy.

Support infrastructure. By most accounts, principals in Cohort 2 schools actively monitored their schools' academic programs to ensure that they reflected the school's educational focus. Teachers praised principals for providing frequent and valuable feedback on their teaching.

Computer availability in Cohort 2 schools was higher than in Cohort 1 schools in Year 1, but about half of the schools did not provide teachers with access to computers in their classrooms.

Principals in most Cohort 2 schools were generally satisfied with the support provided by their New Visions liaisons and regional superintendents, although a vocal minority was not pleased.

Relationships. School partners reported being involved in several aspects of school operations, and they were very pleased with their roles and relations with the schools. Even so, their involvement was concentrated in a few key areas. As in Cohort 1 schools, principals described the partners as playing more minor roles than were described by the partners themselves. At least two of the Cohort 2 schools demonstrated very high-quality partnerships that included partners' extensive and positive involvement in instruction, however.

Outreach to parents, as reported by principals in Cohort 2 schools, was extensive and productive, although partners rated these efforts lower than did principals.

As in the Cohort 1 schools, teachers reported hostility vis a vis the host high school as a serious or moderate problem, although principals perceived the problem as being less serious than teachers did.

How Well Are NCHS Schools and Students Performing?

The central outcome sought by the New Century High Schools is that very high percentages of their students graduate within a reasonable time period and that these students are prepared to succeed in college and careers. Early indicators that this outcome is likely to be achieved will include evidence of high attendance, low incidence of disciplinary infractions, low student attrition, steady accumulation of credits for graduation, and passing scores on Regents exams. At this early stage of the initiative, it is only possible to track the first three of these indicators. They suggest that the NCHS schools may be creating positive educational settings for their students and that these early successes are likely to be borne out later by high graduation rates and high rates of successful preparation for college and careers.

Attendance. In Year 2, the average attendance rate in NCHS schools was 88.2 percent, with students in Cohort 1 schools attending at a rate of 85.7 percent and students in Cohort 2 schools attending at a rate of 89.9 percent. This discrepancy reflects, in part, the existence of two Cohort 1 schools that explicitly target students with histories of truancy and incarceration.

Comparison with the attendance rates of students in the host high schools indicates much higher attendance on the part of NCHS students, with differences of 15 percentage points separating Bronx Cohort 1 schools and their comparisons and 14 percentage points separating Brooklyn and Bronx Cohort 2 schools and their comparisons.

These differences are not totally unexpected given the pattern seen among Cohort 1 students, whose eighth-grade attendance surpassed that of their peers in the Bronx comparison schools. However, analysis of attendance patterns after a year in the Cohort 1 schools shows that student who enroll in NCHS schools maintain their positive attendance patterns, while students who enroll in comparison schools experience dramatic declines in school attendance. This comparison is most vivid when NCHS students are compared with host high school students with the same prior records of attendance; at each attendance quartile, NCHS students maintain their prior attendance while comparison students' attendance declines. These data clearly suggest that NCHS schools are increasing the likelihood of positive outcomes for their students by promoting relatively high levels of school attendance.

Suspensions. Students in NCHS schools were less likely to be suspended than were students in the host high schools. This finding is consistent with the fact that NCHS students were also less likely than their counterparts to be suspended as eighth-graders.

Attrition. NCHS schools exerted stronger holding power on students than did the comparison high schools. In the Cohort 1 schools in the Bronx, 5 percent

of students transferred to a different New York City high school between Year 1 and Year 2 (with an additional 7 percent leaving the system entirely), compared to 14 percent of students in the comparison high schools who transferred to another city high school (and 20 percent left the system entirely).

What Are Some Keys to Success in the Small High Schools?

Among the important tasks of the evaluation is identifying relationships among educational features that can suggest keys to success for the NCHS schools. To that end, the evaluation is examining many possible relationships that might prove important. Four such relationships that have been found to be important—and have been statistically confirmed—are as follows:

- Schools in which students are highly motivated and in which they experience a sense of belonging achieve higher attendance rates than do schools where students' motivation and sense of belonging are not as positive.
- Schools that use authentic assessments (such as portfolios of student work and student presentations) set higher academic standards for students than do schools that do not use such assessments.
- High levels of teacher collegiality and shared decision making are consistently associated with high levels of teacher job satisfaction.
- Schools with strong instructional leaders offer professional development of higher quality and provide a more professional work environment than do schools with weaker leaders.

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I. Purpose and Context for the Small High Schools Initiative

With philanthropic support, New Visions for Public Schools, the Department of Education of the City of New York (DOE), and their partners in the teachers' and administrators' professional associations have embarked on an effort to transform some of the city's large comprehensive high schools into successful, small schools. The New Century High Schools (NCHS) initiative is replacing certain failing comprehensive high schools in the city with a network of smaller high schools that implement research-based strategies for education and youth development. Over time, the New Century High Schools are intended to promote substantial improvement in New York City high schools and in the learning experiences they deliver to students, in order to achieve high levels of educational success among all students citywide. This report describes implementation of the NCHS initiative in its second year.

The NCHS initiative provides planning and implementation grants to public/private partnerships formed to design and implement innovative, effective high schools. By demonstrating the effectiveness of small high schools operating under a set of core principles, the NCHS initiative seeks to leverage its limited resources to transform the entire high school system in New York City. Within the boundaries of its scope, the NCHS initiative has the resources to launch successful schools that offer a good education to a relatively small number of students. To achieve its ultimate goal of stimulating systemic reform and improvement, however, the initiative must use its intellectual and political capital to reach more students and create more schools than is possible with the financial resources directly available to the initiative itself.

In its first year (school year 2002-03), the NCHS initiative launched 12 new high schools, a transformation of an existing high school, and four programs that were slated to become schools in fall 2003. Nine of the 12 new schools and all four programs were in the Bronx, where the high school superintendent had made it a priority to replace dysfunctional large high schools with new small schools. New Visions provided funding for the superintendent to create a Bronx Office of Small Schools to provide direct and on-going support to the new schools. To link these new schools in the Bronx and the rest of the city to the communities in which students live and the city's cultural resources, the planners of each new school established a partnership between a community or high school district and a local nonprofit partner to develop and operate each new or transformed school and program. At the beginning of the following year (school

GLOSSARY

Cohort 1 schools

NCHS schools that began operation as schools (not programs) in school year 2002-03

Cohort 2 schools

NCHS schools that began operation as schools in 2003-04

Program

An independent learning community within a larger high school, usually headed by a director or assistant principal who reports to the principal of the host high school

Host high school

A large comprehensive high school whose campus houses one or more small high schools

Year 1

School year 2002-03, the first year of operations of the NCHS initiative

Year 2

School year 2003-04, the second year of NCHS operations

year 2003-04), the initiative nearly tripled in size, launching 18 new schools (including four schools that had operated as programs the year before), and 10 programs slated to become schools in fall 2004. This second cohort of schools was divided between the Bronx and Brooklyn, where the high school superintendent sought to replicate the efforts underway in the Bronx. At the same time, support for the transformation of an existing high school was withdrawn due to lack of progress. In fall 2004, the rapid expansion continued, with 45 new small schools opening, for a total of 75 new schools since the initiative's inception.

To provide longitudinal information on the implementation of this secondary-school reform initiative, New Visions contracted with Policy Studies Associates, Inc., to conduct a comprehensive evaluation. The evaluation is documenting and assessing the implementation of the initiative's central features in participating schools, measuring the effects of the schools on student performance, and generating findings that can be used by New Visions and others to inform the design and administration of future phases of the initiative. The evaluation is providing regular feedback to the initiative's core team (which consists of the funding consortium, New Visions, DOE, and the professional associations), other interested funders, and additional stakeholders about the initiative's progress in supporting the development and operation of successful small high schools. The evaluation is also assessing the initiative's success in building support for a systemwide shift toward smaller, more effective high schools in New York City.

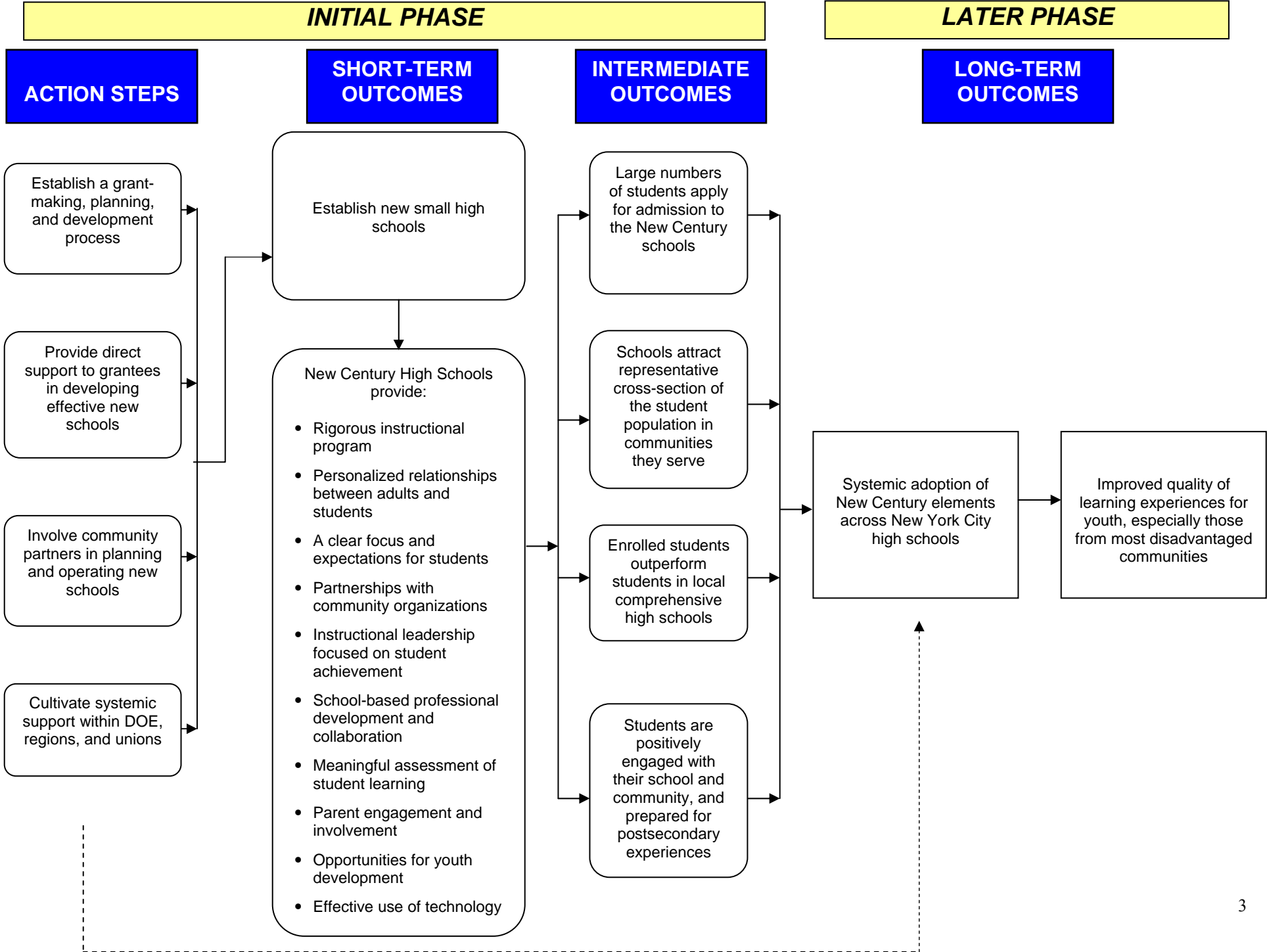
Theory of Change Guiding the Evaluation

As a framework for evaluation, the evaluation team developed a change theory that describes how the initiative plans to use its resources to influence broad, citywide changes. The resources that the initiative expects to make available, the activities that it plans to carry out with these resources, and the short- and long-term changes that are expected to result from these activities are summarized in the theory of change. The change theory represents not only the road map for the initiative but also the framework for its evaluation. The theory is depicted graphically at Exhibit 1.1, and is further elaborated in the first-year evaluation report.

Second-Year Challenges for the NCHS Initiative

As the New Century High School initiative entered its second year, it confronted two major new challenges. First, the large number of new schools and programs strained available facilities and personnel. The first cohort of schools

**Exhibit 1.1
NCHS Theory of Change**



had constituted a modest beginning for the initiative, enabling the new schools to open with little fanfare and only minor disruptions to the operation of the host schools. The second cohort of new schools represented a more ambitious effort that drew widespread public attention, occupied more room in overcrowded school buildings, and placed growing demands on the network of support for the new small schools. The second major challenge was the new school governance structure instituted over the summer of 2003 by Chancellor Joel Klein. The new structure eliminated the high school superintendencies, on which New Visions had pinned plans for providing much-needed technical assistance and support to the new schools. This shift required the schools and New Visions to develop new relationships with administrators in five regions, many of whom were not familiar with the unique opportunities and challenges posed by small schools.

Pressure on Facilities

The most immediate challenge stemming from the initiative's expansion was finding adequate space for the new schools. The original plan in the Bronx had called for six low-performing comprehensive high schools to be phased out of existence as the new small schools grew and gradually took over their buildings. The Bronx implemented this plan in two of the six buildings, but dramatic growth in the borough's high school enrollment forced the other four high schools to continue to accept new classes in fall 2003. According to several expert observers, at least two of these schools are now operating at almost 200 percent of their capacity. In Brooklyn, which experienced less dramatic enrollment growth, the regional superintendents began phasing out several high schools as the small schools began operations, but the number of ninth-graders entering the new schools did not match the number of ninth-graders being turned away from the schools that were being phased out. As a result, several neighboring high schools experienced severe overcrowding.

Locating multiple small schools in a single school building also posed logistical challenges. Whereas a comprehensive high school may have one central office and reception area, each small school needed its own office space and telephone lines. Schools with curricular themes required classrooms to be reconfigured to accommodate new instructional approaches.

The large number of new schools in the second cohort exceeded DOE's capacity to make the necessary physical plant adaptations. For instance, many schools began the school year without working telephones. Even when improvements were made to buildings housing both old and new schools, these efforts often generated tensions as the older schools in the building felt left out of the modernization process.

Support Infrastructure

Providing technical assistance and support to nearly twice as many new schools and programs as the year before was yet another challenge facing New Visions in fall 2003. Its efforts were further complicated by the DOE governance changes instituted in the intervening summer, because the planned infrastructure depended on the now-defunct high school superintendencies. During 2001-02, the Bronx Office of Small Schools within the Bronx high school superintendency had sponsored a well-received series of weekly workshops for the school planning teams leading up to their opening, and then continued to provide on-going support to the schools after they opened in fall 2002.

Following the success of the Bronx Office of Small Schools, New Visions planned to create a similar office within the Brooklyn high school superintendent's office to support the small high schools in Brooklyn. As in the Bronx, the new office would sponsor weekly training sessions for new planning teams and on-going support for the schools once they opened. Meanwhile, the Bronx office would support all of the new and existing small high schools opening in the Bronx.

Before this plan could be implemented, DOE eliminated the high school districts, replacing them with K-12 regions. The New Century schools were scattered across five regions. The Bronx Office of Small Schools remained active in Region 2, and New Visions adjusted its plan by funding new Regional Offices of Small Schools (ROSSs) in Regions 4 and 6, both in Brooklyn. That left two regions in the Bronx with NCHS schools but no Region-based support. Moreover, the two Brooklyn ROSSs did not open until fall 2003, so the schools that opened that fall had minimal external support in the months leading up to their opening. Both ROSSs dedicated most of their time and energy to working with the planning teams that were scheduled to open schools in fall 2004, although they were available for telephone consultations and occasional visits to the existing schools. In the spring, the two Brooklyn ROSSs sponsored two dinner meetings with principals of existing NCHS high schools to facilitate networking among them.

Although the origin of these challenges was beyond the control of the schools, overcoming them still fell to the schools as they faced the reality of needing to educate the students drawn to their doors by their vision for reforming high school education in New York City. As this report examines these schools' early implementation, it does so within the context of these and other challenges they confronted.

Design of This Evaluation

Three central research questions are guiding data collection and analysis in the evaluation. The research questions are as follows:

1. What is the contribution of the external support provided by the core team to the design and implementation of the new schools?
2. To what extent is the New Century High Schools initiative yielding sustainable high schools that implement the design characteristics endorsed by the core team?
3. How, if at all, does the New Century High Schools initiative contribute to the systematic reform of secondary schooling in New York City overall?

To answer these questions, the evaluation draws on both quantitative and qualitative sources of data. Data sources for the evaluation include:

- Site visits to NCHS schools, which include: individual interviews with principals and partners; focus group interviews with teachers, students, and parents; and observations of classroom instruction in ninth-grade English language arts
- Annual surveys of all principals, teachers, non-instructional staff, students, and partners in NCHS schools
- Analyses of student-level demographic and performance data extracted from DOE data bases
- Periodic interviews with New Visions staff and representatives of stakeholder groups

Detailed explanations of the procedures used to collect data are available in the evaluation's Year 1 report.

In the 2003-04 school year, response rates for all surveys exceeded 80 percent, with partners recording the highest response rate at 97 percent. The partner for the International Arts and Business School was the only partner that did not return a survey, but that organization severed its relationship with the school. Teachers recorded the lowest response rate at 81 percent. The response rate on the student survey was 91 percent. The response rate for principals was 86 percent, with surveys missing from Pelham Prep, School for Excellence, the Community School for Research and Learning, and the New York Harbor School.

This report first presents a description of the students who attend New Century High Schools. It next reviews the work of the Cohort 1 schools in Year 2, examining their implementation of the 10 principles of effective schools and looking for signs of progress toward full implementation. The third section presents first-year information from the Cohort 2 schools on their operations. As appropriate, the report highlights similarities and differences between Cohort 1 and Cohort 2 schools and offers explanatory analyses. Next, the report reviews initial student outcomes from Cohort 1 and Cohort 2 schools. Finally, the report closes by examining a series of hypotheses about factors that may be associated with the schools' early success or difficulty.

When the report discusses changes over time or differences between two groups of students or teachers, it presents only findings that are statistically significant at the $p < 0.05$ level. The sample sizes for principals and partners are very small for each cohort, and analyses did not reveal statistically significant differences between cohorts or over time for these groups. Nonetheless, the report presents some data on changes or differences in responses by principals and partners that warrant notice. Results from the principal and partner surveys are reported in terms of the total number of responses, not percentages, because the sample sizes are small (fewer than 15 in each case).

The report presents values for scales that were developed to summarize the findings of groups of survey items addressing particular topics, such as academic rigor or parent involvement. Scale scores are a sum of all of the individual items included in the scale. The evaluation team used factor analyses to identify clusters of survey items that would be appropriate to include in each scale, and Cronbach's alpha, a measure of reliability, was calculated for each of the scales. Only scales in which Cronbach's alpha was greater than or equal to 0.75 are presented in this report.

II. Who Attends New Century High Schools?

An important focus for the evaluation has been describing the students who attend the New Century schools. Understanding the characteristics and educational needs of the students served by NCHS can illuminate the contribution that the schools are making both to the lives of students and to meeting the city's overall need for effective high schools and, in particular, the need for high schools that serve students with the greatest educational challenges.

This chapter presents student information drawn from three sources, including DOE's central student database, DOE's school-level summaries of students attending each of the NCHS schools and host high schools, and the evaluation's surveys of students and teachers. The first section presents data from DOE's school-level summaries and surveys of students and teachers on the characteristics of students participating in the NCHS initiative in Year 2. In addition to presenting data on students in the initiative as a whole, it also presents data separately on students in the Cohort 1 schools and those in the Cohort 2 schools. As part of these analyses, the chapter presents comparative data drawn from the host high schools with which the NCHS schools share space. The second section of the chapter presents in-depth information on the students who were enrolled in the Cohort 1 high schools in Year 1. Data in this discussion are drawn from the DOE central student database, and they present an especially comprehensive description of this initial group of NCHS students.

Characteristics of NCHS Students in Year 2

The evaluation's analysis of student characteristics in Year 2 (school year 2003-04) consists of a review of students' demographic and educational characteristics, and their reported attitudes toward education.

Demographic Characteristics

NCHS students overall in Year 2. In Year 2, the 30 NCHS schools enrolled approximately 4,284 students, representing a 173 percent increase in enrollment from Year 1, when 1,567 students were enrolled. Of these Year 2 students, 66 percent were ninth-graders, 28 percent were tenth-graders, 5 percent were eleventh-graders, and 1 percent were either twelfth-graders or had no grade classification. Fifty-four percent of students were girls, and 46 percent were boys. Fifty-two percent of students were Hispanic, 40 percent were black (not Hispanic), and 8 percent were classified in another racial or ethnic category. Hispanic students formed the majority enrollment in 23 schools, and black students formed the majority in six schools. Asian students constituted the largest racial/ethnic group in one school.

The evaluation also separately examined students in the Cohort 1 schools and the Cohort 2 schools. The 12 schools in Cohort 1 enrolled 2,156 students in Year 2, for an average of 180 students enrolled in a school, while the 18 Cohort 2 schools enrolled 2,128 students, for an average of 118 students enrolled in a school. The enrollment difference reflects the fact that the Cohort 1 schools were in their second year of operation, while the Cohort 2 schools were in their first year and thus enrolled only their initial class of students. Exhibit 2.1 summarizes the characteristics of Year 2 students in the two groups of schools. As the exhibit indicates, schools in the two cohorts differed most notably in the grade levels of the students served, the enrollment of black students, and the presence of girls.

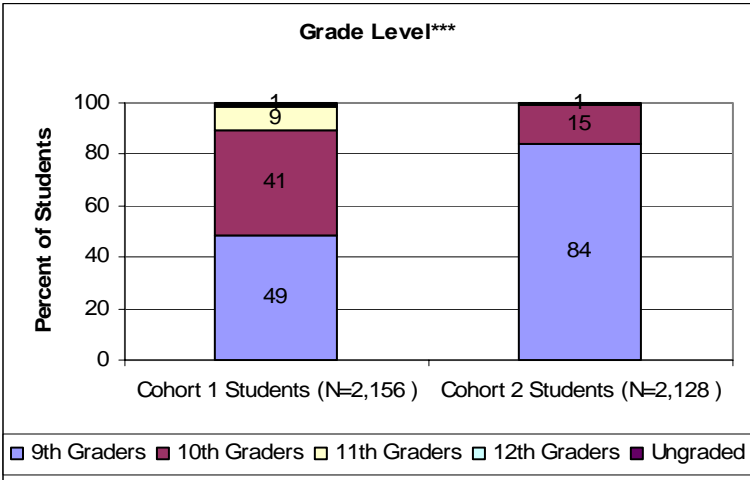
Comparison of students in the Cohort 1 schools in the Bronx to non-NCHS students. Using data from DOE school-level summaries for Year 2, the evaluation compared students who attended NCHS schools with students who attended the large comprehensive high schools on whose campuses most of the NCHS schools are located. For Cohort 1, the evaluation compared students in the subset of nine Cohort 1 NCHS schools located in the Bronx with students in the seven comprehensive high schools whose buildings provide the campuses for eight of these NCHS schools (one school occupied its own building). As Exhibit 2.2 shows, students in the NCHS high schools were more likely to be enrolled in the ninth and tenth grades and were more likely to be girls. Although very similar racially, NCHS students were slightly more likely to be black than were the students in the Bronx comparison schools.

Comparison of students in the Cohort 2 schools in Brooklyn and the Bronx to non-NCHS students. For students in Cohort 2 schools, the evaluation used DOE school-level summaries to compare students attending all Cohort 2 schools (ten schools in the Bronx and eight schools in Brooklyn) with students attending the 10 host high schools (seven schools in the Bronx and three schools in Brooklyn). Exhibit 2.3 indicates the similarities and differences across the two sets of students. As this exhibit shows, students in the Cohort 2 NCHS schools displayed very similar characteristics to students in Cohort 1 schools, including similar patterns of difference from students in the comparison schools.

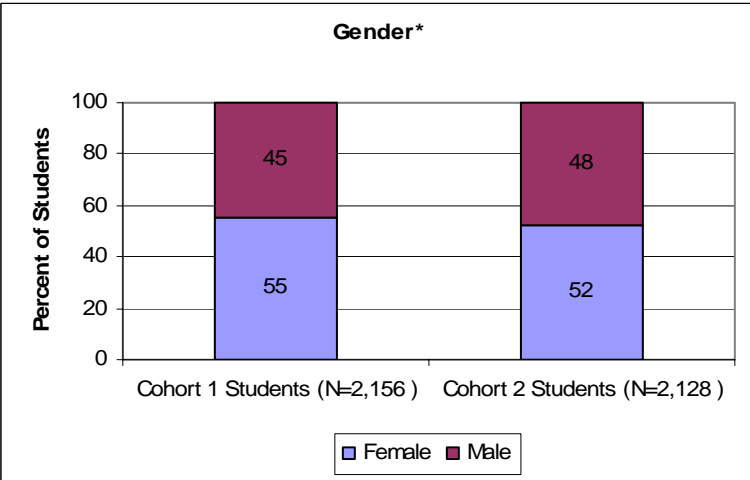
Attitudes toward Education

In addition to gathering descriptive demographic data about students, the evaluation also collected survey data about students' attitudes toward school and toward their own education. During their first year of NCHS enrollment, students reported very positive attitudes about school. For example on the student motivation scale, students in Cohort 1 schools in Year 1 had a mean score of 20.9 (out of 24), while students in Cohort 2 schools in Year 2 had a mean score of 20.8. The individual items that make up this scale are shown in Exhibit 2.4.

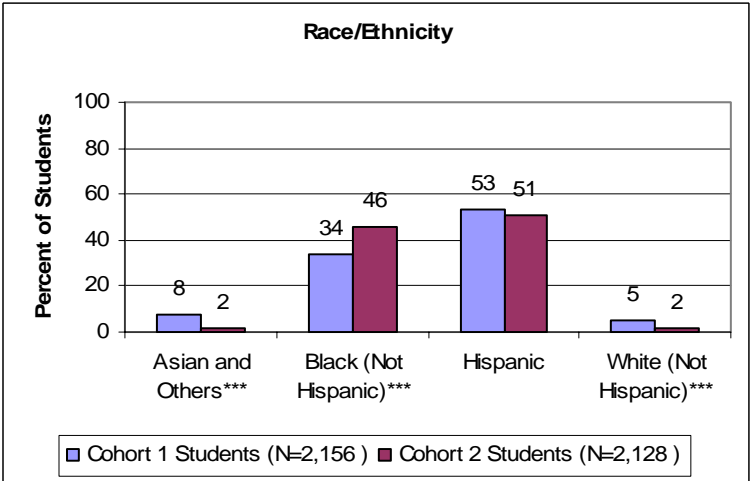
Exhibit 2.1
Characteristics of Year 2 Students in Cohort 1 and 2 NCHS Schools,
2003-04



* $p < .05$, ** $p < .01$, *** $p < .001$



* $p < .05$



*** $p < .001$

Exhibit 2.2 Characteristics of Students in Cohort 1 Bronx NCHS and Comparison Schools, 2003-04

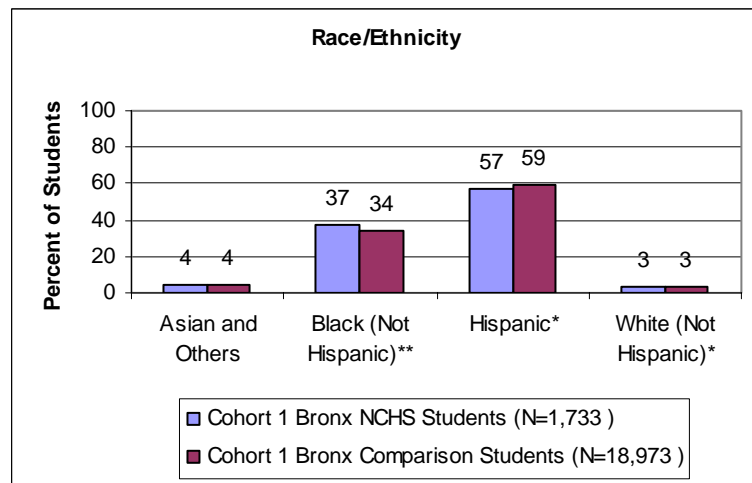
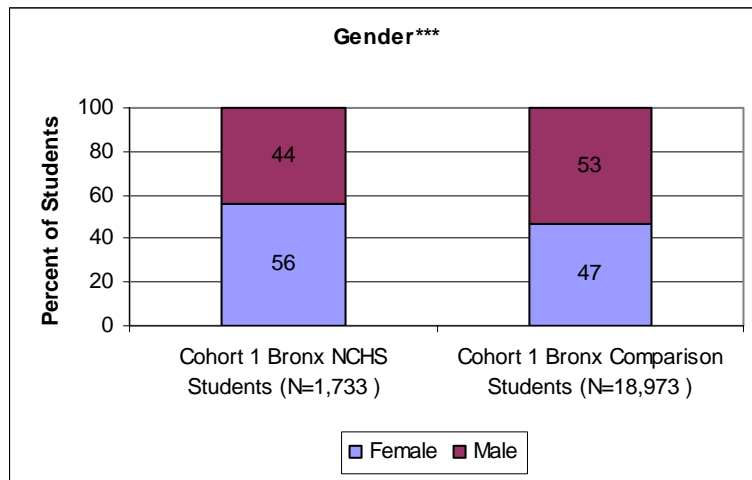
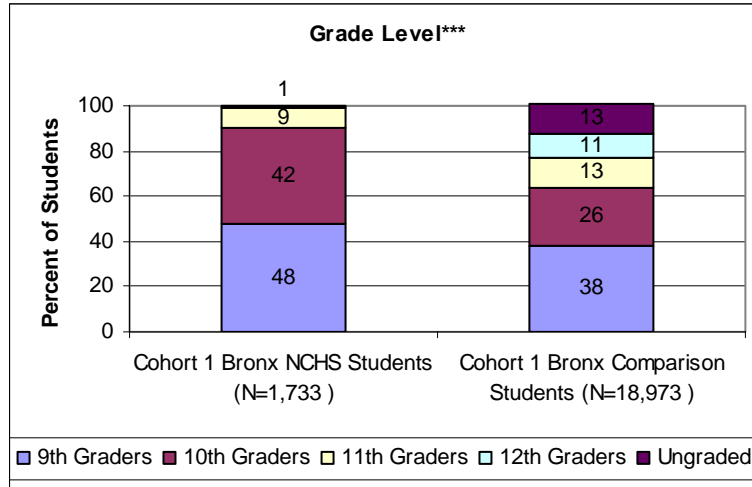
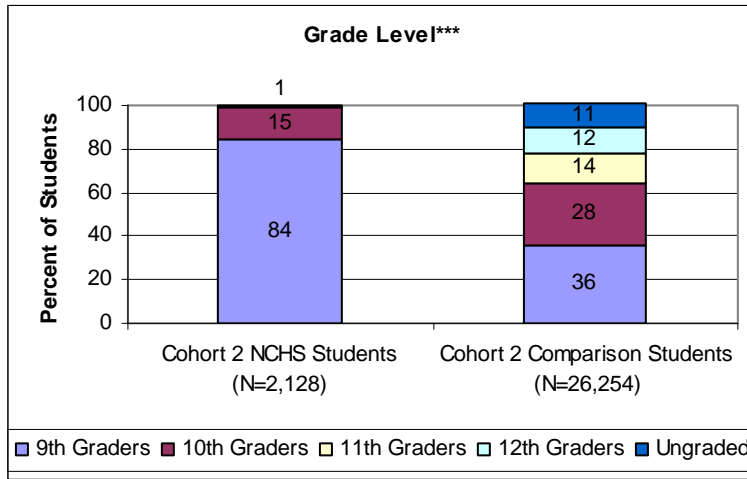
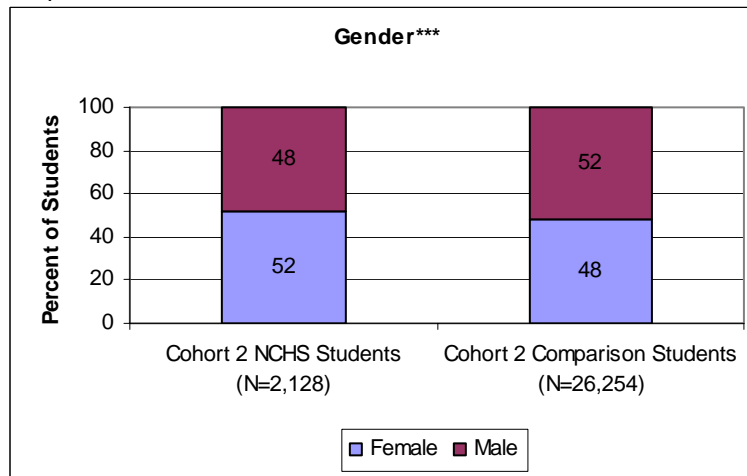


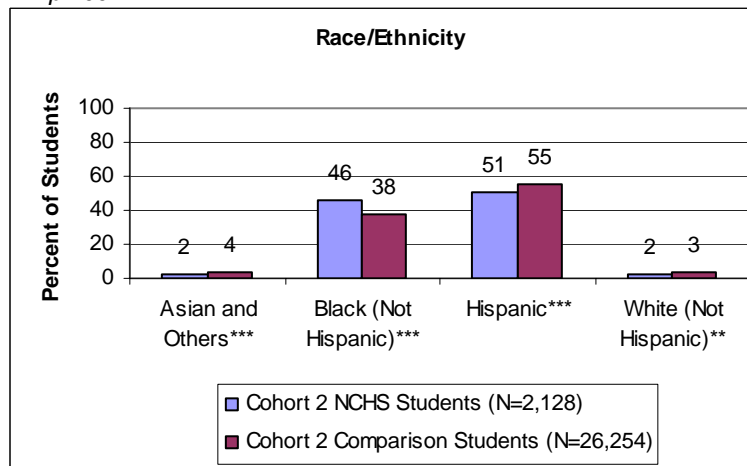
Exhibit 2.3 Characteristics of Students in Cohort 2 NCHS and Comparison Schools, 2003-04



*** $p < .001$



*** $p < .001$



** $p < .01$, *** $p < .001$

The evaluation also asked teachers to comment on the extent to which students' attitudes and associated behaviors affected their school performance. These survey results suggest that, although students may have very high expectations about their education, their actions did not always reflect these expectations. Teachers in Cohort 1 schools responding in Year 1 reported higher levels of student misbehavior than did teachers in Cohort 2 schools responding also in their schools' first year of operation, based on questions asked in each set of schools in the schools' first year of operation. For example, on the Student Behavior scale, teachers in Cohort 1 schools in Year 1 had an average score of 18.6 (out of 32), while Cohort 2 schools had an average score of 22.4. Higher scores on the Student Behavior scale indicate that students are better behaved. Exhibit 2.5 displays each of the individual items that comprise the Barriers to Academic Success scale. Teachers in both Cohort 1 and Cohort 2 schools were most likely to indicate that the greatest barriers to academic achievement were students not completing homework and student tardiness.

Looking at student behavior across the two groups of schools in their first year, the biggest difference was the extent to which teachers perceived student absenteeism to be a problem. While 43 percent of teachers in Cohort 1 schools in Year 1 said that student absenteeism was a moderate or serious problem, only 17 percent of teachers in Cohort 2 schools in 2004 said the same thing.

In-Depth Analysis of Characteristics of NCHS Students in Year 1

A central task of the evaluation is the development of longitudinal data on students who enroll in the NCHS schools. These data will permit the evaluation to observe trends in the educational progress of students participating in the NCHS initiative. Baseline data on the first cohort of students are available now, and they provide an in-depth look at the educational characteristics that these students brought with them as they embarked on their high school careers in the NCHS schools. Similar data on students in Cohort 2 schools are not available but will be reported in the Year 3 report. Data for the Cohort 1 baseline were drawn from DOE's central student database, and include descriptive information on easily measured characteristics (such as race/ethnicity and eligibility for subsidized lunch and special services) and also on student characteristics that are historical in nature, especially students' levels of prior educational performance. Most notably for our purposes, the DOE database provides access to students' prior test scores and rates of school attendance. (See Appendix A for more information on data included in these analyses.)

Exhibit 2.4

Students' Attitude Toward School and Their Own Education During Their First Year of NCHS Enrollment

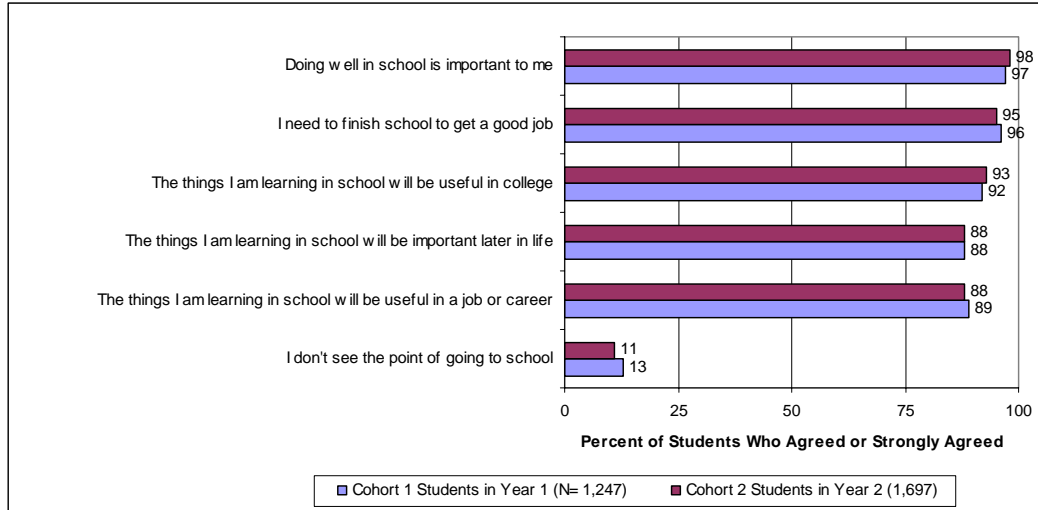
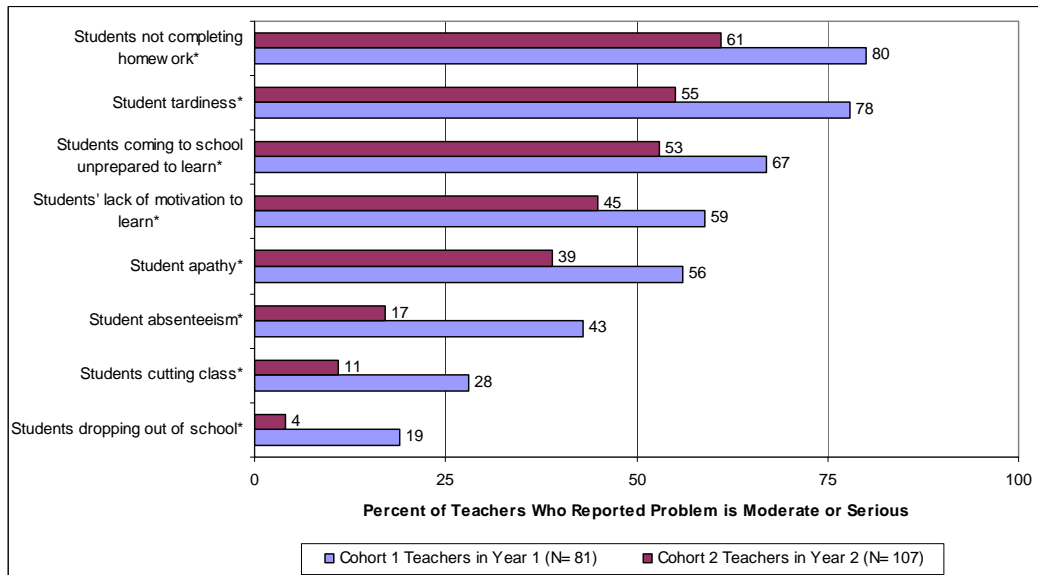


Exhibit 2.5

Teachers' Reports of Student Behavior in Their Schools' First Year of Operation



* $p < .05$

Knowing students' prior achievement and attendance is important because past educational performance is a very strong predictor of future performance. If students who enroll in the New Century schools have stronger academic and attendance records or have significantly different demographic profiles from those students who are enrolled in the host high schools, then any differences in academic outcomes between the two groups may be attributable not to the schools but to the pre-existing differences in the students served by the two sets of schools.

The analyses presented here focus first on students enrolled in all of the NCHS Cohort 1 schools as a group and then on (1) the nine Cohort 1 NCHS schools located in the Bronx and (2) six of the seven Bronx comprehensive high schools that house the Cohort 1 Bronx NCHS schools.¹ Unlike the analyses already presented, which used school-level data from Year 2, these analyses use data from individual student records to describe the students enrolled in those schools during Year 1.

NCHS Students' Background Characteristics

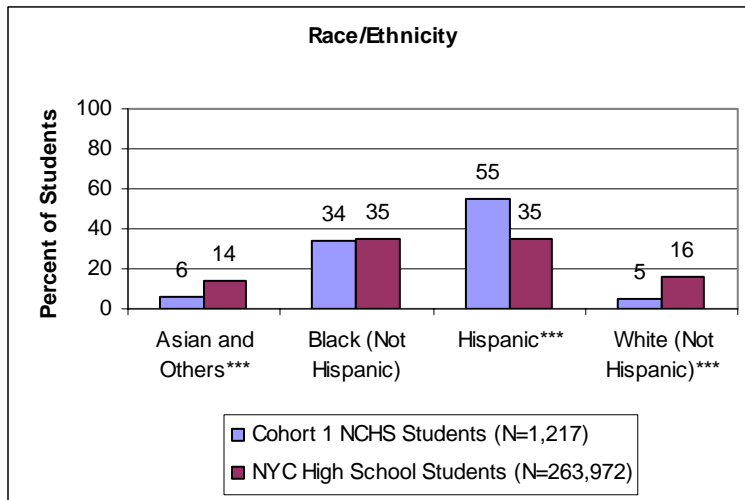
Overview of Cohort 1 schools. In Year 1, the students in the Cohort 1 schools displayed high levels of educational risk as measured by their background characteristics. In particular, they were highly likely to be students of color whose family income qualified them for free lunch. These characteristics are displayed in Exhibit 2.6, in comparison with the racial distribution and free-lunch eligibility of public high school students in New York City overall.

These citywide comparisons are of only limited usefulness, however, since the NCHS initiative is intended primarily to improve educational opportunities and outcomes for students who might otherwise attend some of the city's most troubled high schools. For that analysis, it is most useful to compare students in the subset of the Cohort 1 NCHS schools that have close high school counterparts in schools that are not NCHS schools.

Comparative racial/ethnic profiles. During the 2002-03 school year, students in the Bronx NCHS schools were as racially and ethnically diverse as students in the host high schools on whose campuses they were located, although the racial/ethnic profiles of the two aggregate student bodies differed slightly. As Exhibit 2.7 demonstrates, student enrollments at the Bronx NCHS schools were diverse and closely resembled the racial/ethnic composition of the comparison schools. However, students at NCHS schools were slightly less likely to be Hispanic (57 percent of students in NCHS schools and 60 percent of students in comparison schools) and slightly more likely to be Asian (4 percent of students in NCHS schools and 2 percent of students in comparison schools).

¹ PSA did not obtain student data for one of the Bronx comparison schools. Future analyses will incorporate data from this school.

Exhibit 2.6
Characteristics of Students in Cohort 1 NCHS Schools
and New York City Public High Schools, 2002-03



*** $p < .001$

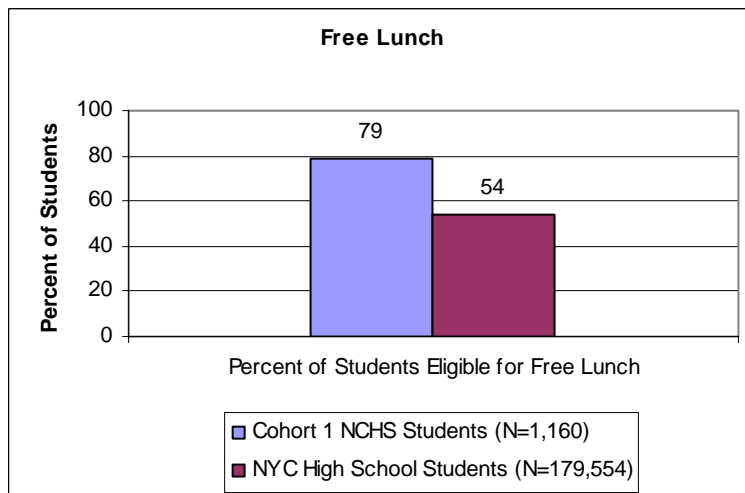
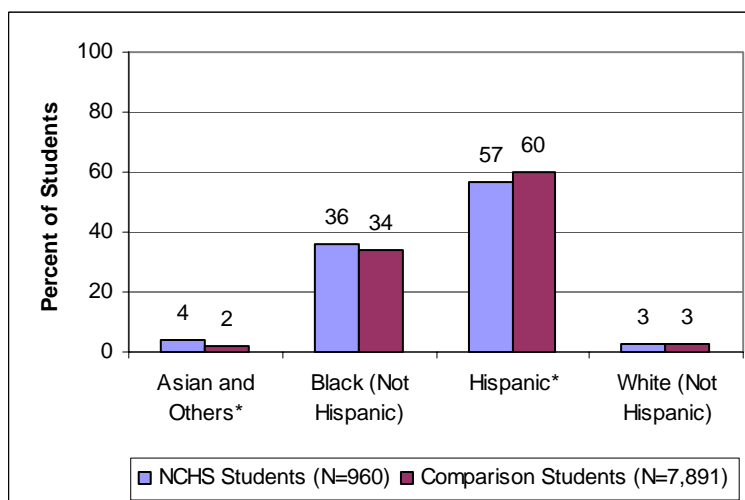


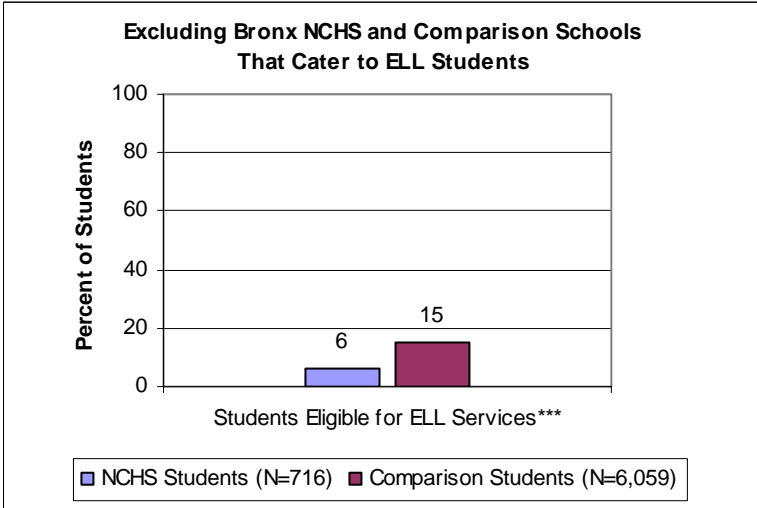
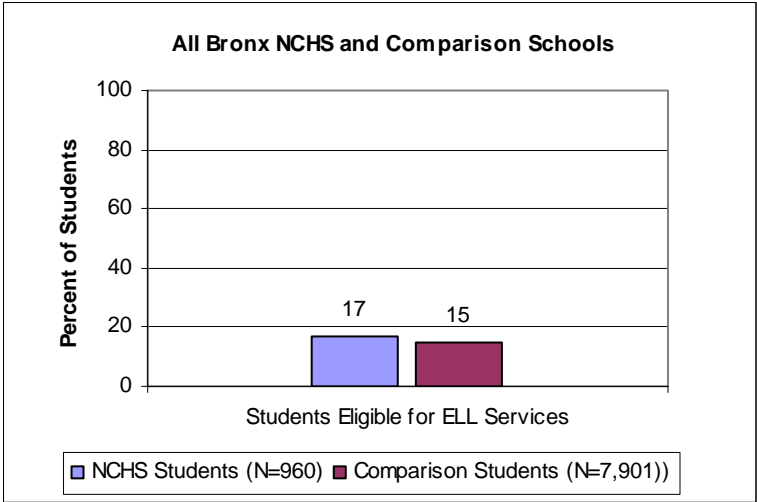
Exhibit 2.7
Race/Ethnicity of Students Enrolled in NCHS and
Comparison Schools in the Bronx in 2002-03



* $p < .05$

Enrollment of ELL students. Overall, Bronx NCHS students were about as likely as comparison students to be English-language learners, but most of the ELL students in NCHS schools were concentrated in two schools. Seventeen percent of NCHS students and 15 percent of comparison students were eligible for ELL services, but two NCHS schools cater specifically to ELL students. As shown in Exhibit 2.8, when these two schools were removed from the analysis, the percentage of ELL students in NCHS schools fell to 6 percent.²

**Exhibit 2.8
Eligibility for ELL Services Among Students Enrolled in NCHS
and Comparison Schools in the Bronx 2002-03**



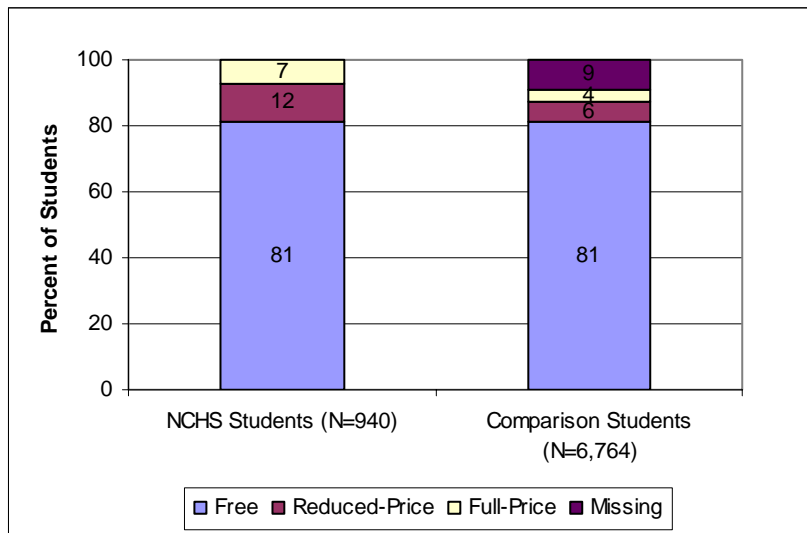
*** $p < .001$

² A comparison high school that housed a single NCHS school in Year 1, which targeted ELL students, was removed from the secondary analysis to create a more precise comparison. While this changed the overall number of students included in the analysis, it did not change the percentage of students eligible for ELL services in the comparison schools.

Enrollment of recent immigrants. NCHS schools enrolled a higher proportion of recent immigrants than did the comparison schools, but as with ELL status, most of the recent immigrants were concentrated in the same two schools. In all nine Bronx NCHS schools combined, 16 percent of the students were recent immigrants in 2002-03, compared with 6 percent of students in comparison schools. However, without the two NCHS schools that cater to recent immigrants,³ the proportion of recent immigrants was higher in the comparison schools (7 percent) than in the remaining NCHS schools (3 percent).

Enrollment of low-income students. A higher percentage of NCHS students were eligible to receive either free or reduced-price school lunches when compared with students in comparison schools; however, students in comparison schools had a much higher rate of missing data. As shown in Exhibit 2.9, 93 percent of NCHS students were eligible for free or reduced-price lunches, compared with 87 percent of students in comparison schools. However, 9 percent of comparison school students are missing data for this variable, compared to 1 percent of NCHS students with missing data. Therefore, it is possible that the proportions were closer than this analysis indicates. The same percentages of students in the two groups were eligible for free lunches (81 percent).

**Exhibit 2.9
Free and Reduced Price Lunch Eligibility Among Students Attending
NCHS and Comparison Schools in the Bronx, 2002-03*****



*** $p < .001$

³ One comparison school was removed from the secondary analysis, thereby changing the percentage of recent immigrants in the comparison schools. See Appendix A for an explanation.

Enrollment of students eligible for special education. The Bronx NCHS schools were less likely to enroll students requiring special education services. In Year 1, 6 percent of Bronx NCHS students required special education services, compared with 25 percent of students in the comparison schools. Five percent of NCHS students were in resource rooms, compared with 7 percent of students in comparison schools. According to DOE data, all of the NCHS students requiring special education services had either learning disabilities or hearing or speech impairments (i.e., mildly handicapped students who were assigned to “the least restricted environment”); none of the students in NCHS schools were autistic, deaf, emotionally disturbed, mentally retarded, or suffering from traumatic brain injury (i.e., moderately or severely handicapped students assigned to “the most restrictive environment”). In contrast, about 3 percent of students in the comparison schools had at least one of the latter category of handicapping conditions.

Enrollment of boys and girls. NCHS schools in the Bronx enrolled a higher proportion of girls than did the comparison schools. Whereas 58 percent of NCHS students in the Bronx were girls, only 44 percent of students in the comparison schools were girls.

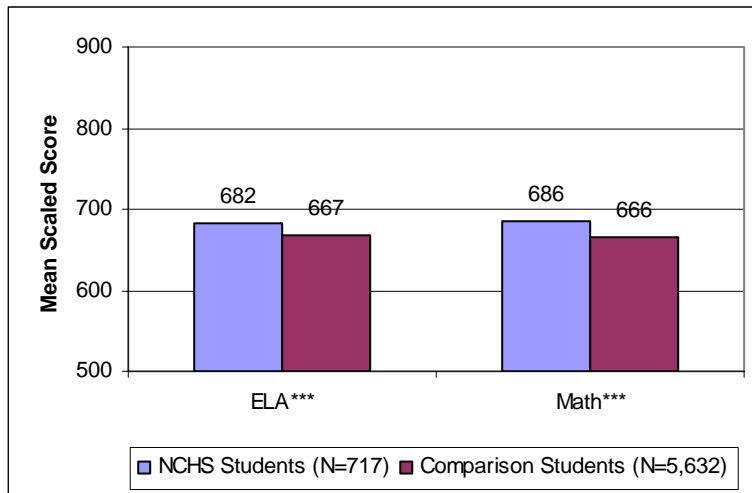
NCHS Students’ Previous Academic, Attendance, and Disciplinary Records

Overview of Cohort 1 schools. Students enrolled in all Cohort 1 schools in Year 1 displayed relatively mixed patterns of educational engagement as eighth-graders. Most notably, their eighth-grade achievement levels indicated serious academic deficiencies, with the great majority of students in the Year 1 group scoring in the lowest two (of four) achievement levels (80 and 83 percent scored in these categories on the reading and math achievement tests, respectively). Less than 1 percent of the Year 1 students scored in the highest level (Advanced). On the other hand, students’ 89 percent average eighth-grade attendance rate indicated a relatively strong commitment to schooling. Only 3 percent of this group had been suspended from school as eighth-graders.

Comparative academic profiles in Bronx NCHS schools. Despite their low levels of eighth-grade achievement, students enrolled in the Bronx NCHS schools in Year 1 scored higher in both reading and math on the eighth-grade statewide achievement test than did students enrolled in the Bronx comparison schools. As shown in Exhibit 2.10, the average reading scaled score for Bronx NCHS students was 682, compared with an average scaled score of 667 for students in comparison schools, which translates into a difference of 5.0 percentage points.⁴ In math, the respective average scores were 686 and 666, for a difference of 5.6 percentage points.

⁴ The evaluation calculated a difference in percentage points by dividing the total possible number of scaled-score points that students could earn by the actual number of points they earned.

Exhibit 2.10
Mean Eighth-Grade ELA and Math Scaled Scores for Students
Enrolled in NCHS Schools and Comparison Schools in the Bronx,
2002-03

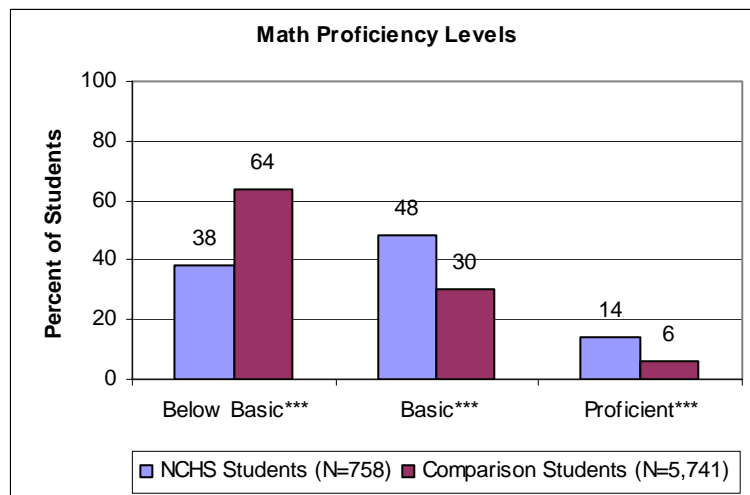
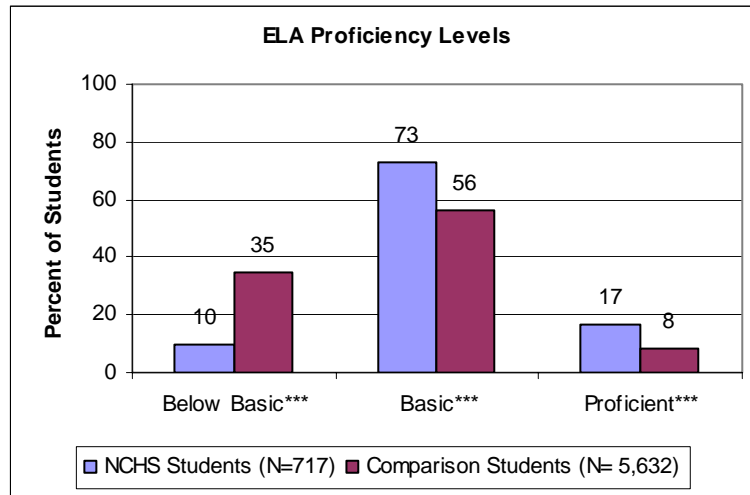


*** Indicates the difference between Bronx NCHS and comparison school scores was statistically significant at the $p < .001$ level.

Moreover, Bronx NCHS students were less likely than students in comparison schools to score in the lowest proficiency levels on the eighth-grade assessments in reading and in math. As shown in Exhibit 2.11, 91 percent of students in comparison schools scored either in the Basic or Below Basic ranges (Levels 1 and 2) in English/language arts (ELA), compared with 83 percent of NCHS students scoring in these ranges. In math, 94 percent of students in comparison schools scored in either Basic or Below Basic, compared with 86 percent of NCHS students. Those differences can be further broken down. Only 10 percent of NCHS students scored Below Basic in ELA, compared with 35 percent of students in comparison schools. The discrepancy in math was similar. The percentages of NCHS students scoring at the Proficient level in ELA and math were correspondingly higher than among students in comparison schools.

Given this difference in past educational performance, it is not surprising that Bronx NCHS students were more likely to have been promoted in the prior year than were students in the comparison schools. According to the DOE data, virtually all Bronx NCHS students (97 percent) had been promoted during spring/summer 2003, compared with 59 percent of students in the Bronx comparison schools.

Exhibit 2.11
Proficiency Levels on Eighth-Grade Math and ELA Assessments
for Students Enrolled in NCHS and Comparison Schools in the
Bronx, 2002-03



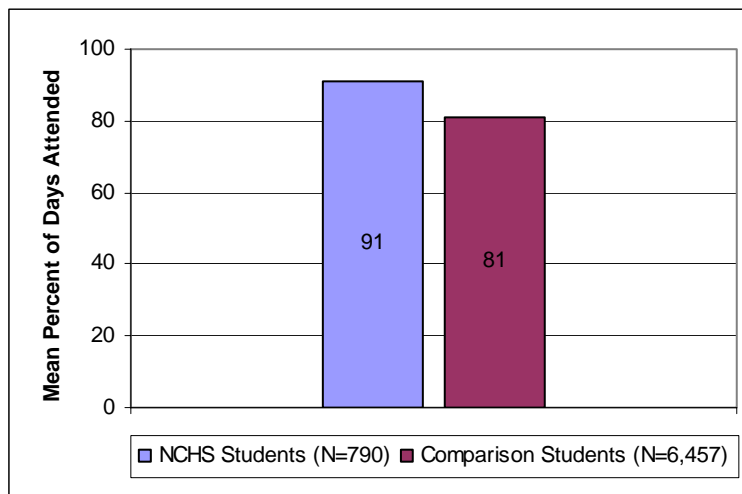
*** $p < .001$

Comparison of previous attendance patterns. During the 2001-02 school year (the year before the NCHS schools opened), students who later enrolled in NCHS schools in the Bronx attended school more regularly than students who later enrolled in the comparison schools. Exhibit 2.12 shows that in 2001-02, the average daily attendance rate for students who later enrolled in Bronx NCHS schools was 91 percent, compared with an average daily attendance rate of 81 percent for students who enrolled in the comparison schools the following year.

Comparison of suspension rates. Overall, students in both groups had low suspension rates, but students in Bronx comparison schools were more likely than students in Bronx NCHS schools to have been suspended in the prior year. Seven percent of students in comparison schools were suspended at least once in

2001-02, compared to 1 percent of students in NCHS schools. While no NCHS students had been suspended more than once, 1 percent of students in comparison schools had been suspended two or more times.

Exhibit 2.12
Prior Attendance Rates of Students Enrolled in NCHS and Comparison Schools in the Bronx, 2002-03***



*** $p < .001$

Conclusion

The available data on students enrolled in the NCHS schools show that students exhibit many indicators of educational risk, especially as measured by poverty and minority racial/ethnic background. However, eighth-grade educational performance data for students in Cohort 1 schools indicate that NCHS students attended school on a more regular basis and performed better on statewide achievement tests than did their peers who enrolled in the Bronx comparison schools. Data from teachers on students' attitudes and behavior suggest that students in the Cohort 2 schools may also share the positive educational backgrounds that the evaluation found empirically among students in the Cohort 1 schools.

These data should not be surprising. The history of small schools in New York suggests that the NCHS schools are likely to offer educational settings more conducive to success than those provided in the host high schools, which the NCHS schools are intended to eventually replace. This reputation is likely to have appealed to parents, guidance counselors, and students who were looking for schools that would promote high achievement, thus encouraging enrollment by students whose educational backgrounds indicated a commitment to schooling and learning.

III. What Changes Did Cohort 1 Schools Experience in Year 2?

A centerpiece of this evaluation is its tracking of the extent to which the New Century high schools implement strategies that reflect each of the 10 research-based principles of effective high schools, as delineated in the theory of change presented earlier. The Year 1 report described the initial steps that the Cohort 1 schools took to implement those strategies. This report re-examines those efforts, looking for progress as well as problems. The evaluation's intent is not to castigate, so individual schools are not identified. Instead, the report identifies areas where most or all of the schools are succeeding or struggling, so that the schools, their partners, and New Visions can refocus their attention on problem areas and help the schools achieve their goals.

In addition to reviewing the status of implementation of the 10 principles, this chapter also examines other central aspects of the schools' operation, including their relationships with their host schools, the qualifications of their teaching staffs, and their use of advisory periods.

Academic Program

The New Century High Schools initiative is more than an effort to shrink the size of urban high schools. At its core, it seeks to change the way urban high schools educate students by creating conditions, including small school size, that give rise to more challenging curricula, improved pedagogy, and higher achievement. Only by enhancing the level of academic challenge in the curriculum and adopting instructional strategies that engage students in the learning process can the schools hope to generate the kind of improved student outcomes they seek. This section reviews their efforts to accomplish those goals.

Rigorous Instructional Program

Overall, students reported that the extent to which they are challenged by their courses remained high and unchanged from the previous year. The mean score for students on the Academic Challenge scale stayed at 16 (out of 24) in Year 2 as in Year 1. Students' attitudes about the extent to which they are challenged were consistent across several items that explored this issue. For instance, 89 percent of students in Cohort 1 schools in Year 2 agreed or strongly agreed that their teachers had high academic standards for their performance, which is the same percentage that agreed with that statement the previous year. Three-quarters of students believed that all or most of their classes were preparing them well for the Regents exams, which was also unchanged from Year 1.

Almost two-thirds of students (64 percent) said that they were challenged to work hard in their classes, which was not significantly different from last year. Comments from students during Year 2 continued to reflect their sense that the schools challenged them to learn at a high level. “[Classes] are challenging, but they’re supposed to be hard,” one student said. “If you don’t get something, you just ask the teachers.” Another confirmed that teachers had high expectations for students but also provided the assistance they need. “They expect a lot from you. If they see you slack off or your grade go down, they make you do [the work] again or give you help. They know you and what you can do so if you go down they will talk to you to try to find out what’s wrong.”

Students and teachers in the Cohort 1 schools disagreed about whether the level of rigor of the classroom and homework assignments had changed. Students responded that the level of rigor in the assignments they were asked to complete for their classes had fallen slightly, though remained relatively high. The mean score on the academic rigor scale for students fell one point, from 39 to 38 (out of a possible 55). Teachers’ assessment of academic rigor remained the same as the year before, although teachers reported that their curricula and assessments were more aligned with the Regents standards in Year 2. Ninety-one percent of teachers in Cohort 1 schools said their curriculum was aligned with the Regents, compared with 85 percent in Year 1. Similarly, 86 percent of teachers in Cohort 1 schools reported that the assessments they administered in class were linked explicitly to the Regents standards, an increase from 74 percent in Year 1.

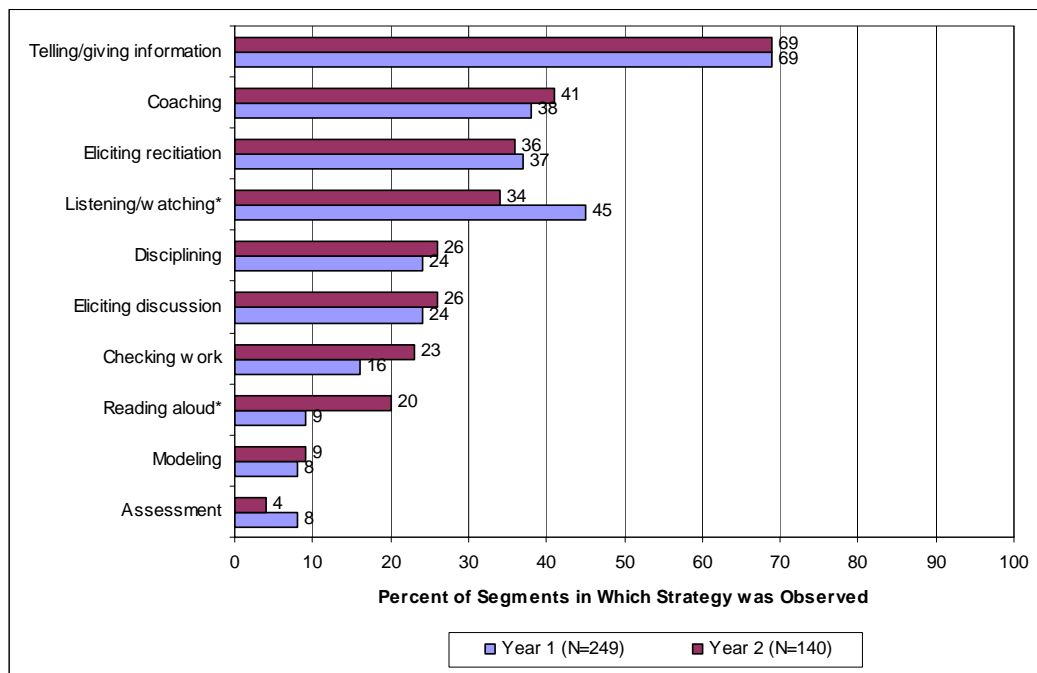
During focus group interviews, teachers highlighted the importance of aligning their curriculum to the Regents standards, and sometimes going beyond those standards. In general, teachers in Cohort 1 schools believed they were challenging students to achieve at a high level. One teacher reported, “There is no deviation from the Regents curriculum. We are following the book, which is aligned to Regents.” A science teacher added, “For science, we know what’s on the Regents and we know the standards.... We have projects that are portfolio projects that include a lot of Regents ideas. The content is covered.” For some teachers, the Regents represent a minimum standard, not a final goal. “I don’t just use samples from the test,” one teacher explained. “I want them to supercede the Regents. I want them to be able to apply what they learn beyond the exam, not just strategically for the exam. I want them to be able to apply [what they learn] to life. I work at the conceptual level. It’s one thing to regurgitate the data; it’s another to apply it.”

In this evaluation, an important tool in assessing instruction has been the classroom-observation instrument developed for the study. The observation instrument calls for observers to record their observations of instructional strategies, content, classroom management, and classroom organization using quantifiable codes, as described more fully in the evaluation’s Year 1 report. The observations conducted for the NCHS evaluation are organized in 10-minute segments, with each observation period typically consisting of five segments.

Each segment is a snapshot of teaching and learning activities within a specific classroom. The classroom observation instrument used in Year 2 of the NCHS evaluation was identical to the one used in Year 1, thus allowing for comparisons across years. The instrument was designed for and used in English/language arts classrooms only. In Year 2, trained members of the PSA evaluation team, many of whom had conducted classroom observations during Year 1 of the evaluation, recorded data from 57 classrooms, in 20 schools, yielding 285 instructional segments. For more information on the observation methodology, please see Appendix B.

The observation data indicate that instruction in Year 2 was not significantly different from Year 1 instruction, as shown in Exhibit 3.1. Overall, instruction continued to be fairly traditional, with the most common instructional strategy consisting of teachers telling or giving information to students, which was observed in 69 percent of instructional segments. This is unchanged from Year 1. The next most common instructional strategy was coaching or scaffolding, which places more responsibility on students to think through a problem with help from the teacher. This was observed in 41 percent of segments, which was about the same as the previous year. Teachers spent less time listening or watching students and more time reading aloud to them compared than in Year 1, but these strategies were observed in one-third or fewer of the segments.

Exhibit 3.1
Instructional Strategies Used in Cohort 1 Schools

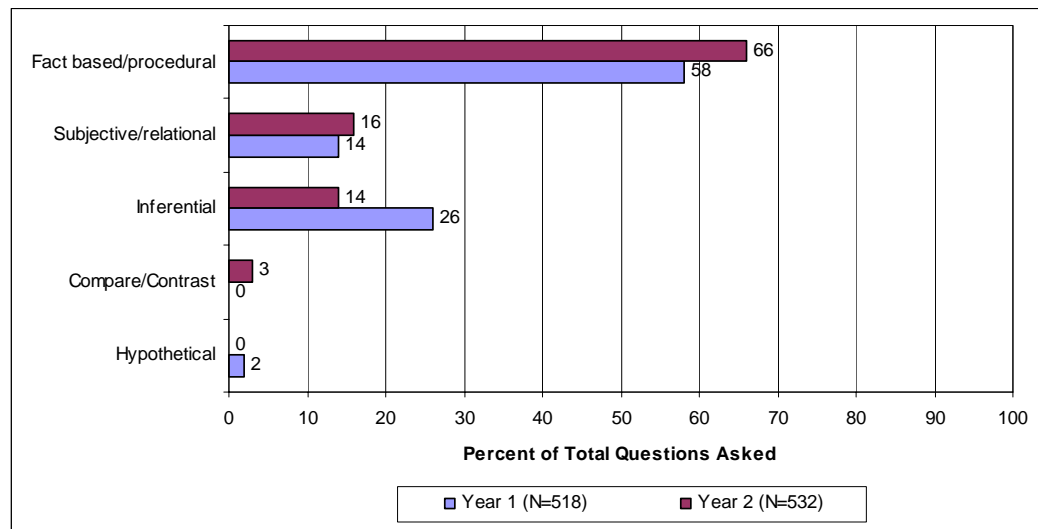


* $p < .05$

The performance goals identified by observers present a more mixed picture. As in Year 1, the most common performance goal identified by observers was learning facts, definitions, and content, observed in 44 percent of instructional segments in Year 2. Next, teachers required students to use ELA skills and strategies in 36 percent of instructional segments, an increase from the 25 percent observed the prior year. In turn, they required students to communicate their understanding of a text in only 25 percent of segments, a decline from the 57 percent of segments in Year 1.

Teachers' questioning strategies indicated that they continued to focus on memorization and recall of facts in their interactions with students. Exhibit 3.2 shows that questions that required fact-based answers were by far the most common type of questions observed; exactly two-thirds of all questions required students to recall facts or definitions. The next most common type of question was subjective/relational, which comprised 16 percent of all questions. Questions that required higher-order thinking and responses, such as compare/contrast or hypothetical questions, were less common; teachers did not increase the frequency with which they asked these questions in Year 1.

Exhibit 3.2
Types of Instructional Questions Asked in Cohort 1 Schools

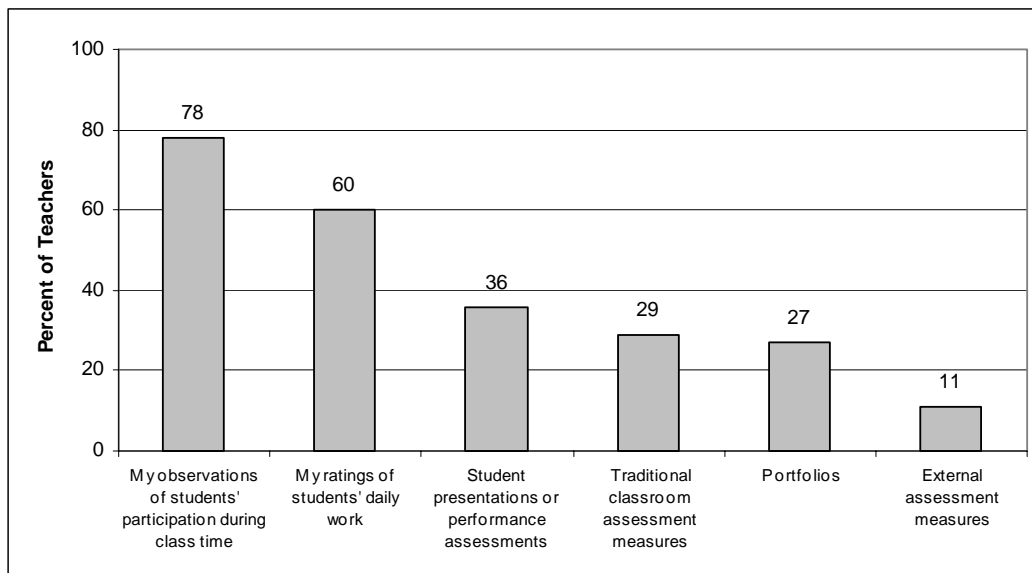


Meaningful Assessment Practices

Teachers in Cohort 1 schools continued to use an array of assessment strategies to gauge how well students were learning in their classes. The most common assessment strategy, shown in Exhibit 3.3, was also the most informal one: their observations of students' participation during class, with 78 percent of

teachers reporting that they use this strategy often or very often. Daily work assigned and completed in class was also used very often by more than half of teachers (60 percent). Teachers also used various formal assessments to measure students' progress. More than one-third (36 percent) often required students to make presentations or conduct performances in class. Slightly fewer teachers (29 percent) used traditional assessments such as unit tests and quizzes, and 27 percent assessed students' portfolios of their work. When asked which of these strategies was most useful to them in determining students' grades, teachers replied that student participation, daily assignments, and presentations/performances, in that order, were the most useful.

Exhibit 3.3
Assessment Strategies Used By Teachers in Cohort 1 Schools,
2003-04 (N=112)



Collaboration and Professional Development

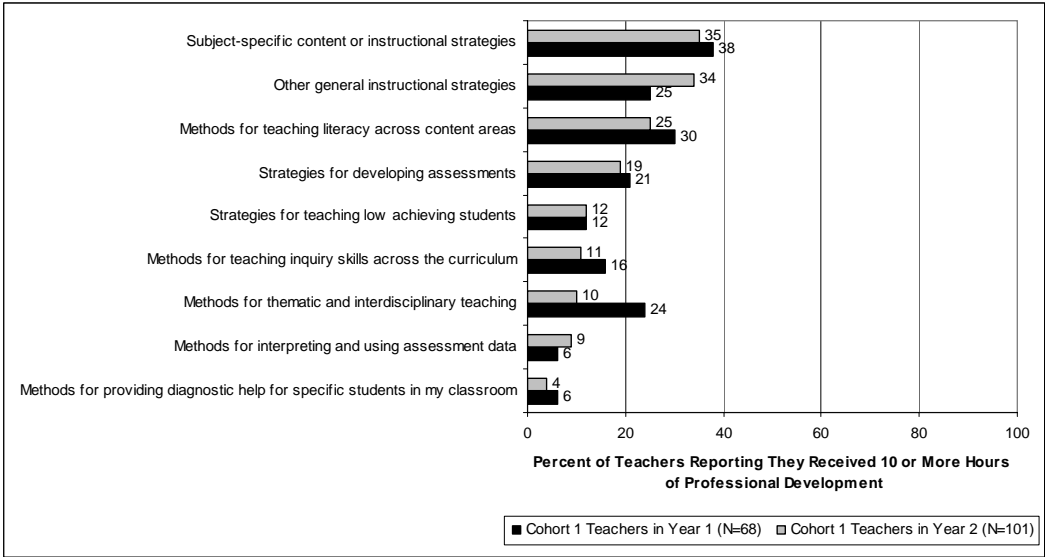
Two-thirds of teachers in Cohort 1 schools said their schools set aside time for teachers to discuss and critique their instruction, which was unchanged from the previous year. However, in Year 2, teachers were more likely to use that time for its intended purpose, which is to discuss instruction. In 2003-04, 55 percent of teachers said they usually or always use planning time to discuss instructional methods with their colleagues, up from 39 percent the previous year.

The more frequent use of planning time to discuss instruction did not result in more interdisciplinary or cross-grade coordination, according to teachers and principals. The percentage of teachers reporting that they coordinated their

course content with teachers in other disciplines or grades (61 percent) did not change significantly. Principals’ responses in Year 2 on this point (five of 11 principals reported such coordination) were also about the same as in Year 1. According to teachers’ responses during focus groups, most schools provided time for teachers to meet either vertically (across grades but within the same discipline) or horizontally (across disciplines but within the same grade), but not both.

As was the case in Year 1, subject-related instructional strategies remained the most common focus for professional development provided to teachers in Cohort 1 schools in Year 2. According to Exhibit 3.4, more than one-third (35 percent) of teachers in Cohort 1 schools received 10 or more hours of professional development in this area in Year 2. The second most common topic was “other general instructional strategies.” This represents a change from the previous year, when methods for teaching literacy across the curriculum was the second most common strategy. The two least common topics addressed by professional development remained unchanged: methods for interpreting and using assessment data and methods for providing diagnostic help to specific students.

Exhibit 3.4
Professional Development of Teachers in Cohort 1 Schools



Teachers’ ratings of the quality of professional development they received did not change from Year 1 to Year 2. On surveys, teachers’ attitudes about the appropriateness and relevance of the professional development they received were neither more nor less favorable compared with the prior year. However, they did indicate that more attention was given to providing on-going support for their efforts to implement in their classrooms what they learned in their training. Forty

percent of teachers in Year 2 said that the professional development they received included feedback and guidance for them as they sought to implement new strategies in their classroom, compared with only 31 percent of teachers in Year 1. In focus groups, teachers offered mixed reactions to the professional development in which they had participated during the year, with some describing it as “underwhelming” and others describing favorably their schools’ efforts to develop an interdisciplinary professional development program. In any case, professional development has not had any greater effect on their teaching than during the first year. In Year 2, the same percentage of teachers in Cohort 1 schools (45 percent) said that the professional development they received led them to change their classroom instruction as in the prior year.

A final note: Although principals in later cohorts may have benefited from the New Schools Intensive provided by the New York City Leadership Academy, the Academy was rated as the least valuable source of support by Cohort 1 principals. Four did not receive any support from the Academy, four said it was not at all useful, and two responded that it was only somewhat useful. In contrast, 10 principals said support provided by their region was somewhat or very useful, and eight said mentoring provided by a veteran principal was somewhat or very useful.

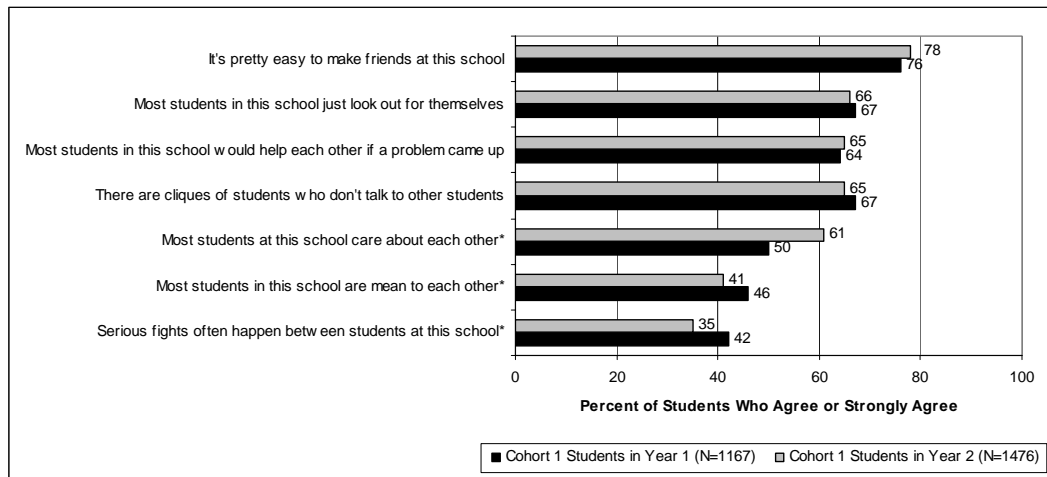
Learning Environment

Students in the Cohort 1 schools reported that they got along slightly better with their fellow students than they did during the schools’ first year. The mean score on their peer relations scale increased slightly from 17.6 (out of 28) in Year 1 to 18.1 in Year 2. Exhibit 3.5 shows some of the reasons for this improvement. The percentage of students who said that most students at their school care about each other increased from 50 percent in Year 1 to 61 percent in Year 2. Not surprisingly, the percentage of students who reported that serious fights occurred often at their school dropped from 42 percent in Year 1 to 35 percent in Year 2.

Qualifications of Staff

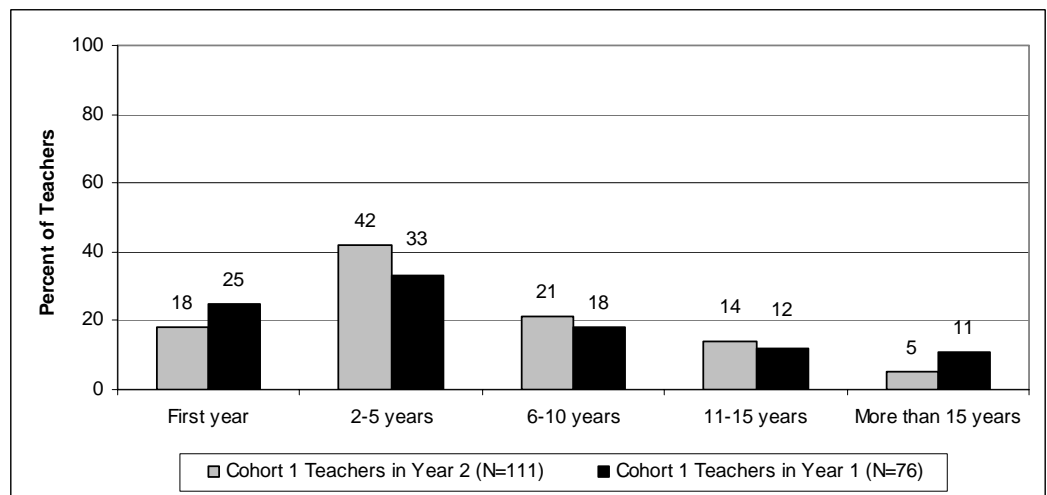
Exhibit 3.6 shows that, compared with their first year of operation, Cohort 1 schools had fewer first-year teachers, but the same proportion of teachers with six or more years of teaching experience. The percentage of first-year teachers dropped from 25 percent in Year 1 to 18 percent the following year. There was a corresponding increase in the percentage of teachers with two to five years of experience, indicating that most of the first-year teachers stayed at their school for the following year. The percentage of teachers with six or more years of experience held steady at 40 percent. This remains substantially below the citywide average of 60 percent.

Exhibit 3.5 Students' Relationships with Peers in Cohort 1 Schools



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Exhibit 3.6 Teachers' Years of Teaching Experience, in Cohort 1 Schools



Almost three-quarters of teachers in Cohort 1 schools (74 percent) had an advanced academic degree, but only 1 percent held a doctorate. Roughly one-quarter (24 percent) had a permanent teaching certificate, with most of the rest (62 percent) employed with a provisional certificate.

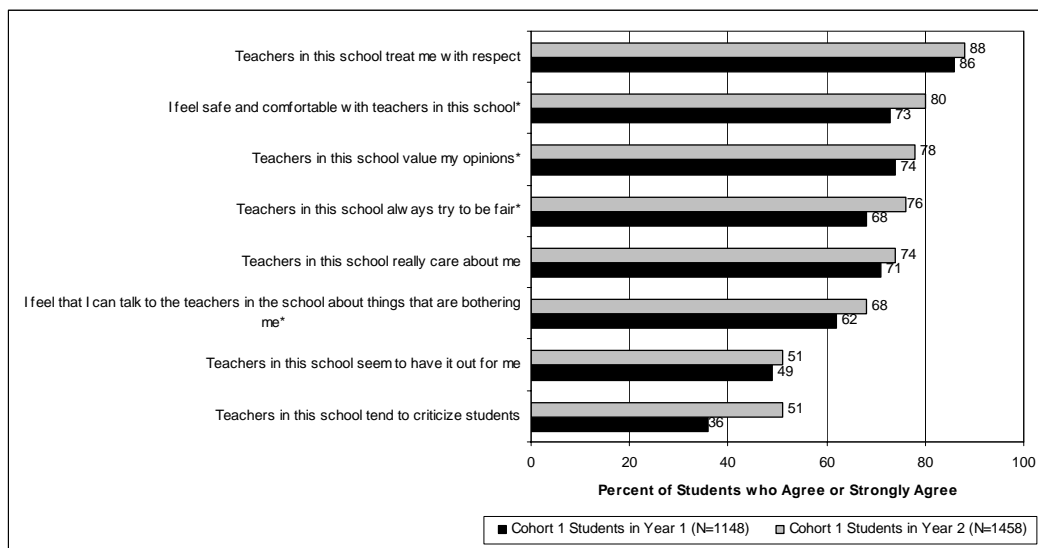
Virtually all teachers who participated in focus groups cited the school's small size as a key reason for wanting to teach there. Others mentioned the

professional environment. For instance, one told us, “I went to see this school and I thought, ‘I’m not walking out this door until I have a job here.’ There’s such a different feeling here.” Another one explained, “I was very pleased to come in a school where the principal is an English teacher and there is a lot of focus on literacy.” Fewer teachers cited their particular school’s academic theme or focus as a major draw.

Personalization

Even as they added grades and expanded enrollment, the Cohort 1 schools maintained the intimate learning environments that encourage strong adult-child relationships to develop. The mean score on the student-teacher relations scale increased from 17.4 to 17.8 (out of 24). Teachers made gains in building students’ trust in them, according to Exhibit 3.7. The percentage of students in Cohort 1 schools who reported that they felt “safe and comfortable” with teachers increased from 73 percent to 80 percent. Similarly, the percentage who said they can talk with their teachers about things that are bothering them increased from 62 to 68 percent. Students continued to believe that “teachers in this school treat me with respect,” with 88 percent agreeing or strongly agreeing with that statement.

Exhibit 3.7
Student-Teacher Relations in Cohort 1 Schools



* $p < .05$

Students in Cohort 1 schools continued to feel valued and known in the schools. Eighty percent of students agreed or strongly agreed with the statement, “I feel like I am known here,” the same percentage as in the previous year. In at least one way, students’ level of comfort improved. More students (70 percent,

compared with 66 percent in Year 1) agreed or strongly agreed with the statement, “I feel like I matter here.”

This high level of personal attention also extended to the classroom. Fully 93 percent of teachers said that when students were not performing up to the school’s expectations, the school provided those students with additional time and support. More than three-quarters of teachers (78 percent) also reported using one-on-instruction in their classrooms to a great or moderate extent (unchanged from the previous year).

During focus groups, students were adamant that their schools recognized and treated them as individuals. Here is a sample of what they said:

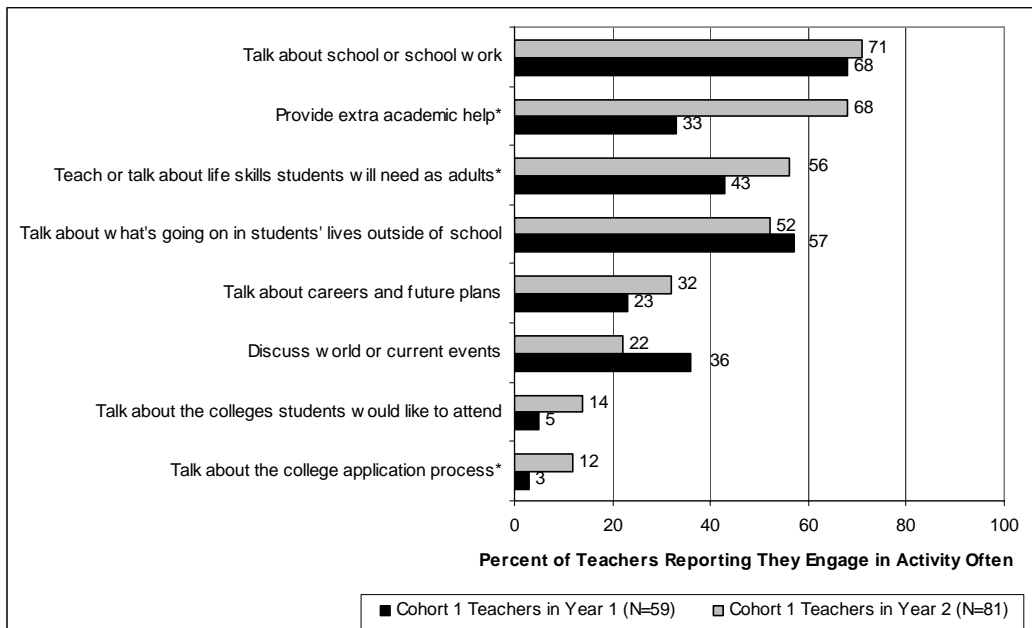
- “I think teachers can write a biography about me. I don’t feel isolated. I feel like a part of the school where I can speak up. When I talk to teachers, I feel more encouraged to do stuff. They motivate me to move forward. Otherwise, I would be stuck in one place.”
- “As soon as someone is missing, they know right away.”
- “I am a shy person and I would have gotten lost in a large school. Here you can talk to teachers and teachers know how I feel. The teachers I have had at other schools never knew me.”
- “My friends are in larger schools and have problems I don’t have, including the problem of teachers who are never available to give extra help.”
- “I like that we can call teachers by their first name. We are all young adults and we are all on the same level; it isn’t a hierarchy.”
- “I like the fact that the school is small, because you get more attention in a small school. You can have one-on-one with the teachers and everyone knows each other.”

Advisory Periods

Advisory periods were originally conceived, among other things, as an opportunity for teachers and students to get to know each other in a non-academic setting, helping to build a sense of community within the school. Options for the use of these time slots included debate about current events, teaching of life skills, discussion of college plans, or discussion of personal issues in a confidential setting.

Survey results and interviews with students and teachers reveal that, at best, advisory groups often had a decidedly academic flavor to them; at worst, they were unstructured time. As seen in Exhibit 3.8, most teachers (71 percent) said they often used advisory periods to talk about school and school work with students, and two-thirds (68 percent) often provided students with extra academic help during advisory, up substantially from 33 percent the prior year. The next two most common uses of advisory periods, according to teachers, more closely reflected their intended purpose. Fifty-six percent of teachers in Year 2 said they often discussed life skills with students (an increase from 43 percent in the previous year), and 52 percent talked about students’ lives outside of school. No other activity was cited as being used often by more than 50 percent of teachers.

Exhibit 3.8
Advisory Period Activities in Cohort 1 Schools



* $p < .05$

In their interviews for the study, however, teachers said that advisory periods often consisted of unstructured time that served little purpose other than to give students and teachers a break from the daily grind. The periods were often described as “hit or miss.” Above all, teachers expressed continued frustration with the lack of focus for these periods. As one teacher, who had taught in two NCHS schools as well as several other schools, commented, “Advisory has been an issue for many schools. It’s been a struggle to define what advisory really is.” One teacher’s frustration was a common theme during focus groups with teachers: “I feel that [advisory] is not structured and it would be better spent on student skills. [Instead,] we’re just scrambling to come up with ideas every week.” At

another school, one teacher explained that the school had developed a regular schedule for advisory, with one day a week devoted to projects, another to free writing, and another to study hall. However, she continued, “After a while, kids were getting more homework and teachers were getting tired. Then advisory became a time to take a break. They only have 40 minutes for lunch. Their classes are very intense. But now advisory is just to take a break.” Yet another teacher described her advisory period as “a zoo....I sit and watch the clock to see when I can dismiss them.”

Students agreed with their teachers that advisories lacked structure and coherence. Unlike teachers, however, they indicated that advisories were being used for their intended purpose. According to the students who participated in the focus groups, most of the time was spent sharing their personal experiences with each other, not engaging in school work. The following quotes demonstrate this:

- “We stay in a circle and talk about how we feel, what we think about teen pregnancy. You’re encouraged to talk because they’re always talking to you.”
- “We always check in. We say our problems, with family and personal things like that.”
- “Instead of being a teacher, she becomes one of us. She won’t tell us about the topic or teach it; she opens up to us and talks about her experiences with the topic.”
- “You don’t have to do work, and you talk about stuff... talk about anything... sex... what’s happening on the news...”

Students indicated during focus groups that the value of advisory periods depended almost exclusively on the personality and abilities of each particular advisory teacher. A few students wished they could use that time to work on homework, while others said they actually used advisory for that purpose.

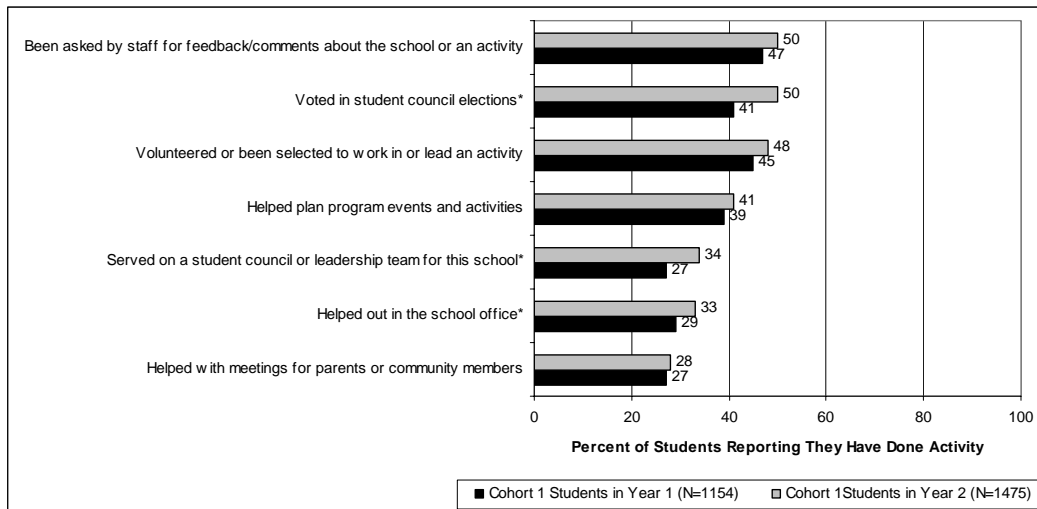
Clear Focus and Expectations

According to teachers, Cohort 1 schools have retained a strong commitment to their educational foci. Mean scores for teachers on the Clear Focus scale remained high and unchanged (16.5 out of 20). Teachers’ responses to the items that make up the scale reflected their strong commitment to the visions that steered their schools. Almost all teachers said they understand and support their school’s educational focus (98 percent) and that their course content and instructional materials reflect their school’s educational focus (93 percent). Similarly, 92 percent of teachers said that they share a common set of beliefs and values that guide their respective school’s program.

Youth Development

Having spent a year getting accustomed to their new school, students in Cohort 1 schools became more involved in school affairs in Year 2, although their level of involvement was still relatively low. The mean score on the student involvement scale rose from 2.5 to 2.8 (out of a possible 7). Exhibit 3.9 shows that student councils were the focal point for students' involvement in school affairs, with more students reporting having voted in student council elections (50 percent, up from 41 percent) and serving on student councils or leadership teams (34 percent, up from 27 percent). For their part, schools provided more opportunities for students to participate in school events. More students in Year 2 (71 percent) responded that their schools offered a variety of sports, clubs, and after-school activities than in Year 1 (63 percent).

Exhibit 3.9
Students' Engagement in School Activities in Cohort 1 Schools



* $p < .05$

Schools, together with their partners, provided more opportunities for students to expand their learning outside of school in Year 2. In Year 2, more students in Cohort I schools (40 percent) had internships or part-time jobs arranged for them by their school than was the case the previous year (34 percent). Similarly, more students volunteered to perform community service (35 percent in Year 2, compared with 28 percent the prior year). Partners were key players in making these expanded opportunities available to students. Partners organized college field trips, internships with organizations as diverse as Major League Baseball and the New York Academy of Medicine, and community service projects. One partner even moved its pre-existing youth development program, which prepares students for the college application process, to the

school. Several partners moved staff from their headquarters to the schools to help coordinate after-school and community service activities. Not surprisingly, partners reported higher levels of student engagement in community service programs in their responses to the partner surveys in Year 2, compared to Year 1. The number of partners who said that all or most students participated in service learning rose from just one partner to four partners.

Support Infrastructure

Instructional Leadership

In Year 1, all but one of the Cohort 1 principals had never been a principal before. Not surprisingly, some struggled with the demands of a new job, especially under less than optimal circumstances (lack of space, very little time to hire and train their teaching staff). Although most expressed a strong desire to be the instructional leader of their school, many found that administrative demands, and the time it took them to learn to negotiate the district bureaucracy, interfered with their ability to be the type of leader they hoped to be.

In their second year, many of the principals said that they had grown into their jobs, but their survey responses showed only modest, if any, improvement in their instructional leadership skills. By their own account, a slightly smaller number of principals spent time in classrooms observing instruction in Year 2. In their first year, nine principals visited a classroom and provided feedback to teachers at least once a month; the following year, eight visited classrooms at least once a month. Also, slightly fewer principals (four, down from six) conducted demonstration lessons for teachers at least once a month.

Overall, about the same percentages of teachers in Year 2, as in Year 1, observed their principals engaged in instructional leadership activities, such as regularly monitoring their curriculum and instruction and providing guidance and assistance to teachers. In one important area, more teachers in Cohort 1 schools said principals gave them feedback on what they saw when they visited their classrooms, and substantially more said the feedback was relevant to them. In Year 2, 82 percent of teachers said principals gave them feedback after they observed a lesson, up from 69 percent the previous year. A remarkable 90 percent of teachers in 2003-04 said the feedback from their principals focused on issues important to the teachers, up from 42 percent the previous year.

During site visits, most principals seemed more confident and comfortable in their roles. Several principals said they believed that they had matured as principals, and that they were better principals than they were the previous year, when many still had the mentality, they said, of a teacher or an assistant principal. Their growing confidence emerged in their reflections on the past two years.

- “[This year] I had a good sense of the budget and curriculum. I was also used to the idea of a shared building. I knew a lot more and [everything] fell into place.”
- “This year I toughened up and told some teachers not to return. I’m very non-confrontational, but I have been more confrontational this year. When we opened last year, I hired all my friends and it didn’t quite work out. We were all fellow teachers and I didn’t own my authority so much last year. This year, I hired strangers.”
- “This year, I am a lot more sure of what I need to do for the school. There are so many things to learn at one time, but now I feel more confident.”

Technology

According to teachers and principals, Cohort 1 schools had installed more computers in classrooms. Not surprisingly, students reported that their teachers incorporated technology into their instruction with greater frequency. More teachers in Year 2 (18 percent) reported having at least 20 computers in their classroom than the previous year, when only 7 percent of teachers had at least 20 computers in their classroom. Principals also reported that their schools had more computers overall and that more were connected to the Internet as well.

Although teachers did not report requiring students to use computers more often, students said otherwise, as shown in Exhibit 3.10. The percentage of students agreeing or strongly agreeing with the statement, “In my classes teachers give assignments that require us to use a computer,” increased from 76 percent in Year 1 to 80 percent in Year 2. Similarly, more students in Year 2 (48 percent) said that their teachers “teach me how to use computers through our coursework” than the previous year (42 percent).

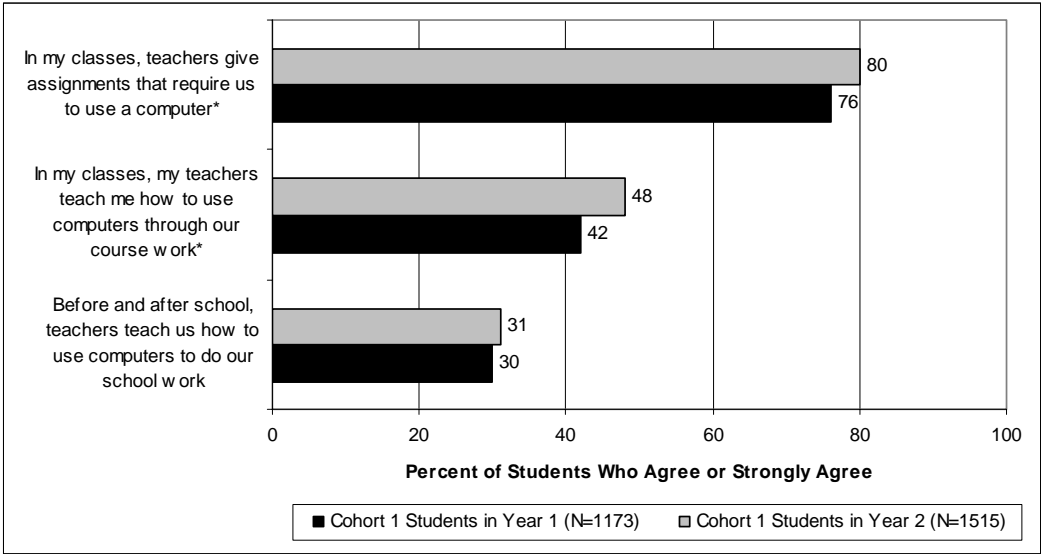
Relationships

Partnerships

In Year 2, partners maintained about the same level of school involvement as in Year 1, with increases in some forms of involvement and decreases in other forms. More partners than before said they played at least some role in after-school programming and fund-raising, with 10 partners engaged in each of those endeavors. According to interviews with partners, at least four of them were playing lead roles in coordinating their schools’ after-school activities, including mentoring, tutoring, internships, and recreational

activities. This work typically involved the assignment of a full- or part-time staff person to the school to manage these programs.

Exhibit 3.10
Use of Technology in Instruction in Cohort 1 Schools



* $p < .05$

Partners tended to describe their role as providing a bridge from the school to resources and opportunities existing outside the traditional school context. Indeed, some partners were key advocates for their schools, helping broker new relationships between the school and other organizations or businesses that enriched the learning environment at the schools by providing internships, in-kind support, and out-of-school learning activities. As one principal commented, “[Partner] gives 110 percent to make connections for the school.” Another partner described its role in finding an alternative facility for the school that was viewed as safer and more spacious than the school’s original space.

At the same time, partners of Cohort 1 schools perceived themselves as having less influence on decisions that affected the school than the year before. Whereas all partners in Year 1 said that they exerted at least some influence on the day-to-day operations of their schools, three of them reported in Year 2 that they had very little influence. Two partners also perceived less cooperation between school faculty and staff from their own organization. In Year 1, all partners agreed that “there is a great deal of cooperative effort among school faculty and members of the community partner.” The following year, two of the partners disagreed with this statement. While three partners expressed satisfaction with their roles (one said “we’re like equal partners with the school

and the teachers”), most of the partners expressed concern with their limited role, as reflected in the following statements:

- “For it to be a true partnership and to have our agency invested, we have to participate in a more meaningful way...The students know who we are, but we want the professionals in the schools to really see us as [an educational] partner.”
- “There’s an expectation that we’ll physically be here more than we have been to date. Part of that is because we don’t have an understanding of how my staff can be useful [within the school] and how we can work together in terms of teachers’ understanding and integrating that in their daily work.”
- “I feel like we are invisible all the time. The principal signed up teachers but not [partner] staff for the New Visions Partnership retreat.”

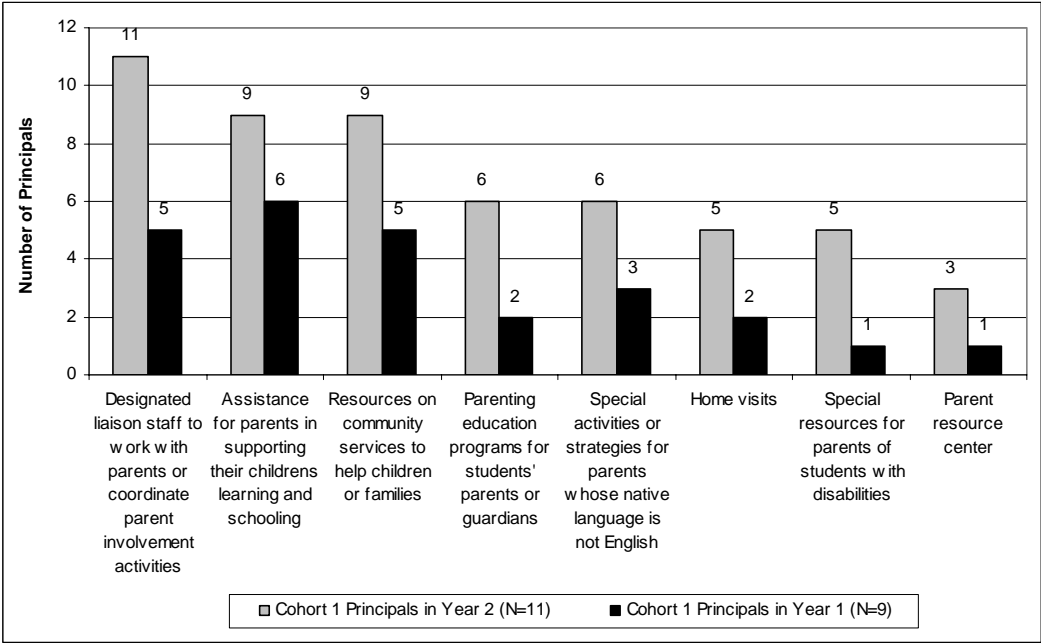
In spite of these concerns, several partners found creative ways to become more involved in their schools’ instructional programs. Several provided staff who taught or co-taught classes with teachers at the school. One explained that “during the day, we get to do in-class assessments. We get to see the students’ comprehension level. That helps us a lot because it’s easier for us to target our [after-school program].” Several partners provided professional development to teachers at the school. One provided a curriculum coach who visited the school one day a week to facilitate team meetings. Another offered workshops on diversity, health, and community service, and another worked to build interpersonal relationships among staff at the school. Finally, another partner said she “tries to see the kids every two weeks in one of their two-hour blocks in the morning and afternoon.”

Parent Outreach and Involvement

Cohort 1 schools in Year 2 reported that they were more active in reaching out to parents than they had been the previous year, and parents seemed to have responded by being more involved in school affairs. The mean score on the Parent Outreach scale, as reported by principals, increased dramatically from 2.6 to 4.5 out of 8. According to principals, many more schools offered parenting support to students’ parents, which is reflected in Exhibit 3.11. Six principals, up from two the previous year, said their schools offered parenting classes. Similarly, nine principals, up from six the previous year, said their schools offered workshops designed to show parents how to support their children’s learning at home. Five principals, up from two the previous year, said that home visits by teachers were an important component of their program. Reflecting DOE’s

decision to place parent liaisons in every school, all 11 principals, up from five the previous year, said their schools had parent liaisons.

**Exhibit 3.11
Services to Parents and Families in Cohort 1 Schools**



Community partners played important roles in reaching out to parents. For instance, one partner applied to be the family literacy service provider for the neighborhood and now operates a family literacy program twice a week at a neighboring elementary school. Another was responsible for hiring the school's parent coordinator and participated in parent involvement activities at the school.

In focus groups, parents said that principals and teachers at the Cohort 1 schools made a major effort to communicate regularly with them. These efforts included teachers and principals giving out their personal cell phone numbers to parents and calling parents whenever they had a concern about their child. According to parents:

- “At other schools, if I want to speak to my child’s teacher, I have to wait on hold on the phone for 30 minutes or I have to make an appointment. At this school, I have three phone numbers (the principal, the assistant principal, and the teacher). I call at any time and I never have to wait. For me, this is very important.”

- “Teachers make an effort to talk to parents. With me, it is easy because I am here. I come by once or twice a week. I am unemployed right now, so that helps. They talk to me, or I get a call from one of the teachers. In addition, I have a good relationship with the parent coordinator.”
- “I get called every Friday because that’s how I set it up. I want to know, ‘Did my son or nephew do their homework for that week?’ because that’s going to determine how the weekend’s going to go.”
- “If he slips, I get a call. They don’t let him go downhill for six months.”
- “My son had some difficulty with some things. Initially I heard from some administrators. They’ve given me their cell phones. If you call them, they call right back. I was really impressed that they called me in advance.”

In contrast, students in Cohort 1 schools said that staff at their schools were less likely to contact their parents regularly. Fewer students in Year 2 reported that their parents spoke on the phone or met with their teachers at least once a month. Only 33 percent of students said their parents talk with teachers on the phone at least once a month, down from 40 percent the previous year. Likewise, 29 percent said their parents met with their teachers at least once a month, down from 33 percent. However, students said their parents were just as likely to attend school meetings and events as they were the previous year, although these percentages remained fairly low, with fewer than one-third of students saying their parents attended such meetings.

In most areas, principals in Cohort 1 schools reported increased involvement by parents. For instance, the number of principals who said parents were involved or very involved as volunteers increased from four in Year 1 to seven in Year 2. Similarly, six principals said more than half of all parents attended parent-teacher conferences in Year 1, up from four the previous year.

Relationship with the Host High School

NCHS teachers reported a slight decrease in the amount of hostility they sensed from the staff and students in the host high schools; principals, however, may have sensed heightened hostility, although these data were incomplete. Thirty-one percent of teachers said that hostility from their host schools was a serious or moderate problem for their schools, a decrease from 37 percent in Year 1. Among principals, four out of 10 principals who responded said that hostility from the host schools was a serious or moderate problem, compared with three out of 13 who responded this way the previous year. Thus, a higher proportion of

principals appeared to sense hostility, but with fewer principals responding in Year 2, a firm conclusion is not possible.

During focus groups, teachers indicated that, while tension between the NCHS schools and host schools was not ubiquitous, where tension existed it could be quite serious and disruptive. According to them, the tension stemmed from host schools being overcrowded and resenting having to give up resources and space to the small schools. According to one teacher, “There is big tension here. The host school has realized they aren’t going to be here in five years, and they aren’t going to go quietly. Last year, there was only one small school. This year there are two, and next year two more small schools will bring in two grades. There is an expected backlash from the staff [of the host school].” Another one said sarcastically, “Our students fight with the students from the other schools – that’s the extent of [our relationship with them].”

Summary Observations from the Schools

In most cases, a majority of respondents in Cohort 1 schools indicated that the school had improved in key areas when compared with conditions during their first year. Six of 11 principals said that the work environment and relations with the community partner had improved, and eight of 11 said the instructional program was better than the previous year. Equal proportions of community partners responded that conditions had improved, with seven of 12 saying that the work environment and relations between the school and community partner had improved, and nine of 12 saying the instructional program had improved. However, some partners broke with their counterparts on the issue of the quality of the partnership, with three partners saying that relations between the school and the partner organization had deteriorated. Also, one partner said that the work environment at the school had worsened.

More than half of the teachers who were not new to their schools said that the work environment, instructional program, and relations with the community partner were improved over the prior year. Fewer than 10 percent of teachers said the instructional program, work environment, and relations with the community partner had worsened.

During site visits, leaders and faculty in Cohort 1 schools shared what they considered to be their biggest accomplishments during their second year. Faculty praised their leaders for recruiting more high-performing students and more teachers who were committed to the school’s focus. In all, they said that the schools had developed a stronger sense of vision after their first year. As one teacher said, “The school’s vision has been made clearer now, so that students can see how we are different from other schools.”

At the same time, teachers and principals complained about their loss of autonomy on curricular matters, as the DOE sought to centralize the district's high school instructional program. This especially concerned one teacher, who asked rhetorically, "Small schools with an emphasis on testing? We're becoming the smaller school version of the large school." They also said that as the schools expanded by adding more grade levels, they tended to lose some of the intimacy and personalization that had characterized the schools during their first year. According to one principal, "It's harder because there are more kids. You can never do for the second wave of kids what we did for the first wave. I cannot do the town halls I did last year; [there are] too many students. It's very hard to provide that level of caring, although we do provide it. There are more students and you split your attention among 200 instead of among 100." It should be noted, however, that teachers' and principals' responses to survey items did not reflect such deterioration. Both groups reported the same high levels of instructional autonomy and personalization as they had described during the first year.

Looking ahead, principals identified several areas of looming concern. One area identified by several principals was accommodating the needs of students with diverse learning needs and differing levels of English proficiency. One principal pointed out that his school did not have enough students with special needs or limited English proficiency to offer them specialized services, so "we had to rely on the larger school to support those needs." Another challenge confronting the schools was instituting instructional strategies that better engaged students in their education. As one principal noted, "We also haven't figured out how to give open-ended assignments and have kids engage in them in a rigorous way."

IV. How Are Cohort 2 Schools Implementing the Principles of Effective High Schools?

In September 2004, 18 new small schools opened their doors. Four of these schools, all in the Bronx, had operated as programs the year before. The remaining 14 schools, all in Brooklyn, were brand new. This chapter presents data on their implementation of the principles of effective high schools and on other elements of their operation. When appropriate, it compares their level of implementation with the level of implementation in Cohort 1 schools during their first year of operation. In that sense, the Cohort 1 schools' first year serves as the benchmark against which the Cohort 2 schools are being measured. In addition, because Year 2 was the first year of operation for these schools, this chapter examines the support they received leading up to their opening and throughout the school year.

Academic Program

Rigorous Instructional Program

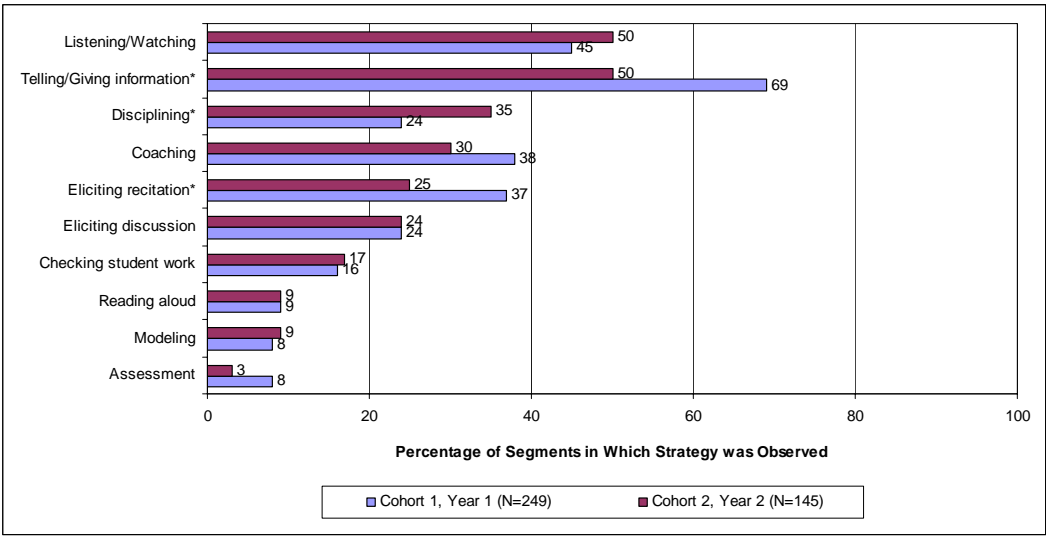
Students in Cohort 2 schools said that their classes were challenging and were preparing them well for the Regents exams they must pass to graduate from high school. The mean scale score on the Academic Challenge scale for students was 16 out of 24. Solid majorities of students reported high levels of academic challenge in their classes, with 87 percent responding that teachers had "high standards" for them. In addition, 70 percent of students said that they were learning a lot in most or all of their classes, and 59 percent said they were challenged to work hard in most or all of their classes. More than 70 percent of Cohort 2 students said that teachers incorporated Regents-style questions into their classroom assessments and homework assignments. The mean scale score for students on the Academic Rigor scale, which measures students' impressions of the difficulty of in-class and homework assignments, was 36 out of 55. This is lower than the mean score of 39 that students in Cohort 1 schools recorded on the same scale during their first year.

Teachers in Cohort 2 schools were fairly satisfied with the level of rigor in their courses. The mean score on the Academic Rigor scale for teachers was 23 out of 33, which is comparable to the mean score for teachers in Cohort 1 schools during their first year. Perhaps one reason for teachers' confidence in the level of rigor of their classes was their belief that their content is closely aligned with the Regents standards and exams. Almost all teachers in Cohort 2 schools (96 percent) agreed or strongly agreed that their curricula were aligned with Regents standards, and 93 percent said that the assessments they administer in class are closely linked to the Regents standards. These reported levels of alignment with

the Regents were significantly higher than those reported by teachers in Cohort 1 schools during their first year.

The classroom observations indicated that instruction in Cohort 2 schools was quite traditional and tended to focus on low-level knowledge and skills. During more than half of the segments observed (53 percent), teachers in Cohort 2 schools engaged in whole group instruction, using small group instruction during only 18 percent of segments. As shown in Exhibit 4.1, the two most common instructional strategies employed by teachers in Cohort 2 schools during the observations were telling or giving information and listening or watching students; both were used in 50 percent of the segments. Next, teachers were most likely to be spending their time disciplining students, which they were observed doing in 35 percent of the segments. In less than one-third of the segments (30 percent), teachers coached students. Compared with teachers in Cohort 1 schools during their first year, teachers in Cohort 2 schools were less likely to tell or give information and elicit recitation but more likely to spend instructional time disciplining students.

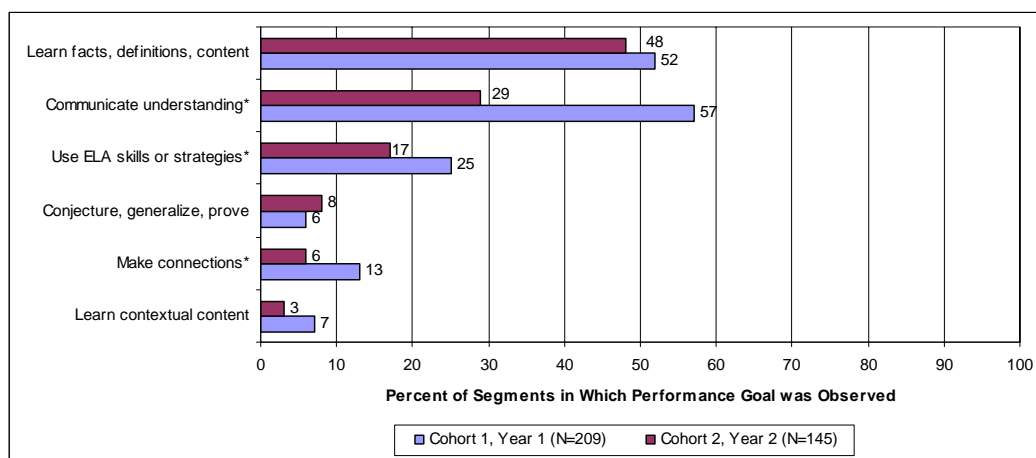
Exhibit 4.1
Instructional Strategies Used in NCHS Schools, by Cohort



* $p < .05$

The performance goals for the observed segments revealed a focus on basic skills. Exhibit 4.2 shows that in almost half of the segments (48 percent), the performance goal was for students to learn facts, definitions, or content. This matches the frequency of this goal observed in classrooms in Cohort 1 schools during their first year. In only 8 percent of the segments in Cohort 2 schools were students expected to conjecture, generalize, or prove a position, and in only 6 percent of segments was the goal for students to make connections between what they were learning and their existing knowledge base.

Exhibit 4.2 Performance Goals for Students in NCHS Schools, by Cohort



* $p < .05$

Teachers in Cohort 2 schools used a variety of materials in their lessons. More than two-thirds of them (36 percent) used narrative texts, and 28 percent used students' own writing and non-academic materials. In only 6 percent of observed segments did teachers use textbooks. Compared with teachers in Cohort 1 schools, teachers in Cohort 2 schools were less likely to use narrative texts and textbooks and more likely to use students' own writing and non-academic materials.

The types of questions asked by teachers in Cohort 2 schools followed the same patterns as other observed behavior. Almost two-thirds (64 percent) of all questions asked during the observations were fact-based or procedural. Almost one-quarter were subjective or relational, and only 2 percent asked students to compare or contrast or to respond to a question that posed a hypothetical situation.

Meaningful Assessment Practices

Teachers in Cohort 2 schools used a mix of assessment strategies to gauge their students' progress. The most frequently used assessment strategy was also the most informal: 95 percent of teachers often or very often used their own observations of students' participation during class time. Eighty-eight percent often or very often incorporated students' daily work into their assessment system. In addition to being the most frequent forms of assessments, teachers' observations and ratings of student work were also the most important and useful measures, teachers reported. At the same time, less traditional forms of assessment were prominently featured in Cohort 2 classrooms. Seventy percent

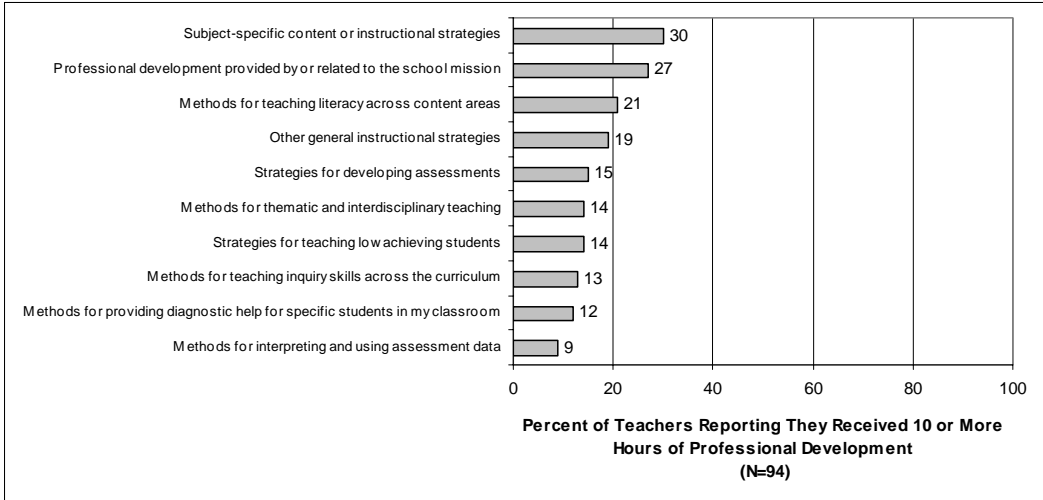
of teachers often or very often required students to give presentations or performances, and 39 percent used student portfolios to assess students.

Collaboration and Professional Development

Almost all Cohort 2 schools provided common planning time for teachers, but fewer of them coordinated their curricula across grades and/or disciplines, according to principals. Of the 15 principals, 13 said the school provided common planning time for teachers, but only 10 said that teachers coordinated the content of their courses across disciplines or grades. Among teachers, 45 percent said they always or usually discussed instructional strategies during common planning sessions with their peers, and 70 percent said they always or usually discussed individual students whom they had in common. At the same time, 57 percent of teachers indicated that their schools had formal arrangements that “provide opportunities for teachers to discuss and critique their own and others’ instruction.” Cohort 2 schools were less likely to provide these formal arrangements for teachers than Cohort 1 schools during their first year, when 67 percent of teachers said their schools had such arrangements.

Instructional strategies were the topic most commonly addressed during teachers’ professional development, according to Exhibit 4.3. Almost one-third of teachers (30 percent) received more than 10 hours of professional development in instructional strategies related to their content area, and 19 percent received more than 10 hours of professional development in other instructional strategies. Irrespective of the content of their professional development, a majority of teachers rated the quality to be “adequate.” With one exception, higher percentages of teachers rated the quality of professional development in different topic areas to be “high” rather than “low.”

**Exhibit 4.3
Professional Development for Teachers in Cohort 2 Schools, 2003-04**



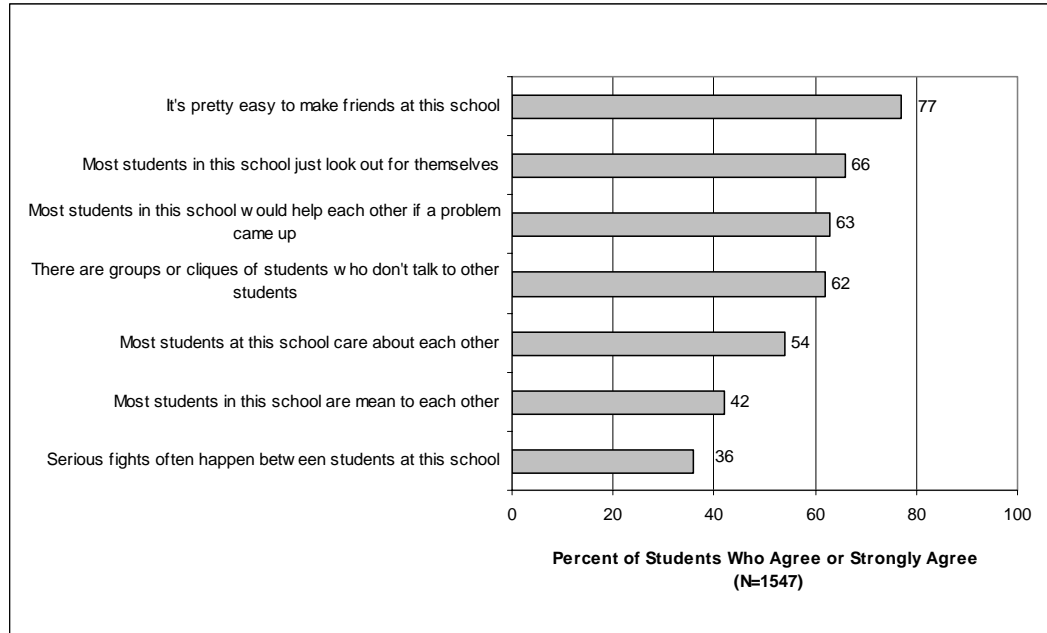
These results are consistent with the results on the Professional Development Quality scale, in which the mean score for teachers in Cohort 2 schools was 40 out of 64. Teachers identified the following strengths of the professional development they received: it was appropriate for their grade level and content areas (65 percent), helped them reflect critically on their teaching (58 percent), and gave them new ideas to try in their classrooms (55 percent). However, only 35 percent said that it included feedback and guidance while they tried to implement new ideas in their classrooms, and 48 percent said it led them to change their teaching. These last two figures did not differ from those of teachers in Cohort 1 schools during those schools' first year.

During focus groups, teachers expressed the most concern about the lack of time they had to collaborate with other teachers and to attend professional opportunities outside of school. Regarding the latter, the schools' small size worked against teachers because there was no one available to cover their classes if they wanted to attend a session outside of the school. "I was going to attend a conference but I couldn't go" because there was no one to cover her class, a math teacher reported. Small school size also precluded adequate collaboration within disciplines because often there was only one teacher teaching a particular subject. Teachers expressed the desire for more interdisciplinary collaboration but again regretted the lack of time available for that. As one teacher pointed out, "The main question is 'How can we integrate [the school's theme] into what we're doing?' I don't think anyone has done it because of time constraints and a lack of staff development in that area. We're not doing what we could do there."

Learning Environment

Students in Cohort 2 schools offered mixed reports of the quality of relationships among students in their new schools. Overall, the mean score on the Peer Relations scale was 18, which was slightly higher than it was in Cohort 1 schools during their first year. Exhibit 4.4 shows that more than three-quarters of students in Cohort 2 schools (77 percent) said it was easy to make friends in school. However, two-thirds (66 percent) said most students at their school just looked out for themselves, and 62 percent said there were groups or cliques who excluded other students. Nevertheless, just over one-third of students (36 percent) said serious fights happened at their schools, which was lower than the 42 percent of students in Cohort 1 schools who reported serious fights during those schools' first year.

Exhibit 4.4 Students' Relationships with Peers in Cohort 2 Schools, 2003-04

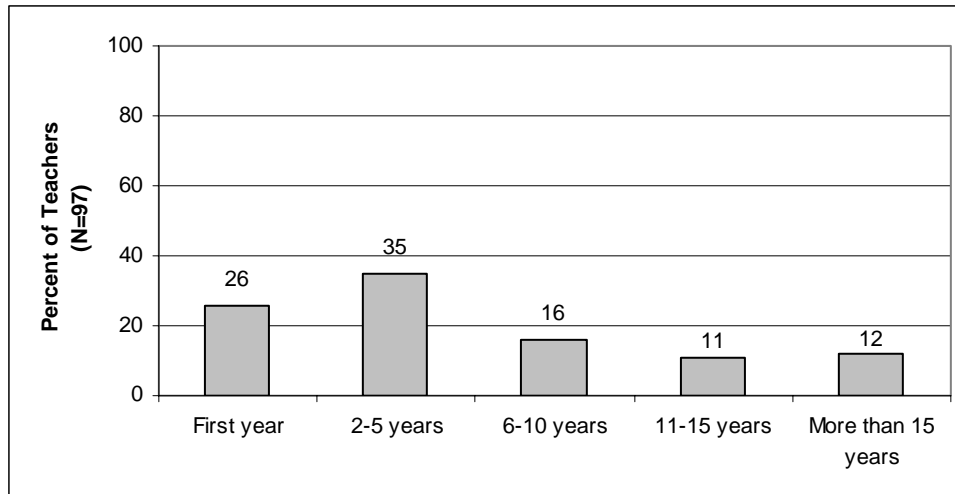


Qualifications of Staff

Cohort 2 schools employed a relatively inexperienced group of teachers compared with New York City schools overall. Among this group, 26 percent were in their first year of teaching, 35 percent had taught for two to five years, and 39 percent had taught for six or more years. This profile, shown in Exhibit 4.5, almost exactly matches the profile of teachers from Cohort 1 schools during their first year. Together, these figures seem to indicate that NCHS schools have attracted a high proportion of teachers with limited teaching experience. This was confirmed during focus groups, when several teachers expressed their excitement at being part of something new and “getting in on the ground floor” of a new endeavor. The following two teachers were particularly excited about those opportunities: “When the opportunity came to start a school, it seemed too good to be true,” one noted. “I loved the idea that we created this school without an administrator – that it was teacher-developed.” The other added, “It’s a work in progress, and I can put my mark on it.”

Just over two-thirds of teachers in Cohort 2 schools (68 percent) had advanced degrees, and 5 percent held a doctorate. Fewer than one-third of them (28 percent) had a permanent New York teaching certificate; 60 percent had a provisional certificate.

Exhibit 4.5
Teachers' Years of Teaching Experience in Cohort 2 Schools,
2003-04



Personalization

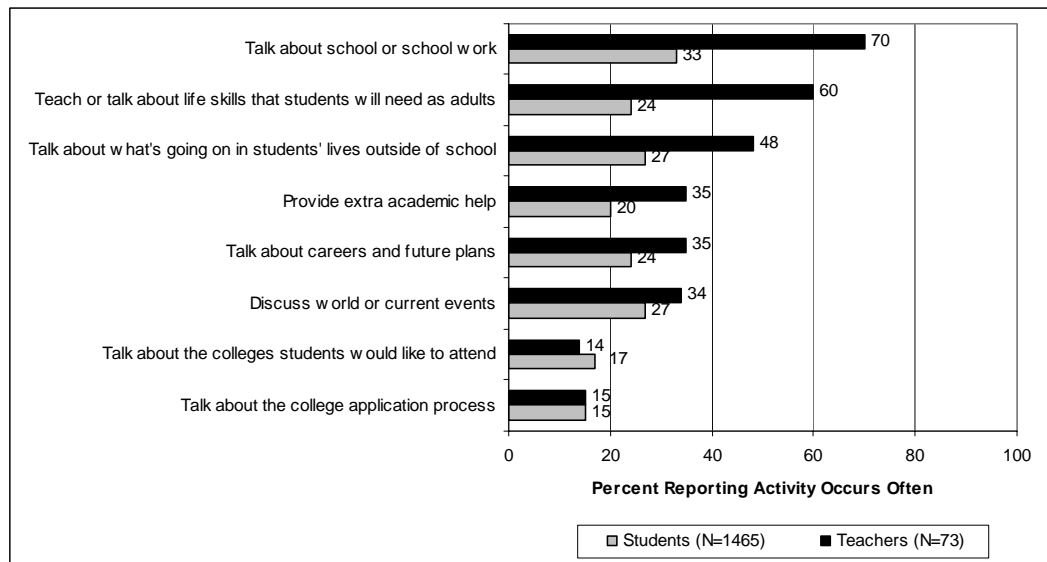
The Cohort 2 schools created an environment in which students trusted their teachers and believed they were known by them. The mean score on the Student-Teacher Relations scale, based on student survey responses, was a relatively robust 17.1 out of 24. This was about the same as the 17.4 mean scored by the Cohort 1 schools during their first year. A remarkable 83 percent of students agreed or strongly agreed with the statement, “I feel like I am known here.” About three-quarters of students (72 percent) said that “teachers in this school really care about me,” and even more (74 percent) felt “safe and comfortable with teachers in this school.”

Teachers also recognized and addressed students’ individual talents and needs in the classroom. Almost all teachers (97 percent) said they gave struggling students extended time and support. Four-fifths of teachers (80 percent) said students were organized into instructional groups according to their academic needs or skill levels, and that they provided one-on-one instruction to a great or moderate extent (73 percent). Finally, a substantial majority of teachers (61 percent) used different instructional materials with students of different ability levels. One teacher highlighted the advantages of being a small school when it came to addressing the needs of her students: “Because we are a small school, you can figure out individually what students need and target that. We really know our students. We know this one needs help with this and this one with that to bring them up to our standards.”

Advisory Periods

Teachers in Cohort 2 schools reported that they were most likely to spend their advisory groups talking with students about their school work, as shown in Exhibit 4.6. Seventy percent of teachers said they often talked with students about their school work during advisory period. At the same time, 60 percent said they often talked about or taught students about life skills they would need as adults. Fewer than half of teachers in Cohort 2 schools (48 percent) said they often talked with students about their lives outside of school. Compared with teachers in Cohort 1 schools, teachers in Cohort 2 schools were as likely to provide extra academic help and talk about school work, more likely to talk about life skills, and less likely to discuss students' lives outside of school.

Exhibit 4.6
Advisory Period Activities in Cohort 2 Schools, 2003-04



Students in Cohort 2 schools agreed with their teachers that their school work was the most common topic discussed during advisory periods, but reported that other topics were common, too. One-third of all students (33 percent) said that teachers often discussed their school work during advisory period. Slightly fewer (27 percent) said that their lives outside of school and world events were often discussed.

In person, teachers were confused and ambivalent about the advisory periods. Much of the confusion stemmed from a lack of direction, curriculum, and structure for the time, they said. A majority of Cohort 2 schools used their

advisory periods as bonding time for the students and teachers, but without any structure or preparation for teachers. Advisory periods tended to go through an evolutionary process as the faculty struggled to come up with an appropriate use for them. The following comments were emblematic of teachers in Cohort 2 schools' reactions to advisory periods.

- “We have gotten off the track here. It should be time for students who have issues to find someone to talk to. Maybe their advisor can give some advice.”
- “Every teacher has an advisory class starting at 8 a.m. That time is supposed to be utilized for the students to engage in general writing. That worked out well initially, but sort of dissipated.”

However, one teacher credited her school's use of advisory periods as key to the school's success. “A lot of our success [as a school] could be tied to our advisory program,” she said. “We've been combating students' negative experience with school through advisory and that's really paid off academically.”

Clear Focus and Expectations

The faculty in Cohort 2 schools shared a common vision for their school and clear expectations for their students. On the Clear Focus scale, teachers scored a mean of 16.4 out of 20. This is comparable to the 16.5 mean score for teachers in Cohort 1 schools during their first year. Eighty-eight percent of teachers agreed or strongly agreed that they and their colleagues shared a common vision and set of values. This had positive implications for students, as one teacher pointed out, “We are more of a team and we back each other. The kids know that we back each other, and that builds coherence and minimizes the tensions within the school.”

Teachers' responses to similar questions revealed the extent of their unity of purpose. Ninety-four percent said they understood and supported their school's educational focus, and 91 percent said their instructional materials and course content reflected that mission. In addition, 94 percent of teachers said they communicated their expectations in explicit terms to students, and their expectations seemed to have gotten through to students. Ninety percent of students agreed or strongly agreed with the statement, “I know what I am expected to learn at this school.”

Schools fell into three different categories in terms of the specific expectations they had for students. Some schools sought first and foremost to change the way students learn and interact with knowledge. Two teachers in separate schools explained this expectation.

- “We wanted to develop a program that would change how students are interfacing with knowledge—one that is different from the oppressive route to education that occurs in other schools.”
- “The goal is to change kids’ idea of what school is, to get them to think about learning from what they observe and what they deduce from that observation.”

Other schools expected to build a strong sense of community that supported students’ learning. “One of the aims of the school is to build a sense of community,” a teacher explained. “That’s not always a priority in other schools. The kids feel they belong, and that helps in attendance and motivation, to be a part of a . . . community.”

Finally, a third set of schools expected students to be ready for postsecondary education or careers. “We do a good job of preparing them for any career they want to go into,” a teacher said proudly. “One of the big goals is to prepare them for college and prepare them for any career they are interested in.”

Youth Development

Cohort 2 schools were off to an encouraging start in providing extra-curricular opportunities for their students. While students as a whole took advantage of these opportunities, responses from community partners seemed to indicate that student participation in some schools was less than adequate. Nearly two-thirds of students (64 percent) said that their school offered a variety of sports, clubs, and after-school activities, and more than half (57 percent) said their school offered a range of community service activities. In both cases, students in Cohort 2 schools were less likely than students in Cohort 1 schools to report that these activities were available to them in the school’s first year.

However, the mean score on the Student Involvement scale, which measures the extent to which students were actually involved in school affairs and events, was 2.9 out of 7, a higher score than the 2.5 mean achieved by the first cohort of schools at the equivalent point in time. Several principals provided examples of ways in which they encouraged students to take an active role in their schools. “Through our town hall meeting, many of our young people have a chance to stand in front of the student body and make a presentation,” one principal said. Another emphasized that students should be involved in key decisions affecting their lives at the school. “[We expect] that kids are going to be engaged. They’re going to take an active part in what’s going on in the school. They are learning that school is a fluid environment; there is give and take. We might have a debate over the dress code, over dances; there may be some times they’re not going to get what they want. But there is a structure – a process whereby they can communicate their concerns. We let them know: ‘We really

value what you have to say' and we can build on that to create a learning environment that everyone can be successful in." Yet another said that involving students is a central component of the school's approach. "We discussed our advisory, the discipline and undesirable student behaviors, and our theme [with students]. They had an equal voice in what is going on. We're letting them know this is how our school operates. This is how professionals work." However, at least two principals expressed concern that their schools were not offering students enough opportunities to participate or develop leadership skills.

Community partners were much less encouraged by the level of student participation in after-school activities. Only four out of 17 partners said all or most students attended after-school or weekend enrichment programs, and five of 17 said all or most students attended after-school or weekend tutoring programs.

Support Infrastructure

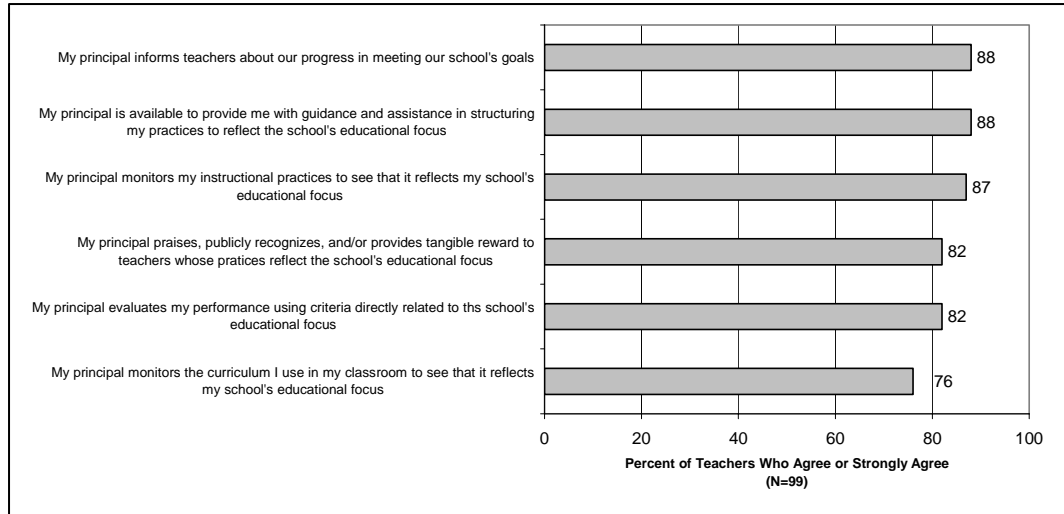
Instructional Leadership

Principals in Cohort 2 schools appeared to be rather inexperienced, but missing data make a definitive finding impossible. Eight of 10 principals said they had never been a principal before, but five principals returned a survey without responding to that item.

By most accounts, principals actively monitored their schools' academic programs to ensure that they reflected their particular educational focus. All principals agreed or strongly agreed that they monitored their schools' curricula and classroom instruction to ensure that they conformed to their educational foci. Exhibit 4.7 shows that teachers agreed, with more than three-quarters of all teachers in Cohort 2 schools saying that principals closely monitored their instruction (87 percent) and curriculum (76 percent). Moreover, 82 percent said that principals evaluated their performance as teachers using criteria directly related to the school's educational focus.

Teachers also praised principals for providing frequent and valuable feedback on their teaching. Eighty-three percent of teachers said their principals gave them feedback on their instruction after visiting their classrooms. Moreover, almost all teachers (93 percent) said that feedback from their principals was timely, focused on issues important to the teachers, and was useful to them in helping to improve their instruction.

Exhibit 4.7
Principal Leadership, According to Teachers in Cohort 2 Schools, 2003-2004



Technology

Cohort 2 schools were well-equipped with computers, but in about half of the schools, teachers did not have access to computers in their classrooms. Only two out of 15 principals said their schools had no functioning computers, and the remaining 13 principals said their schools had at least 20 computers. Of those, only two schools had fewer than 20 computers connected to the Internet. Moreover, only three principals said that their school did not have enough computers for teachers to use them in instruction. By contrast, eight principals in Cohort 1 schools said their schools did not have enough computers during their first year.

Even though Cohort 2 schools were well-equipped with computers, about half of all teachers did not have access to computers in their classrooms, but that did not stop them from giving assignments that required students to use computers. Forty-seven percent of teachers in Cohort 2 schools did not have a functioning computer in their classrooms. Reflecting the uneven distribution of computers within schools, 27 percent of teachers said they had at least 20 computers in their classroom. Still, more than three-quarters of teachers (77 percent) said they gave assignments that required students to use a computer. This was substantially higher than the 62 percent of teachers in Cohort 1 schools who gave assignments that required students to use computers during their first year of operation. Almost the same percentage of students (76 percent) said that their teachers gave them assignments that required them to use a computer.

Presumably, some teachers expected students to use computers in a school computer lab or at home, since half of them did not have computers in their classroom.

Support from New Visions and Regional Superintendents

Principals in Cohort 2 schools were generally satisfied with the support provided by their New Visions liaison and their regional superintendents, but a vocal minority was not pleased. Eleven of 14 principals were satisfied or very satisfied with the support they received from their New Visions liaison. Nine of 15 principals said mentoring by New Visions staff was either useful or very useful to them. The biggest complaint that principals had with staff from New Visions was that they did not keep principals informed of decisions and issues affecting small schools, with four principals lodging this complaint. Six principals added that they did not believe that New Visions had established a strong partnership with school staff.

Only a small number of principals spoke about the support they received from New Visions during visits to their schools. Several were highly complimentary, with one saying, “There is nothing negative about my experience. New Visions and the Department of Education did a good job talking about the ten essentials of small schools.” Another appreciated “the flexibility that comes with the New Visions support. It means that we can shape professional development and other services to fit what we need here.” However, one principal described shortcomings in the support he received before and after his school opened, emphasizing the school’s early needs for help in logistical planning: “I didn’t have the codes for accessing certain budgets. I didn’t know I needed to ask for them. You need to know that you need to get Metro cards for kids.” Two other principals complained that New Visions had failed to “protect” the schools from the vagaries of internal DOE politics.

Principals’ were very pleased with support provided by their Local Instructional Superintendents. Almost all principals (13 out of 15) said coaching by their Local Instructional Superintendent was somewhat or very useful. Also, all nine principals who attended workshops sponsored by their Learning Support Centers said they were somewhat or very useful. Ten out 15 principals said that training by the New York Leadership Academy was somewhat or very useful. At the same time, principals had some of the same complaints about their liaison from the local superintendent’s office as they did about their New Visions liaison. Five principals said their liaison failed to keep them informed about decisions and issues affecting small schools and failed to develop a partnership with school staff.

Relationships

Partnerships

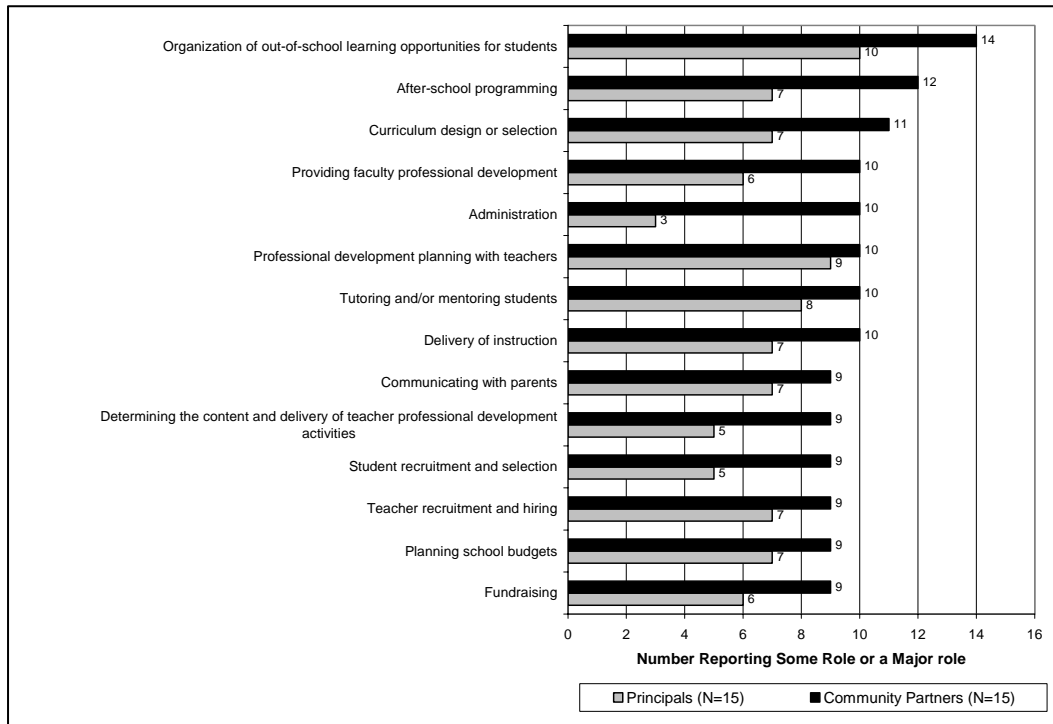
Community partners reported being involved in several aspects of school operations, and they were very pleased with their roles in the schools. Out of 11 partners who responded, 10 agreed or strongly agreed that there was “a great deal of cooperative effort” between school staff and the partner. In addition, 11 out of 15 partners said they had some or a great deal of influence on day-to-day operations at the school. Of those, only four said they had a great deal of influence, but no partners said they had no influence. All but one partner said that the principal regularly consulted with the partner about the overall direction of the school.

Nonetheless, a majority of partners did not have a major role in any of the areas of school operations about which they were asked. The largest number of partners who reported having a major role in any one area was seven (for recruiting and hiring teachers). As seen in Exhibit 4.8, partners in Cohort 2 schools were most likely to report having some role or a major role in providing extracurricular activities for students. Fourteen partners were involved in organizing out-of-school learning opportunities for students, and 12 were involved in planning or delivering after-school programs. At the same time, unlike partners in Cohort 1 schools, a substantial portion of partners in Cohort 2 schools had at least some role in their schools’ academic programs. Eleven partners said they had at least some role in curriculum design, and ten partners had at least some role in delivering instruction, planning and providing professional development for teachers, and tutoring or mentoring students.

Principals viewed their partners as less involved in school affairs. Only three principals said their partners had a great deal of influence on day-to-day operations, and four principals said their partners played a major role in any given area of school administration. Like their partners, however, more principals (10) said their partners had a role in organizing out-of-school learning experiences than in any other activity. Principals were much less likely than their partners to say the partners played a role in their schools’ academic programs. For instance, only seven principals said partners had at least some role in delivering instruction or designing the curriculum.

At least two of the Cohort 2 schools had the makings of model partnerships that could sustain the schools into the future. In one school, the partner maintained a regular presence at the school and participated in many facets of school life. As the principal explained, “The community partner lives here....The community partner is part of the professional development team. They participate in weekly learning walks. They administer our field studies. They work with the science teachers on a regular basis and participate as part of our school leadership team. The community partner has a community director for

Exhibit 4.8 Role of Community Partners in Day-to-Day Functions of Cohort 2 Schools, 2003-2004



the school who works with me in many capacities, including outreach for new students and arranging mentors for students.”

The other school had assembled a team of partners, each playing a specialized but complementary role. The lead partner provided administrative support as well as guidance on curriculum development; it also provided professional development for teachers, and one staff member of the community partner taught a government class one day a week. A secondary partner provided a classroom coach who visited the school once a week to observe four teachers and offer feedback on instruction and behavioral management. “Her work as a coach has been so beneficial,” expressed the principal. “Her support has been wonderful.” This partner also paid for the school’s guidance counselor and purchased instructional materials. The third partner, a community-based advocacy group, provided in-school staff support to help teachers integrate the school theme into their teaching. The principal also credited this group with securing 60-70 percent participation at parent-teacher conferences through their outreach efforts.

Parent Outreach and Involvement

According to principals, Cohort 2 schools were quite active in reaching out to their students' parents. The mean score on the Parent Outreach scale, according to principals, was 4.5 out of 8, substantially higher than the mean of 2.6 that Cohort 1 schools achieved in their first year. However, community partners, who often have a stronger connection to their communities than do the schools, gave schools a much lower mark. The mean score on the Parent Outreach scale, according to partners, was 2.2 out of 8. Twelve principals and 13 partners said their schools provided assistance to parents in supporting their children's learning at home. All principals and partners also confirmed that their schools had a parent liaison, as required by DOE. However, principals and partners disagreed about the prevalence of other outreach activities. All principals, but only 11 partners, said their school gave parents information about community services available to them. Eight principals, but only two partners, said their schools had a parent resource center.

Principals also reported communicating regularly with parents. All but two principals said they regularly informed parents about the overall direction of their school, and 11 principals said teachers communicated with parents on a regular basis. Seven principals said their schools regularly sponsored parenting workshops on campus, but only one principal said school staff conducted home visits.

Although none of the respondent groups identified lack of parental involvement as a serious or moderate problem, the level of parental involvement in the schools was relatively low. Across the board, roughly one-quarter of principals, partners, and teachers identified lack of parental involvement as a serious or moderate problem in their schools. At the same time, only eight principals said at least half of all parents attended Back-to-School night, and only three principals said parents were very involved in the Parent-Teacher Association. On a more positive note, 11 principals said at least half of all parents attended parent-teacher conferences.

Relationship with the Host School

Teachers were far more likely than principals to identify hostility from their host school as a serious or moderate problem. Whereas only two principals said hostility from the host school was a problem, 38 percent of teachers said it was. However, for one principal, the hostility from the host school overshadowed everything else the school was doing. "Being in this building is definitely a challenge. We've been treated horribly. We're disrespected daily, vandalized, ripped off. My kids are aware of it, but we try not to let them get involved. It's the faculty and staff at [the host school] abusing all the small schools. One of [the host school's] deans on our floor harasses us daily."

Though not directly the fault of the host school, teachers and principals were much more likely to agree that limited space within their facilities was a problem. Nine principals and 63 percent of teachers said inadequate space was a serious or moderate problem, with all nine principals reporting that it was a serious problem. Teachers highlighted some of the problems they had dealing with lack of space and resources when their schools opened:

- “We are limited to what we can access in the building. We don’t have a gym teacher, and we have to share cafeteria time.”
- “For future schools, there should be a master check list before any child walks through the door. It was disturbing not to have everything in place before we started. We had no equipment, desks, or materials. It wasted a lot of time and frayed a lot of nerves.”
- “We didn’t have a lot of equipment, and we didn’t have any books until Thanksgiving.”

Summary Observations from the Schools

Like the Cohort 1 schools before them, the Cohort 2 schools had an encouraging opening year, while still leaving themselves much room for growth. They shared some of the same strengths of their predecessors, namely their creation of safe and nurturing environments where students felt connected to and respected by adults, and where teachers shared a common vision for challenging their students to achieve at high levels. As one principal noted, “Our biggest challenge has been to get the school climate to where it is now. We have to develop trust and create a culture here. We’re now at a comfortable point. Students now understand that people really do care.” In some key areas, they surpassed the benchmarks established by the first cohort. The newer schools were more persistent in reaching out to include and involve parents, more adept at getting students engaged in school affairs, more successful in making sure that teachers received useful feedback from their principals, and better equipped with computer technology to enrich instruction. In other areas, they fell short, most notably in assigning academically rigorous work to students and involving their partners in the day-to-day operations of the schools. In all, however, Cohort 2 schools established a solid foundation for their future development.

Principals and teachers in Cohort 2 schools were well aware of the challenges confronting them as they moved forward. With some of them having overcome disastrous beginnings when they lacked sufficient furniture and instructional materials, they viewed their next challenge to be meeting the diverse educational needs of their students within the framework of their unifying themes.

Principals and teachers alike noted that students come to them reading at many different grade levels, often as low as fifth grade. Others mentioned the unique requirements for teaching students with disabilities and limited English proficiency. As small schools, they were concerned that they lacked the capacity to adequately serve those students. According to one teacher, “Since the city-wide curricula are not modified for ESL or for special ed, the teachers have to create those resources on their own. Since the city doesn’t provide these resources, it is a big problem to come up with a modified curriculum in all these areas.”

Helping students learn and grow while still remaining true to their themes at times seemed daunting to faculties in Cohort 2 schools. A principal laid out the challenge facing all of the schools in very stark terms, “The bottom line is that if you have a theme and no one is learning, then who cares?” To make the themes workable, teachers must adapt in the face of increased mandates, pressure to prepare students for the Regents exams, and limited time to develop creative lesson plans. As one teacher said, “The hardest things have been to fully merge the vision from the proposal and not really having the leeway from the mandated curriculum. It’s been difficult when the teachers have a very strict day-to-day curriculum.” Since many NCHS teachers were first-year teachers, they expressed a strong desire for more in-class support and more time to collaborate with their peers.

V. How Well Are NCHS Schools and Students Performing?

The central outcome sought by the New Century High Schools is that very high percentages of their students graduate within a reasonable time period and that these students are prepared to succeed in college and in careers. Early indicators that this outcome is likely to be achieved include evidence of high attendance in the NCHS schools, low incidence of disciplinary infractions, low student attrition, steady accumulation of credits for high school graduation, and passing scores on Regents exams. At this early stage of the initiative, it is only possible to track the first three of these indicators—students' levels of school attendance, their incidence of disciplinary infractions, and student attrition. Future analyses in this series will examine high school credit accrual and Regents test performance.

Student Outcomes as Measured by School Attendance

School attendance is examined here in two ways. The first section below uses data reported on DOE school-level summaries for Year 2 to determine attendance rates across NCHS schools and their comparison schools. The second section uses the evaluation's longitudinal student database to report comparatively on change in attendance rate between 2001-02 and 2002-03, which corresponds roughly to change between the eighth and ninth grades for students enrolled in the first class of students attending the Cohort 1 schools.

Attendance Rates across Schools in Year 2

In Year 2, the average attendance rate across all NCHS schools was 88.2 percent, with ninth-graders attending school at a rate of 88.2 percent, tenth-graders at a rate of 87.7 percent, eleventh-graders at 85.9 percent and twelfth-graders at 76.6 percent. Compared across cohorts, schools in Cohort 2 achieved slightly higher attendance rates, averaging 89.9 percent, compared to Cohort 1 schools' average attendance rate of 85.7 percent. Individual school attendance means ranged from a rate of 41.7 percent to a rate of 95.9 percent.

Comparison across Years 1 and 2 indicates that student attendance in Cohort 1 schools remained about the same over the period, with students attending an average of 85.7 percent in Year 2. The change in average attendance rates across Cohort 1 schools was greatest in a school whose attendance declined 15 percentage points over the two-year period. Excluding this school from the

analysis, the average attendance rate among Cohort 1 schools was 90 percent in both years.

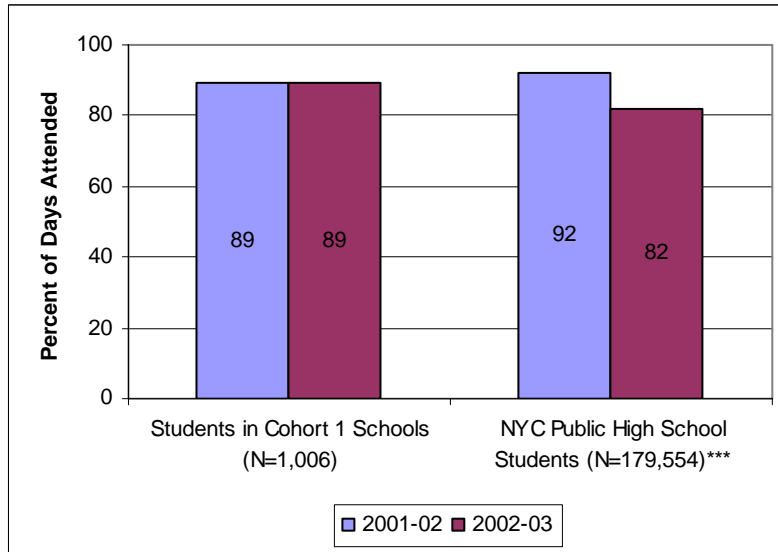
Another window on the changes in the NCHS schools is provided through comparison with the attendance rates of the host high schools in which the NCHS schools were located. This analysis is limited to the same school groupings as used in Chapter 2. The Bronx host high schools serve as the comparison for Cohort 1 NCHS schools in the Bronx, and the host high schools in both Brooklyn and the Bronx are the comparisons for Cohort 2 NCHS schools in Brooklyn and the Bronx. These analyses indicate that NCHS schools achieved significantly higher attendance than their comparisons, with a difference of 15 percentage points for the Cohort 1 schools and 14 percentage points for the Cohort 2 schools. Broken down by grade level in the Cohort 1 schools (because the Cohort 2 schools served mainly ninth-graders in Year 2), the largest attendance difference was at the ninth grade, in which the average NCHS attendance rate was 90.4 percent compared to a rate of 75.3 percent among the Bronx comparison high schools.

Change in Attendance Rates among Students Attending Cohort 1 Schools in Year 1

As explained in Chapter 2, the evaluation's creation of a longitudinal student database provides information about students' educational performance before entering an NCHS school. This allows the evaluation to chart change over time at the individual student level. An important question that these data can help answer is whether the high levels of student attendance seen in the NCHS schools represent an improvement in what would otherwise be expected from the NCHS students or a continuation of their previous performance. The longitudinal student-level data available for the students in Cohort 1 schools suggest, first, that these students attended school at relatively high rates before they enrolled in an NCHS school but, second, that NCHS enrollment was associated with an increase in attendance for all but the highest-attending students.

Overview of Cohort 1 students' change in attendance. Across all students in Cohort 1, average attendance rates remained stable between the year prior to their enrollment in Cohort 1 schools (2001-02) and Year 1. These rates were 89 percent in both 2001-02 and in Year 1, as seen in Exhibit 5.1. Available data from DOE suggest that the stable attendance pattern of NCHS students is quite positive, when compared with entering ninth- and tenth-graders throughout the city. District-wide, average attendance rates of entering ninth- and tenth-graders dropped 10 percentage points in 2002-03, from 92 percent in 2001-02 to 82 percent in 2002-03. The fact that, on average, NCHS students did not experience that attendance decline suggests that the NCHS schools were engaging students in their education at a level that maintained their relatively high attendance, thus creating a possibility of longer-term educational success.

Exhibit 5.1
Attendance Rates of Incoming Ninth- and Tenth-Graders Enrolled
in Cohort 1 NCHS Schools and
Incoming NYC Ninth- and Tenth-Graders, 2001-02 and 2002-03



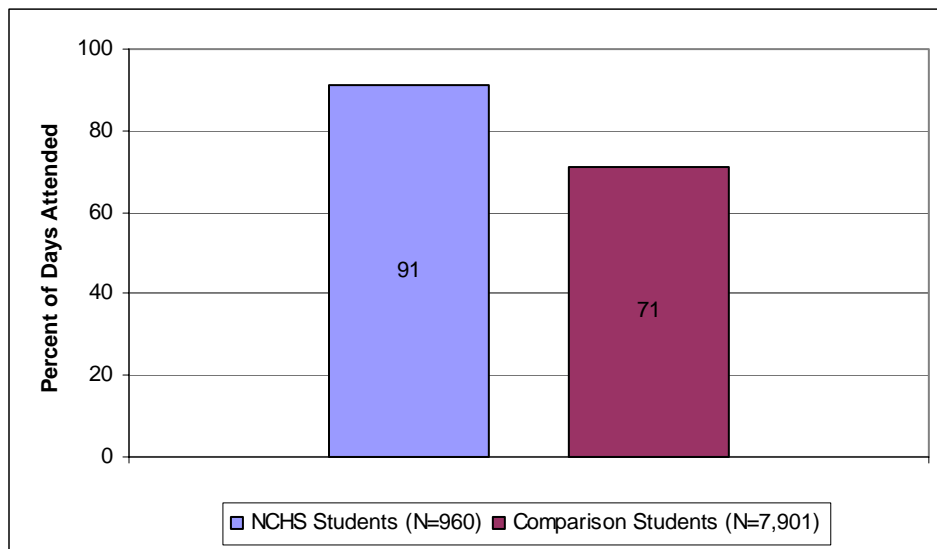
Comparison of attendance rates for NCHS schools in the Bronx.

Comparison of Bronx NCHS students with students in the host high schools is more useful than comparison of all NCHS schools with the district's high schools as a group, because of the similarity of the two groups of students in the Bronx schools. This analysis suggests that, during Year 1, students attending Bronx NCHS schools had a significantly higher average daily attendance rate than students in the comparison schools. The average daily attendance rate across all NCHS schools in the Bronx was 91 percent, compared with an average daily attendance rate of 71 percent in the comparison schools, as shown in Exhibit 5.2. This finding is not surprising since NCHS students had higher attendance rates before enrolling in the NCHS schools than did students in the comparison schools. Of perhaps greater importance are the different ways in which attendance rates changed when the two groups of students moved into high school.

The data suggest that enrollment in NCHS schools helped stem declining attendance rates for students transitioning from middle school to high school in 2002-03. Most notably, 2002-03 students attending Bronx comparison schools on average experienced declines from their eighth-grade attendance rates, while the attendance rates for students in NCHS schools remained unchanged. This pattern held true for subgroups of students with very high and very low 2001-02 attendance rates; indeed, the differences are most dramatic for students with very low attendance rates as eighth-graders. Exhibit 5.3 shows changes in attendance rates from the 2001-02 school year to the 2002-03 school year by quartile for both NCHS students and comparison school students. Overall, NCHS students

experienced virtually no change in their average daily attendance when they moved from eighth grade to ninth grade, compared with a 9.5 percentage point drop for students in the comparison schools.⁵

Exhibit 5.2
Attendance Rates of Students Enrolled in Cohort 1
NCHS Schools and Comparison Schools in the Bronx, 2002-03***

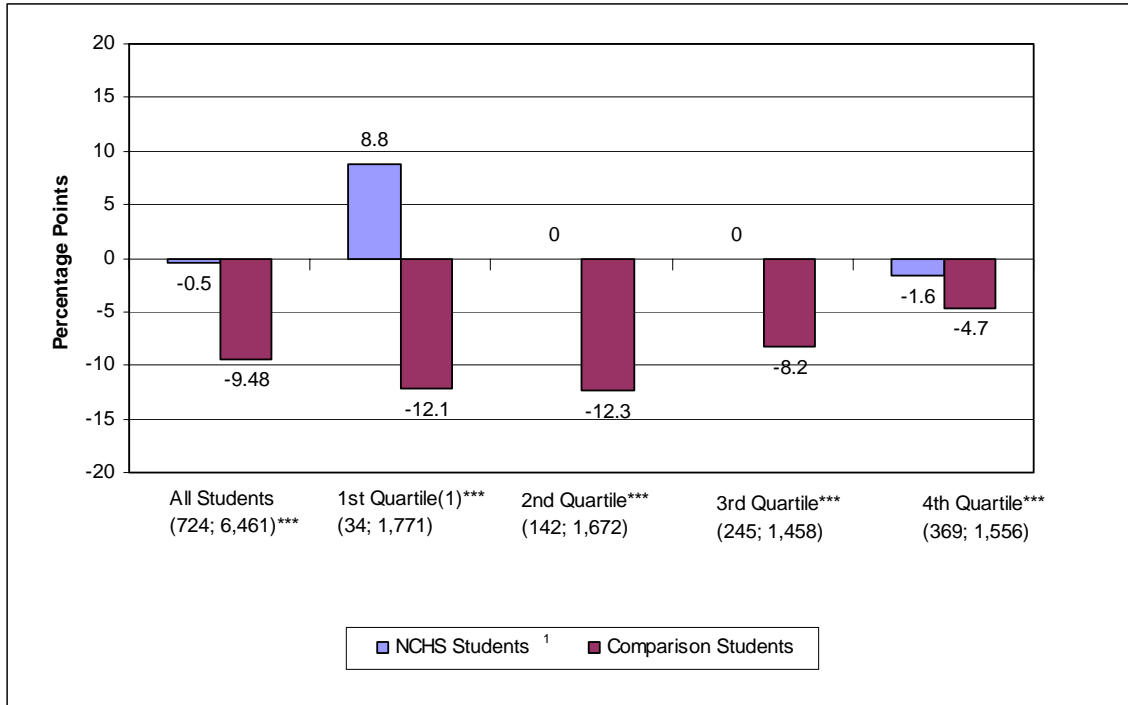


Even more striking are the differences among students with the poorest prior-year attendance. Comparison school students in the first quartile (those with attendance rates below 76 percent) experienced a 12 percentage-point drop in their attendance rates, while students in NCHS schools experienced no statistically significant change in their attendance rate.⁶ Similar findings emerge in the second quartile, where attendance rates for comparison school students dropped 12 points, while the attendance rate for NCHS students remained unchanged. Indeed, the differences in changes in attendance rates between NCHS students and comparison school students are statistically significant in each of the four quartiles, representing students with the lowest to the highest rates of attendance in 2001-02.

⁵ The evaluation restricts the analysis of the difference in attendance rates between the 2001-02 and 2002-03 school years to those students for whom the DOE database had attendance data in both years (i.e., 81 percent of students in NCHS schools and 82 percent of students in the comparison schools).

⁶ The 8.8-point increase for NCHS students is not statistically significant; from a statistical standpoint, therefore, we can only say that the attendance rate for NCHS students in the first quartile did not change. However, the difference between attendance rates of NCHS and comparison school students is statistically significant.

Exhibit 5.3
Change in Attendance Rates Between 2001-02 and 2002-03 for
Students Enrolled in Cohort 1 NCHS and
Comparison Schools in the Bronx***



¹ In parentheses in each column, the N for students in NCHS schools in the Bronx is followed by the N for students in comparison schools.

*** $p < .001$

Student Outcomes as Measured by Student Suspensions

To measure student outcomes in the area of disciplinary suspensions, the evaluation compared changes over time in the suspension rates of students attending Cohort 1 schools in Year 1 as well as the within-year suspension rates of students attending Cohort 1 schools and those attending comparison schools. Across all students in Cohort 1, average suspension rates remained fairly stable at 2 percent between 2001-02 and 2002-03. District-wide, suspension rates among all high school students were also fairly stable at 5 percent in 2001-02 and 6 percent in 2002-03. In both school years, however, the suspension rate was higher among all NYC high school students than it was among students in Cohort 1 schools.

Comparison of Bronx NCHS students with students in the host high schools is more useful than comparison of all NCHS schools with the district's high schools as a group, because of the similarity of the two groups of students in the Bronx schools. This analysis suggests that, during Year 1, students attending Bronx NCHS schools had a significantly lower average annual suspension rate than students in the comparison schools. The average annual suspension rate across all NCHS schools in the Bronx was 3 percent, compared with an average suspension rate of 7 percent in the comparison schools. This finding is not surprising since NCHS students had lower suspension rates before enrolling in the NCHS schools than did students in the comparison schools.

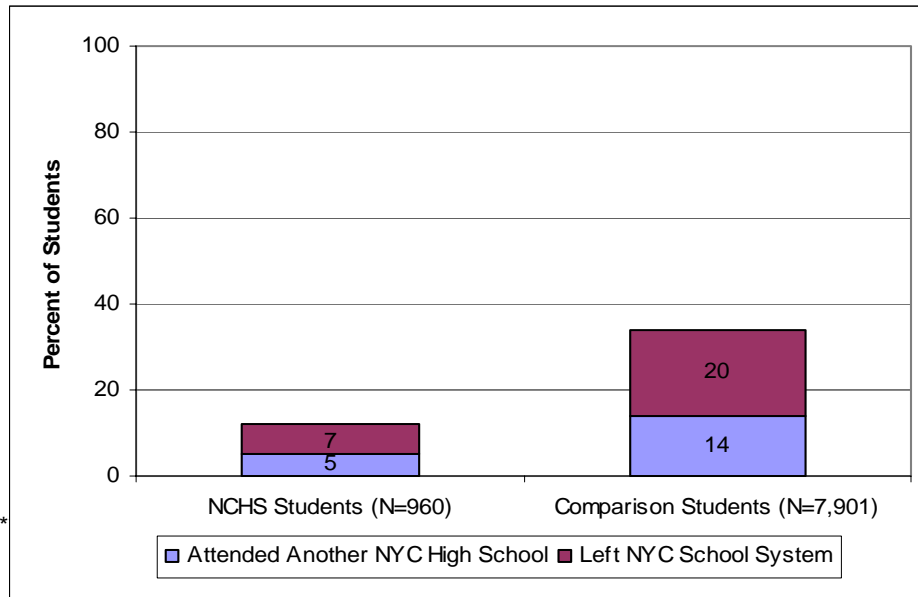
Student Outcomes as Measured by Student Attrition

School attrition is presented here in two ways, first with an overview of attrition between Years 1 and 2 among students attending Cohort 1 schools in the Bronx and then with a comparison of attrition rates between students in the Bronx Cohort 1 schools and those attending the Bronx comparison schools. The comparison indicates that the NCHS schools were much more effective in holding students in the schools.

Sixteen percent of NCHS students in Cohort 1 schools changed schools between Years 1 and 2, with 6 percent of those students changing schools but staying within the NYC public school system and the remaining 10 percent leaving the system altogether. Student attrition among the individual NCHS schools ranged from a low of 7 percent to a high of 56 percent.

Exhibit 5.4 shows that attrition was lower among Cohort 1 Bronx NCHS students than it was among comparison students, with 12 percent of NCHS students changing schools between Years 1 and 2 compared to 34 percent of comparison students. Five percent of NCHS students changed schools but stayed with the NYC public school system and 7 percent left the system altogether. In comparison, 14 percent of comparison students changed schools within the NYC public school system and 20 percent left the system altogether.

Exhibit 5.4
Student Attrition Between 2002-03 and 2003-04 for Students
Enrolled in NCHS and Comparison Schools in the Bronx***



Implications of These Outcome Findings

On all of the quantitative measures currently available to the evaluation, the New Century High Schools are producing positive changes for the students whom they enroll. On the first and most important of these measures, NCHS students are attending school at high rates, exceeding the attendance rates of students in the host high schools. In addition, using the more sensitive measure of change in attendance from students' eighth-grade baseline, NCHS students are maintaining their high eighth-grade attendance patterns into high school, while the attendance of their peers in the comparison high schools declines precipitously from their eighth-grade attendance levels.

Examination of suspension rates among NCHS students finds that they are suspended from school at lower rates than their peers in the comparison high schools. Two percent of NCHS students in Cohort 1 schools in the Bronx were suspended in Year 1, compared to 7 percent of students in the comparison high schools. This pattern is consistent with the suspension histories of these students as eighth-graders, however, and so cannot be attributed to enrollment in the NCHS schools.

Finally, based on the experience of the Cohort 1 NCHS schools in the Bronx, the NCHS schools appear to be exerting much greater holding power over

enrollees than are the comparison high schools. Between Years 1 and 2, 12 percent of NCHS students in the Bronx left their schools, compared to 34 percent of students in comparison schools who withdrew.

These early indicators of success suggest that the NCHS schools may be creating positive educational settings for their students and that these early successes are likely to be borne out later in high graduation rates among NCHS students and high rates of successful preparation for college and careers.

VI. What Are Some Keys to Success in Small High Schools?

The Year 1 evaluation report examined several hypotheses about the relationships between school climate, classroom instruction, and satisfaction among teachers and students. This section revisits some of these hypotheses, and introduces some new ones. This discussion only presents analyses in which strong relationships were found.

Hypothesis 1: Schools in which students are highly motivated and in which they experience a sense of belonging post higher attendance rates than schools where students are less motivated and do not feel as if they belong. In analyses that combined Cohort 1 and 2 schools, the mean attendance rate was significantly correlated with the mean score on the Student Motivation scale ($r=.74$, $\alpha = .001$), indicating a not-surprising relationship between students' intrinsic motivation to do well in school and their attendance. A correlation was also observed between the mean attendance rate and the mean score on the student Sense of Belonging scale, indicating that schools in which students feel a strong sense of belonging attain higher attendance rates. However, when multiple variables were used to create a multivariate regression model, which analyzed the correlation between each variable while holding the other variables constant, only student motivation was significantly associated with attendance rates. Indeed, 54 percent of the variation in student attendance could be explained by the variation in student motivation.

Hypothesis 2: Schools that use authentic assessments set high academic standards for students. Authentic assessments, which include performance-based assessments and portfolios that are graded against a standard rubric, differ from traditional assessments such as quizzes and tests. Traditional assessments typically require students to respond to questions with short answers that are either right or wrong. Authentic assessments require students to demonstrate what they know and can do by producing original work. Products can include presentations to an audience, essays or extended written responses, works of art, and original research. Teachers assess these products against a standard rubric to determine the depth and breadth of a student's knowledge and understanding. Since authentic assessments typically require more of students than do traditional assessments, the hypothesis posits that schools that use such assessments also employ more rigorous curricula designed to prepare students for the challenging assessments they face. Analyses reported in the Year 1 report did not find support for this hypothesis.

In Year 2, however, teachers' self-reported use of authentic assessments was positively and significantly correlated with their scores on the academic rigor scale. In Cohort 2 schools, the percent of teachers who used portfolio assessment often or very often was strongly correlated with scores on the academic rigor

scale ($r=.47$, $\alpha=.01$). In Cohort 1 schools, the percentage of teachers who used student presentations or performance assessments often or very often was strongly correlated with scores on the academic rigor scale ($r=.37$, $\alpha=.01$). These findings confirm the hypothesis and offer a rationale for encouraging teachers to use authentic assessments more regularly.

Hypothesis 3: A high level of collegiality and shared decision-making by teachers promotes high levels of job satisfaction among teachers. Teacher retention is a significant challenge confronting all urban schools but especially high schools, where working conditions can be difficult. To retain effective teachers, schools must, among other things, offer them supportive and enriching environments where their judgment is valued. Giving teachers opportunities to be involved in decisions that affect their daily lives is one way that schools can accomplish that goal. To test this notion, scores on the Teacher Input scale, which measures the extent to which teachers believe they are involved in making important decisions for their school, were compared with scores on the Professional Environment scale.

Results reveal a strong and significant relationship between the extent to which teachers play a role in school decision-making and their satisfaction with the professional environment at their schools. Scores on the Staff Input scale were positively correlated with scores on the Professional Environment scale for schools in Cohort 1 ($r=.25$, $\alpha=.05$) and Cohort 2 ($r=.27$, $\alpha=.01$). The collegiality made possible by the NCHS schools' small size makes them fertile ground for teachers looking to play key roles in the schools' development. If these and other small schools want to retain their teachers, they should take advantage of that opportunity and offer teachers opportunities to participate in making decisions that affect the school.

Hypothesis 4: Schools with strong instructional leaders offer higher-quality professional development and a more professional work environment than do schools with weaker leaders. This hypothesis presumes that strong school leaders are concerned with the professional growth and well-being of their teachers. Ratings of principals' instructional leadership skills were derived from teachers' impressions of their principals on a variety of dimensions. By examining the relationship between the Principal Leadership scale and both the Quality of Professional Development scale and the Professional Environment scale, both derived from the teacher surveys, this presumption proved to be accurate.

The Principal Leadership scale was significantly and positively correlated with the Quality of Professional Development scale in both Cohort 1 ($r=.47$, $\alpha=.01$) and Cohort 2 ($r=.43$, $\alpha=.01$) schools. It was also significantly and positively correlated with the Professional Environment scale, which measured teachers' satisfaction with the professional climate at the school. This correlation was stronger in Cohort 2 schools ($r=.43$, $\alpha=.01$) than in Cohort 1 schools

($r=.20$, $\alpha=.05$). Although these analyses do not indicate a direct causal link, it does appear that providing professional development that meets teachers' needs and creating a positive work environment are significantly associated with teachers' perceptions of their principals as strong instructional leaders.

As the study progresses, it will re-examine the relationships reported above and explore more such relationships, in order to learn more about the conditions that create positive settings for learning and high levels of student achievement.

Appendix A

Data and Procedures Used to Analyze Student Characteristics and Performance

The evaluation used information collected by the DOE to analyze differences between NCHS and comparison school students and changes in school attendance between the 2001-02 and 2002-03 school years. This section reviews the analytic procedures and data used in these analyses.

Populations

For these analyses, PSA obtained records from DOE for all students enrolled in Cohort 1 NCHS schools at the October 31 enrollment count. Because all of the schools were in their first year of operation, the vast majority of students were ninth-graders. However, three NCHS schools enrolled tenth-graders, and those students were included in the analyses.

The nine NCHS schools were located in seven different comprehensive high school campuses. As a basis for comparison with students attending NCHS schools, PSA obtained records from DOE for all ninth-graders in six of those seven high schools⁷. In addition, we included records for tenth-graders in the two high schools (Walton High School and Morris High School) that housed NCHS schools with tenth-grade classes.

The use of student-level data accounts for some of the differences in the results reported in this report and the results reported in our December 2003 report. Both reports compared characteristics of students in NCHS and comparison schools. However, the December 2003 report relied on school-wide averages reported in school-level summaries published by DOE. The report card format did not allow us to isolate only the ninth- and tenth-grade classes in those schools, which means that ninth-graders (and some tenth-graders) in NCHS schools were compared with all students in grades 9-12 in the comparison schools. Therefore, this report provides a more precise comparison of NCHS students with their peers in the comparison schools.

Statistical Tests

Traditional tests of statistical significance were conducted to compare outcomes for program students and comparison students. Where the outcome

⁷ As indicated earlier, one comparison school was omitted from the analysis due to a clerical error, which will be corrected in future analyses.

measure was a two-category variable—for example, promoted/not promoted—we conducted 2x2 chi square tests to test the difference in proportions for the two groups. Occasionally, a group proportion was zero with a small sub-sample size. In these cases, we applied the exact binomial confidence intervals, adjusting the probability tail for the one-sided nature of the observed distribution (Clopper & Pearson, 1934). For outcome measures that were continuous in nature, such as achievement test scores, we performed t-tests, which compared the differences in means between the two groups or two time points. When two means from two time points for the same individuals were being compared, we used paired-samples t-tests; and when two means being compared were from two separate groups of students, we used independent t-tests. Only differences between NCHS and comparison school students that are statistically significant at the $p < 0.05$ level are reported here.

Achievement Results

Students' achievement prior to entering high school was obtained from their scores on the New York State Testing Program's eighth-grade ELA and mathematics tests. Results from these tests are reported as scaled scores and performance levels. In eighth grade, the ELA ranges from a possible low score of 527 to a possible high score of 830; the mathematics scale ranges from 517 to 882.

The performance levels for the eighth-grade assessment (Below Basic, Basic, Proficient, Advanced) are established by the New York State Education Department (NYSED), which establishes cut scores for each level based on the eighth-grade assessment scale. These proficiency levels are often referred to as Level 1 (Below Basic), Level 2 (Basic), and Level 3 (Proficient). We do not report results for Level 4 (Advanced) in this report because less than 1 percent of students in both groups achieved at that proficiency level.

NYSED changed the cut scores that determine proficiency levels on the ELA test between 2001 and 2002 when it began administering the assessment during the winter instead of the spring. The cut score between Below Basic and Basic fell from 661 to 658. The cut score between Basic and Proficient rose from 697 to 698. These changes are accounted for in the results we report.

Immigrant and ELL Status

The primary analysis comparing the immigrant and ELL status of NCHS and comparison school students involved all students in the two populations. As described in the text, the secondary analysis screened out students in the two NCHS schools that cater to immigrant and ELL students. One of those schools was the only NCHS school located in the school that served as its comparison, so

when we dropped the NCHS school from the analysis, we also dropped the corresponding comparison school. The other NCHS school was not the only small school in its comparison school, so that comparison school was left in the sample for the secondary analysis.

Screening one comparison school out of the two analyses left the percentage of comparison school students who were eligible for ELL services unchanged but raised from 2 percent to 3 percent the proportion of comparison school students who were recent immigrants.

Attendance Data and Quartiles

Average daily attendance rates for NCHS and comparison school students were derived by calculating the mean individual student attendance rates for students in each group.

For our analysis of changes in attendance rates among students with high and low attendance rates entering high school, we grouped all students in the two populations into quartiles according to their eighth-grade attendance rates. The following table shows which students are included in each of the quartiles.

	2001-2002 Attendance Rates
First Quartile	< 77 %
Second Quartile	77-88 %
Third Quartile	89-94 %
Fourth Quartile	> 94 %

Reference

C.J. Clopper & E.S. Pearson, “The use of confidence or fiducial limits illustrated in the case of the binomial.” *Biometrika* **26**:404-413, 1934.

Appendix B

Observation Methodology

In conducting classroom observations for the NCHS evaluation, the evaluation team used an instrument designed specifically for this study, the Language Arts Observation Instrument (LAOI). The LAOI is designed to collect data describing the occurrences of specific behaviors and does not include procedures for analyses, judgment, and interpretation. The team believed that this approach would avoid the imposition of a predetermined set of values on the data collection.

Data Collection

In the course of each observation, team members observed a language arts class for at least 50 minutes. During those 50 minutes, team members recorded their observations in 10-minute segments. Researchers took note of the following information:

- Student grouping patterns
- The language arts focus
- The specific language arts activities in which students were engaged
- The classroom materials in use
- The teacher's instructional strategy
- The performance goals of each activity in which students were engaged
- The number and types of questions posed by the teacher during each observed activity
- The number of students on-task during each activity

Using their notes, evaluation team members used a coding scheme to assign codes describing the teaching and learning activities observed. These codes were then marked on a coding sheet.

Analysis

The classroom observations conducted in the NCHS evaluation permitted the collection of valuable information about English/language arts instruction in

the New Century schools. Using the information contained in the coding sheets, analysts constructed a statistical database that permitted quantitative analysis of the occurrence of instructional activities and behaviors. Analyses included, but were not limited to, frequencies, cross-tabs, and correlations. These analyses have permitted the team to (1) gauge the extent to which teachers engage their students in academically rigorous activities and (2) monitor changes in academic rigor over time.

Inter-Rater Reliability

A key component of the observation strategy was the assessment of inter-rater reliability. Overall, PSA observers obtained 96 percent inter-rate agreement across all six test classrooms observed. Agreement on individual classrooms ranged from 90 percent to 96 percent, and agreement in each segment observed ranged from 82 percent to 100 percent.

Inter-Rater Reliability by Classroom

Observation Team	Percentage Agreement in Joint Observation
1	99
2	99
3	97
4	91
5	97
6	90
Average	96

The evaluation used a standard process for determining inter-rater reliability. During six of the 20 PSA site visits to New Century High Schools, the pair of evaluators who visited the school conducted one joint classroom observation in addition to two individually completed classroom observations. During the joint observation, each researcher observed the class independently and completed an individual coding sheet. Both then submitted their coding sheets for comparison by a third party. The subsequent analyses revealed the percentage agreement among researchers for their observations

Percent agreement between observers was determined based on the total number of codes that an observer could potentially assign to each observation segment. Because the observation method allowed observers to assign multiple codes, it was necessary to analyze observer matches to items coded as well as not coded in order to obtain an accurate assessment of inter-rater agreement. There are 55 potential codes an observer could record during any one 10-minute segment, or 275 codes during an entire observation (five segments per observation). Using the coding sheets completed independently during a joint observation, analysts determined the frequency with which only one observer

recorded a code. The analyst then divided this number by 275 to determine the percentage agreement between the two observers. Training materials for the observation instrument on which the NCHS observations are based require that observers meet an 80 percent reliability threshold to be considered “reliable.” The evaluation applied that same standard in determining the extent to which the observation teams achieved inter-rater reliability.