

Core Academic Strategic Designs
Noble Street Charter High School

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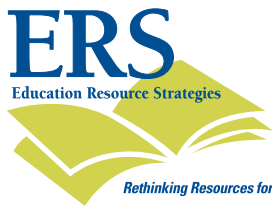
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Case Studies of Leading Edge
Small Urban High Schools

Education Resource Strategies

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Case Studies of Leading Edge Small Urban High Schools

This report is one of nine detailed case studies of small urban high schools. Each case study can be accessed individually or in one complete document at www.educationresourcestrategies.org.

Core Academic Strategic Designs

1. Academy of the Pacific Rim
2. Noble Street Charter High School
3. University Park Campus School

Relevance Strategic Designs

4. Boston Arts Academy
5. Life Academy of Health and Bioscience
6. Perspectives Charter School
7. TechBoston Academy
8. High Tech High School

Personalization Strategic Designs

9. MetWest High School

Also available on our Web site, www.educationresourcestrategies.org:

- Executive summary and full report: "Strategic Designs: Lessons from Leading Edge Small Urban High Schools"
- Detailed methodology
- Data request and interview protocol
- Introduction to the "Big 3" framework
- Comparative Leading Edge School data on diagnostic resource indicators (by school)

Thirty years ago, urban high school organization looked similar from one school to the next. Today, rising dropout rates and persistent achievement gaps have generated an urgency around redesigning the urban high school. Creating small high schools has become a central element of this redesign movement, with reformers envisioning improving instruction and, through the schools' "smallness," creating a supportive community of adult and student learners.

At Education Resource Strategies (ERS), in our work with school and district leaders, we have found that many school districts begin creating small high schools without a clear sense of how much they will spend or how to ensure that small schools organize in ways that will promote high performance. In response, the Bill & Melinda Gates Foundation supported ERS in a three-year effort aimed at building understanding and tools to support districts in creating cost-effective systems of high-performing urban high schools.

This report is one of nine detailed case studies of small urban high schools that served as the foundation for our report "Strategic Designs: Lessons from Leading Edge Small Urban High Schools" (available at www.educationresourcestrategies.org). We dubbed these nine schools "Leading Edge Schools" because they stand apart from other high schools across the country in designing new ways to "do school" while outperforming most high schools in their local districts.

We found that Leading Edge Schools deliberately create high-performing organizational structures, or Strategic Designs, that deliberately organize people, time, and money to advance their specific instructional models — the set of decisions the schools make about how they organize and deliver instruction. They create these Strategic Designs through four interconnected practices:

1. Clearly defining an instructional model that reflects the schools' vision, learning goals, and student population.
2. Organizing people, time, and money to support this instructional model by (a) investing in teaching quality, (b) using student time strategically, and (c) creating individual attention for students.
3. Making trade-offs to invest in the most important priorities when faced with limits on the amount, type, and use of people, time, and money.
4. Adapting their strategies in response to lessons learned and changing student needs and conditions.

Reviewing the case studies, readers will find that teacher characteristics, staffing patterns, schedules, and budgets look very different across the nine schools. Their instructional models reflect three broad approaches to teaching and learning:

1. **Core academics:** a rigorous core academic college-preparatory program for all students;
2. **Relevance:** a curriculum that is relevant to student interests and/or the world in which they live; and
3. **Personalization:** personal relationships between adults and students are fostered to ensure all students are known well by at least one adult.

All Leading Edge Schools incorporate some aspects of each approach, while tending to emphasize one over the others.

We also found that although no school organizes resources exactly the same, high-performing schools organize people, time, and money to implement three high-performance resources strategies. They:

1. Invest to continuously improve **teaching quality** through hiring, professional development, job structure, and collaborative planning time.
2. Use **student time** strategically, linking it to student learning needs.
3. Create **individual attention** and personal learning environments.

Using these strategies as our framework, we assessed case study school practices and quantified their resource use. We did this by creating a set of *diagnostic indicators* that describe how schools best use their resources for improving student performance. They are used throughout the case studies to illustrate resource use.

A detailed methodology, an in-depth introduction to the “Big 3” framework, and a full list of the diagnostic indicators can be found at www.educationresourcestrategies.org.

Education Resource Strategies hopes that these case studies will serve multiple purposes: to generate ideas about implementing strategies in schools; to help develop new small schools and reform existing schools; and to engage colleagues, principals, and teachers in conversations about what is possible in their districts. By detailing how these nine Leading Edge Schools organize their resources — people, time, and money — to improve student achievement, it is our hope that readers will be able to apply the findings to their own context and contribute to changing the national conversation around resource use from “how much” to “how well.”

Core Academic Strategic Designs

2. Noble Street Charter High School

1010 Noble Street
Chicago, IL 60622

www.goldentigers.org
www.noblenetwork.com

Noble Street Charter High School is a college-preparatory school whose foundation is based on a culture of hard work and respect and a belief that all Noble Street students will go to college.

Noble Street's mission

Noble Street Charter High School campuses seek to prepare Chicago's youth to function successfully in our society through commitment to educational excellence, civic responsibility, and respect for their community, the environment, and people from all walks of life.

Summarized from
www.goldentigers.org

Noble Street, located in Chicago, opened in 1999 with 127 freshmen, and it currently enrolls nearly 500 students in grades nine through 12.¹ The school was founded by a Chicago public high school teacher in collaboration with the Northwestern University Settlement Association, a nonprofit organization that provides resources and support to those in the surrounding West Town area. The school is housed in a building owned and operated by the settlement. Students have full use of facilities, including a theater, two gymnasiums, and two halls for meals and meetings.

Noble Street is open to all students living in Chicago who have completed eighth grade. Incoming students who have submitted applications are selected from a blind lottery each year.

A culture of professionalism and high standards

Noble Street was founded on the core values of academic excellence, discipline, and respect. All students must wear uniforms. To be eligible for extracurricular activities, students must pass all of their classes. Grades are posted every two weeks to inspire achievement. Promotion to the next grade level is contingent on students successfully passing all classes, including physical education and a fitness test.

The halls of the high school are covered with college pennants of Noble Street alumni, providing a tangible indicator of the school's mission and priorities and serving as an inspiration for its students. Noble Street's curriculum requires students to complete nine core academic courses beyond the Chicago Public Schools graduation requirements.

Both the school year and the school day at Noble Street are longer than traditional Chicago public schools. Noble Street students spend 700 hours a year in core academic courses — 331 more hours than a typical Chicago Public Schools student. Unlike other schools in our study, Noble Street organizes its core courses by students' skill levels. The class groupings

are flexible, so students can advance in courses at various points during the year if they have demonstrated improvement and proficiency. The school has specifically designed its schedule to ensure this flexibility.

Noble Street uses a rigorous hiring process to find top-quality teachers who are experts in their content areas. Teachers at the school have discretion over their collaborative meeting time and agenda, and they spend 150 hours per year in professional development and collaborative planning time. Noble Street uses bonuses and annual performance contracts to reward effective teachers and ensure that only the highest-quality teachers remain at the school.

Noble Street uses advisory groups and town hall meetings to support its students both socially and academically. Student advisories are gender- and grade-specific groups that are made up of 15 students who stay together all four years. Ninth grade students meet in advisory every day, and 10th to 12th grade students meet in advisory once a week. Town hall meetings occur every other Friday and provide an opportunity for students to be recognized for good work, listen to a motivational speaker, and feel part of the school community. These personalization structures are important given Noble Street's teacher load of 118 students.

Replicating a successful model

Noble Street's popularity over the years, coupled with the city's Renaissance 2010 program to open 100 new small schools in Chicago, prompted Noble Street leaders to replicate the school model. It opened two new schools — Pritzker College Prep and Rauner College Prep — in SY2006–07, and it will open two more schools — Rowe-Clark Math and Science Academy and Golder College Prep — in SY2007–08. Two additional high schools are planned for SY2008–09. School leaders created the Noble Network of Charter Schools, a charter management organization (CMO), to support its new network of charter schools.

Student demographics

Noble Street has similar student demographics to the Chicago Public Schools district average, except for special education self-contained students. As shown in Figure 2.1, despite a high percentage of Hispanic students, Noble Street has fewer students who qualify as English language learners compared to the district average. Only a minority of Noble Street students is new to the country and the English language.

FIGURE 2.1

Student demographics: Noble Street and Chicago Public Schools district average, SY2004–05

	Noble Street	Chicago Public Schools district average
Race/ethnicity		
Hispanic	81%	38%
African American	12%	49%
Caucasian	4%	9%
Asian	2%	3%
Socioeconomic status		
Free and reduced-price lunch	85%	85%
Program		
Special education Resource	13%	9%
Self-contained	0%	4%
English language learners	3%	14%

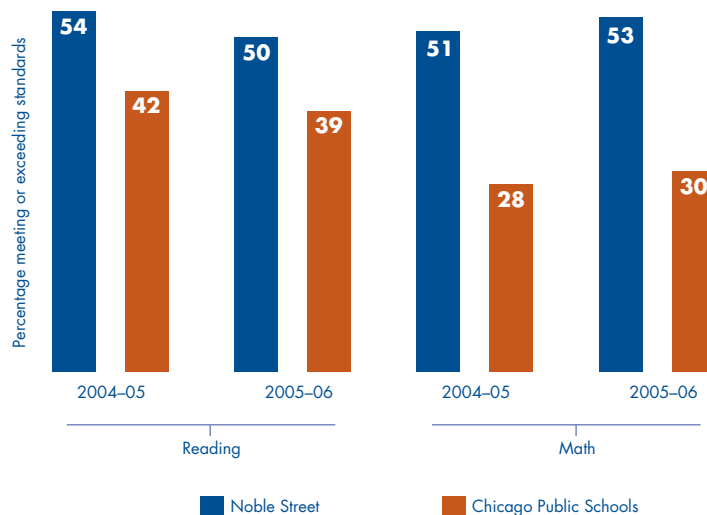
Source: <http://iirc.niu.edu/District.aspx?source=cat2&source2=subCat1&districtID=150162990&year=2006&level=D>; percentages are rounded to the nearest whole number.

Student performance

Academically, Noble Street students consistently exceed the Chicago Public Schools district average on state standardized tests. Figure 2.2 compares the performance of Noble Street students and the district average on the reading and math portions of the Prairie State Achievement Examination (PSAE) in SY2004–05 and SY2005–06.² The PSAE is a state assessment given to 11th graders to determine whether schools are making adequate yearly progress as defined by No Child Left Behind (NCLB).

FIGURE 2.2

Percentage of students meeting or exceeding standards on PSAE: Noble Street and Chicago Public Schools, 2004–05 and 2005–06



Source: <http://iirc.niu.edu/School.aspx?source=Test%20Results&schoolID=15016299025006C&year=2006&level=S&source2=PSAE>.

Noble Street’s high scores on the PSAE earned the school a ranking of 14 of 95 public high schools in Chicago, including selective schools with exam admissions. It also was named the best-performing charter school in Chicago in SY2004–05.

Noble Street also exceeds the district average in other indicators of student performance, such as attendance and graduation, and it has lower dropout and mobility rates, as shown in Figure 2.3.

FIGURE 2.3

Other indicators of student performance, SY2005–06

	Noble Street	Chicago Public Schools district average
Attendance	95%	86% ⁱ
Dropout rate	4%	8%
Graduation rate	87%	73%
Mobility rate	7%	24%

Source: <http://iirc.niu.edu/District.aspx?source=cat2&source2=subCat2&districtID=150162990&year=2006&level=D>; percentages are rounded to the nearest whole number.

ⁱ SY2005–06 attendance rate for Chicago Public Schools high school students only, www.cps.k12.il.us/AtAGlance.html.

Per-pupil spending

Noble Street receives \$7,017 per pupil from Chicago Public Schools, funds which include the following per-pupil allocations:

- 6,075 direct allocation;
- 217 for being a community school;
- 300 for being a small school; and
- 425 for facilities.

Although Noble Street receives the \$425 per-pupil facilities allocation to find and fund its own facilities, that funding does not represent the full cost of the facilities. Noble Street relies on private funding to subsidize the true cost of running the school. Additionally, private revenues were necessary to get over the “hump” of starting a school, when there is a low student head count (resulting in less district funding) and when there are high, fixed capital expenditures for preparing the building and equipping classrooms with furniture, textbooks, and computers.

From the beginning, the Northwestern University Settlement Association has provided the school with critical financial support, substantial business expertise, and neighborhood credibility gained during a 115-year history of service to the community.³ The president and chief operating officer of the settlement association will continue to provide leadership as they manage the business operations of the CMO created to assist the campuses of the Noble Network of Charter Schools. The CMO has hired a superintendent, a resource development manager, two accountants, and two administrative assistants to further support the schools. To preserve the academic quality of the original campus, the president and director of external affairs of the settlement association will continue to support the Noble Network until all seven schools are at full capacity in 2012.⁴ At that time, the CMO will assume all business functions and be independent from the settlement association. Once the new schools are fully functioning, each school will be assessed 8 percent of its base per-capita revenue from Chicago Public Schools to fund the services provided by the CMO.

The numbers represented in this analysis reflect Noble Street’s structure in SY2005–06. This was a unique year for the Noble Network because there was only one school open, but the CMO infrastructure had been created in preparation for opening and supporting two new schools the following year. To account for this, the portion of the CMO’s expenses that served Noble Street in SY2005–06 is calculated by taking a ratio of student enrollment at the current school to the projected full enrollment for the three schools. This equals approximately 9.5 percent of Noble Street’s expenses.

As shown in Figure 2.4, when including private funds, Noble Street has slightly higher per-pupil spending compared to the average of two high-performing nonexam comprehensive high schools in Chicago Public Schools. Much of the difference is due to higher per-pupil leadership and pupil services spending. Noble Street invests 7 percent and 9 percent of its operating budget on leadership and pupil services, respectively — almost twice the amount of the Chicago comparison schools average. These leadership and pupil services positions include a dean of students and a disciplinary dean, which are central to both supporting students in a rigorous college-preparatory setting and establishing a strong school culture.

FIGURE 2.4

Per-pupil operating expenditures, SY2005–06

	Noble Street	Chicago Public Schools comparison schoolsⁱ
Total fully allocated operating budget ⁱⁱ	\$4,428,116	\$13,890,372
General education per pupil (unweighted, fully allocated, including private, no geographic adjuster)	\$8,679	\$7,527
Percentage above that is privately funded	6%	N/A ⁱⁱⁱ
Percentage spent on instruction	51%	63%
Student-teacher ratio	14:1	16:1
Percentage spent on leadership ^{iv}	7%	4%
Percentage spent on pupil services ^v	9%	5%

i. Comparison schools are the highest-performing, nonexam schools in the district that were selected to provide a comparison to the Leading Edge Schools' per-pupil cost.⁵

ii. Fully allocated operating budget includes the costs of running a school on a daily basis.⁶

iii. Data on private funding were not collected for the comparison schools.

iv. Leadership coding includes all functions associated with governance, school administration, secretaries and clerks supporting school leaders, and accountability (research, evaluation and assessment, community relations, attendance tracking, student assignment, etc.).

v. Pupil services coding includes all functions associated with noninstructional programs.⁷

Flexibility dimensions⁸

As a charter school, Noble Street can determine staff salary, class size, and the length of the student and teacher day and year (see Figure 2.5). School leaders also can hire and fire staff. However, Noble Street must comply with special education staffing requirements and NCLB’s highly qualified status for teachers. Despite its autonomy over compensation, Noble Street salaries closely resemble those of Chicago Public Schools, with the additional opportunity for a bonus as described in detail on page 12.

FIGURE 2.5

Flexibility dimensions

Flexibility dimension	Noble Street
Hiring and firing	Yes
Teacher time	Yes
Class size	Yes
Student time	Yes
Staffing composition	Yes
Salary	Yes
Option to opt out of district services	N/A
Discretion over nonsalary budget	Yes

Resource strategies

The following sections highlight Noble Street’s practices around three resource strategies of high-performing high schools: the school’s investment in teaching quality, its strategic use of student time, and the provision of individual attention to students.⁹

Noble Street resource strategy highlights

- 1. Invest to continuously improve teaching quality through hiring, professional development, job structure, and collaborative planning time*
 - Rigorous hiring process that ensures teachers are content experts and committed to supporting students
 - Culture of teacher professionalism: Teachers plan and schedule collaborative planning time and seek external professional development as needed to improve their practice
 - High expectations for teachers reinforced through one-year contracts and bonuses
- 2. Use student time strategically, linking it to student learning needs*
 - 331 more student hours per year than a typical Chicago public high school, resulting from a longer student day and year and creative scheduling of noncore courses
 - Block scheduling of core academic courses, with a particular emphasis on English language arts and literacy in the ninth and 10th grades
- 3. Create individual attention and personal learning environments*
 - Strong school culture of high expectations and support reinforced through advisories and town hall meetings
 - Unique structures to provide support and extra time in core content areas for ninth graders
 - Flexible skill-based groupings of classes with opportunities for remediation and acceleration
 - Full-inclusion model in which special education faculty co-teaches classes

■ Resource strategy 1

Invest to continuously improve teaching quality through hiring, professional development, job structure, and collaborative planning time

- *Rigorous hiring process that ensures teachers are content experts and committed to supporting students*
- *Culture of teacher professionalism: Teachers plan and schedule collaborative planning time and seek external professional development as needed to improve their practice*
- *High expectations for teachers reinforced through one-year contracts and bonuses*

Rigorous hiring process that ensures teachers are content experts and committed to supporting students

Noble Street values teachers who have strong content expertise and prior experience in the classroom. The school begins its application process early, receiving résumés, applications, and as many as 10 references from prospective teachers in early January of each year. Qualified candidates are asked to participate in three rounds of interviews and prepare a sample lesson to teach to a group of students. After the sample lesson is taught, school leaders conduct a focus group with the students to discuss the applicant's teaching style and how effectively students were engaged in the lesson. Before making a selection, Noble Street leaders conduct intensive reference checks with applicants' references, including previous employers, colleagues, and former students.

This rigorous hiring process allows Noble Street leaders to hire the best-qualified teachers who also are the best fit for the school. Of Noble Street's core academic teachers, 33 percent have multiple certifications, 35 percent have master's degrees, and only 9 percent have taught for fewer than three years. The principal of Noble Street believes that it is worth the extra time investment in the hiring process up front to have strong teachers in the classroom. He notes, "We've needed less instructional leadership because we've hired brilliant teachers." The Noble Street staff list can be found in Appendix 2.4.

Culture of teacher professionalism: Teachers plan and schedule collaborative planning time and seek external professional development as needed to improve their practice

Noble Street builds a culture of teacher professionalism by giving teachers discretion over their collaborative planning time and professional development, in terms of both scheduling and content. "Our general philosophy around professional development is that we're professionals and we know how to develop ourselves," says the school's principal.

In exchange for the autonomy to decide when meetings take place, teachers are held accountable for the productivity of the collaborative planning time sessions. Teachers are required to meet with their grade-level and content teams five times each month. The teacher leader for each department and grade level is responsible for scheduling the meetings. At the beginning of each meeting, teachers state their objectives; the teachers then take the needed time to meet those objectives.

Teachers use these meetings to develop college-readiness standards, discuss their content and teaching practices, create a common language around instruction, and problem-solve around student issues. To ensure accountability, grade-level and department chairs give the principal the notes and any outcomes that result from their meetings. The principal views his role as making sure teachers have the time to collaborate with and learn from their peers. He notes, “We trust that teachers are going to do the right thing. What we do with teacher development isn’t always isolated as teacher development but integrated into the day.” Teachers’ grade-level and content-team meetings total 46 hours each year.

In addition to collaborative planning time, Noble Street staff engages in other professional development opportunities, totaling 104 hours each year. This represents approximately 26 more hours in professional development and collaborative planning time than Chicago Public Schools requires.¹⁰ Noble Street’s professional development includes 30 minutes every Friday with the entire staff, as well as five days before school starts and three days of professional development spread throughout the year. The principal is responsible for organizing professional development for the school based on schoolwide needs. The foci of professional development in SY2005–06 were creating and articulating a positive school culture that is not discipline-related and developing college-readiness standards to ensure rigor in courses at all levels.

Noble Street also encourages teachers to engage in professional development that addresses their individual learning needs. For example, the chair of the science department monitors science Web sites and informs her fellow science teachers when there is a seminar that might be helpful to their practice. One teacher notes, “One of the things I love about Noble is the autonomy in how we are able to attend professional development seminars and conferences.” Teachers are expected to pursue professional development that is relevant to their needs; in return, the school will support and fund their participation in a conference or workshop.

High expectations for teachers reinforced through one-year contracts and bonuses

Noble Street uses a unique performance structure of incentives and consequences to ensure its teachers are motivated and effective in improving student achievement. In SY2005–06, teachers had the opportunity to earn a \$4,000 bonus. Half of the bonus was based on overall student performance in the school: Teachers earn \$1,000 if 50 percent or more 11th graders meet or exceed the PSAE standards and \$2,000 if 70 percent or more 11th graders meet or exceed the standards. Although performance on the PSAE standards is based on the scores of 11th grade students, the schoolwide bonus fosters the culture of teamwork among Noble Street teachers — it is everyone’s job to prepare students for success.

The second half of the bonus is related to the following criteria for each teacher's practice:

- The principal's observation of teachers;
- Attendance of 92 percent or better of students in their advisory;
- Organized and complete records of students' homework;
- Parent attendance at report card night;
- Checking for dress code in advisory;
- Being on time to staff meetings; and
- Staying up-to-date with requirements for special education students.

The bonus encourages teachers to make the listed responsibilities a priority, and school leaders recognize when they are done well. For those teachers who do not meet these criteria, they do not receive the bonus, and they may not be asked back the following year. As a charter school, Noble Street has complete autonomy to hire and fire its staff. Annual contracts are used to ensure that only the highest-quality teachers remain at the school. Over the past seven years, three teachers were not asked to return.

■ Resource strategy 2

Use student time strategically, linking it to student learning needs

- *331 more student hours per year than a typical Chicago public high school, resulting from a longer student day and year and creative scheduling of noncore courses*
- *Block scheduling of core academic courses, with a particular emphasis on English language arts and literacy in the ninth and 10th grades*

331 more student hours per year than a typical Chicago public high school, resulting from a longer student day and year and creative scheduling of noncore courses

Noble Street uses its autonomy as a charter school to extend students' time in school by approximately 105 minutes more each day than other Chicago public schools. Noble Street students also are in school for seven days more each school year than Chicago Public Schools students. This time added to the school day and year equals an additional 331 hours a year, or 63 additional school days, for Noble Street students.¹¹

Noble Street uses much of the extended time to provide an academically rigorous curriculum to prepare students for college. Students must complete four English language arts courses, three literature courses, two reading courses, six math courses, four science courses, three history courses, and two foreign language courses. This represents nine more core academic courses than what is required for a Chicago Public Schools student to graduate.¹²

Noble Street also believes in the importance of extracurricular activities to build school community, foster student engagement, and develop students' talents. School leaders schedule about half of the extracurricular activities during the student day, and the other half students must complete either after school or in the summer. During the school day, students have physical education two mornings each week. The school partners with a local gym, allowing students to take workout classes, use cardio machines, or use weights. Students also participate each day in their choice of art, chorus, or ROTC.

Outside the school day, students must participate in eight enrichment courses over their four years at the school. These credits can be earned with after-school courses Noble Street offers or acceptable courses held during the summer at nearby colleges or community centers. AmeriCorps staff and other volunteers teach after-school courses that include The Stock Market Game, rocket club, and film study. Noble Street's external partnerships provide students with opportunities to explore a variety of interests and talents and allow the school to focus resources on supporting a strong core academic program.

In all, students spend an average of 700 hours each year in core academic courses, or 56 percent of their total time in school. This represents 371 more hours in core academic courses than a typical Chicago Public Schools student. Including the after-school enrichment courses, students spend 268 hours, or 22 percent of their year, in noncore academic courses.

Block scheduling of core academic courses, with a particular emphasis on English language arts and literacy in the ninth and 10th grades

As shown in the sample student schedule in Appendix 2.2, Noble Street operates on an A/B day block schedule, during which students have English, reading, and history as their core academic courses on one day and math and science on the alternate day. By not scheduling all six core classes in one day, classes are 80-minute blocks of uninterrupted learning time. The 12th grade schedule has five core academic courses meeting every day for 50 minutes. This is the result of student attrition of approximately 20 percent by the 12th grade, as well as limited physical space to accommodate the block schedule for all four grades.

Noble Street emphasizes literacy in the ninth and 10th grades. Students in each grade take three English language arts or reading courses throughout the year: English language arts, reading, and literature of a designated time period or genre. This is a deliberate strategy by the school to help students reach grade-level proficiency before the ACT exam and the PSAE, both taken in the 11th grade.¹³ Ninth and 10th grade students spend 314 hours, or 25 percent, of their year in English language arts classes.

■ Resource strategy 3

Create individual attention and personal learning environments

- *Strong school culture of high expectations and support reinforced through advisories and town hall meetings*
- *Unique structures to provide support and extra time in core content areas for ninth graders*
- *Flexible skill-based groupings of classes with opportunities for remediation and acceleration*
- *Full-inclusion model in which special education faculty co-teaches classes*

Strong school culture of high expectations and support reinforced through advisories and town hall meetings

Noble Street holds its students to high standards, with an expectation that all will attend college. It couples its rigorous requirements with various support programs — advisory groups and town hall meetings — to ensure students meet those expectations.

Advisories

Noble Street's core academic teachers have teacher loads of 118 students, close to what one would expect to find at a large comprehensive high school. Responsibility for such a high number of students makes it difficult for teachers to know their students well. To help build a personal learning environment for students, Noble Street leaders developed an advisory system in which students stay with the same advisory teacher and group of peers for their entire tenure at the school. Advisory groups are gender and grade specific and have only 15 students per advisory. This structure allows teachers to monitor closely the development of their students and build strong relationships with them and their families over the four years. The gender-specific aspect gives students a safe space in which to learn about life skills and issues that are specific to their needs. With the exception of ninth grade — which has a community service learning project — there is no structured curriculum for advisory.

In addition to the designated advisory period, all grades meet in their advisories in the morning for a check on attendance, homework, and uniforms. Although this time is administrative, it builds the advisory relationships by providing students a daily check-in with a trusted adult and a small group of students.

The importance of advisories at Noble Street is evident in one teacher's comments:

I think advisory is the least defined, the least structured, and the most important job that we have. It's the advisor's job to really navigate this kid through high school: to get them from eighth grade graduation to high school graduation; to be the liaison to mom and dad; to be the liaison to all the grade-level teachers and staff. We're also trying to build character in these kids of "The Noble Way." It ties people [teachers] to this building for four years. But the negative side of it is that it adds a level of responsibility and personal commitment: Advisees stay at teachers' houses, teachers pay for student fees, etc. It really drains you.

Town hall

Noble Street uses town hall meetings to foster communication among students, build school spirit, and make students feel that they are supported and part of the school community. Two grades of students meet together in town hall for one hour every other Friday. Students completely control the town hall meetings, from operating sound and light technology to ROTC students posting the school colors. Motivational speakers, successful minorities (business leaders, politicians, or professors), or recent alumni frequently attend the meetings to speak with students about their work, college life, or other topics. Classes perform skits, songs, or dances to present to their peers what they are learning. School leaders also recognize students who received merits during the month by holding a lottery for gift certificates. At the end of the meeting, students all chant school cheers. In all, students spend an average of 67 hours a year, or 5 percent of their year, in these social and emotional support and enrichment activities.

Unique structures to provide support and extra time in core content areas for ninth graders

Noble Street leaders believe ninth grade is a critical year for students to develop a strong academic foundation and become contributing members of the school community. The school uses the ninth grade year to academically prepare students in literacy and math before moving on to future coursework. Ninth graders must take two English language arts and literacy courses more than their Chicago Public Schools peers. Additionally, students who do not pass the math placement test in the fall are required to take a math-enrichment class two days a week on the mornings they do not have physical education.

School officials also created unique support structures for ninth graders that address their distinct needs and help them become invested members of the school community. The students start school a week early to attend a five-day orientation. During orientation, they learn about "The Noble Way," become familiar with the school building, learn the school cheers and what is expected of them, and more.

The ninth grade advisory group schedule also differs from those of older students in the school. Ninth graders have an additional 50 hours a year in their advisories, meeting every Monday through Thursday for 30 minutes. In contrast, 10th to 12th graders meet Friday mornings for 75 minutes. Noble Street staff created a different schedule for ninth graders because they believe it is beneficial for freshmen to have time each day to meet with a teacher and small group of students during their first year.

Flexible skill-based groupings of classes with opportunities for remediation and acceleration

Noble Street uses flexible skill groupings of classes with opportunities for remediation and acceleration to best suit students' needs.

Flexible skill-based groupings of classes

Noble Street staff believes in teaching students a rigorous curriculum that best matches each student's skill level. To accomplish this goal, they group students in classes according to their skill level and allow students to progress flexibly through course levels. Freshmen take a placement test in English and math when they arrive at Noble Street to provide teachers with information about their academic abilities and learning needs.

Based on the results of the assessment, Noble Street staff divides students into two ability groups for each subject. For example, the 60 top-performing students in English language arts are divided into three reading groups of 20 students each, one or two of which may be honors classes. The lower-performing group also is divided into three groups of 20 students each and placed in classes with more support. A team-taught class by the school's special education teacher provides part of the additional support.

Unlike typical tracking in high schools — in which difficulty in one content area can lead to low-level courses in all content areas — Noble Street's courses rotate on an A/B day schedule, with reading, English language arts, and social studies courses on one day and math and science courses on the alternate day. This allows students who might struggle in math courses and excel in English language arts (or vice versa) to avoid placement in low-level courses for all subjects. There also is flexibility and fluidity in student placements. Five weeks into the school year, teachers can switch students based on their progress. They also can switch students at the end of the semester and end of the year if students demonstrate they are ready for the next level.

Extra support for remediation and acceleration

Noble Street provides multiple opportunities for student remediation and acceleration. Beginning in ninth grade, those students placed in the lowest-level math course are required to take seven weeks of a math class during the summer. Students who fail a course in any grade must take the course the following semester during a night-school class. If they still do not pass, they are required to attend summer school to achieve mastery of the material. Summer school lasts four hours a day for eight weeks. If students do not pass the summer school course, they must repeat *all* of the courses in that grade the following year. Students also may use summer school as an opportunity for acceleration, for instance to jump to the next level in math before the following school year. Teachers report that many students take advantage of this option. Noble Street graduation requirements can be found in Appendix 2.3.

Although there is no structured time during the school day for tutoring students, Ameri-Corps volunteers tutor interested students at the school every day from 4 p.m. to 6 p.m. Tutoring sessions take place in grade-level and subject-area rooms, where students can informally work on group projects and receive extra help. Additionally, teachers can require students to attend the LaSalle Street Resource Center, a quiet setting at the school where students are monitored to ensure they complete their homework. Teachers also meet students before and after school, as needed, to provide support in a particular subject.¹⁴

Full-inclusion model in which special education faculty co-teaches classes

Noble Street implements a full-inclusion special education model in which the school's four special education teachers co-teach classes with content teachers. Special education teachers plan the classes they will co-teach based on students' Individual Education Plans.

The team-teaching model looks different in each classroom based on the dynamics between the teachers. For example, one co-teaching model may have the special education teacher and the content teacher alternate who teaches the lesson and who acts as support in the classroom. Another variation may use the content teacher as the primary teacher and the special education teacher to support any students who may be struggling with the material. A noted benefit of the inclusion model is that the special education teachers work with all the students in the class, thereby lowering the student-teacher ratio. As a result, Noble Street's average English language arts and math class sizes drop from 20 to 17 and 16, respectively.¹⁵ The full-inclusion model creates an opportunity for individualized attention in the core academic classes for any struggling students.

NOTES

- ¹ The study was conducted in SY2005–06.
- ² The writing portion of the PSAE was not administered in SY2005–06.
- ³ www.noblenetwork.com
- ⁴ Ibid.
- ⁵ In Chicago, our partnership with the district allowed joint identification of two comparison schools and access to the detailed coded budgets. Chicago Public Schools comparison schools demographics: 1,556 students; 65 percent African American; 15 percent Asian; 8 percent Caucasian; 14 percent Hispanic; 87 percent free or reduced-price lunch; 13 percent students with disabilities; 9 percent English language learners.
- ⁶ These costs include provision and support of the academic program; administration and support services; provision and maintenance of the physical plant; and auxiliary services such as food, transportation, and security. For district schools, some of these costs are administered at the district central office level. If a charter school has a CMO, some of these costs are administered at the CMO level.
- ⁷ These include social and emotional needs (social workers, character education, mentoring, parent programs, etc.), physical health (itinerant therapists, nurses, etc.), students with disabilities and English language learner evaluation/diagnostics, career/academic counseling, and other noninstructional programs (athletics, truancy, etc.).
- ⁸ Flexibility dimensions are a school's ability to use its resources — people, time, and money — as it chooses. Schools can be limited by legal or administrative constraints, such as federal or state laws, union contracts, or district policies. The degree of school flexibility depends on both how much it has and whether the school can use the resource as it chooses.
- ⁹ This framework for analysis, the “Big 3” resource strategies of high-performing schools, is more fully described in Appendix 2.1.
- ¹⁰ Chicago Public Schools has 10 professional development days each year, www.nctq.org.
- ¹¹ In SY2005–06, Chicago Public Schools students were in school for 5.25 hours a day, or 174 days each year.
- ¹² Based on SY2005–06
- ¹³ Some students take the ACT in the 12th grade as well.
- ¹⁴ Time in after-school tutoring is not included as academic support because less than 50 percent of students attend each of these programs. See www.educationresourcestrategies.org for more information on the calculation of student time.
- ¹⁵ As special education teachers are not in all classes, the average class size for the school is not dropped to 10.

APPENDIX 2.1

Resource strategies

Resource principles	What we see in the school	Diagnostic indicators
Invest in teaching quality		
Hire and organize staff to fit school needs in terms of expertise, philosophy, and schedule	<ul style="list-style-type: none"> Multiple in-person interviews Teaching lessons to students with feedback from students Extensive reference checks 	<ul style="list-style-type: none"> Use of a rigorous, strategic hiring process 9% of core academic teachers with three or fewer years' experience 49% of core teachers teaching more than one subject Leverage outside experts for noncore courses
Integrate significant resources for well-designed professional development that provides expert support to implement the schools' instructional models	<ul style="list-style-type: none"> Eight full days devoted to professional development spread before, during, and after school year Weekly professional development time on Fridays Focus of professional development: creating a positive school culture; developing college-readiness standards 	<ul style="list-style-type: none"> \$1,884 per teacher on professional development (not including teacher time) 3% staff with instructional leadership roles
Design teacher teams and schedules to include blocks of collaborative planning time effectively used to improve classroom practice	<ul style="list-style-type: none"> Teachers meet with grade-level and content-based teams five times a month 	<ul style="list-style-type: none"> 10% of teacher year in professional development (with collaborative planning time) 150 total yearly teacher professional development hours (with collaborative planning time) 75 minutes collaborative planning time per week 15% professional development in content-based teams
Enact systems that promote individual teacher growth through induction, leadership opportunities, professional development planning, evaluation, and compensation	<ul style="list-style-type: none"> One-year contracts and bonuses used to ensure high-quality teaching and reward effectiveness 	<ul style="list-style-type: none"> Ratio of teachers to school-based evaluators is 34:1 Regular review of teacher performance and growth 0% of teacher compensation for leadership roles

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Resource principles	What we see in the school	Diagnostic indicators
Use student time strategically		
Purposefully align the schools' schedules with their instructional models and student needs	<ul style="list-style-type: none"> Grouping English language arts and math courses on separate days so students receive instruction targeted to their skill level without being tracked 	<ul style="list-style-type: none"> School schedules reflect instructional model and academic needs of students 268 total yearly hours in noncore academics 22% of student year in noncore academics
Maximize time on academic subjects, including longer blocks of uninterrupted time	<ul style="list-style-type: none"> Use of A/B schedule to create 80-minute blocks of learning time for core classes Focus on English language arts and literacy in ninth and 10th grades, requiring students to take three English language arts and literacy courses in each grade 	<ul style="list-style-type: none"> 1,244 yearly student hours 700 average yearly hours in core academics 653 yearly hours in ninth grade core academics 693 yearly hours in 12th grade core academics 56% of student year in core academics 2,800 total core academic hours over four years
Vary individual student time when necessary to ensure all students meet rigorous standards	<ul style="list-style-type: none"> Remedial ninth grade math class, night school, and summer school available for students who struggle or fail a class Extra academic support is voluntary and provided after school through tutoring 	<ul style="list-style-type: none"> No required student time in academic support during school day Ratio of time in ninth grade math to average time in math: 0.93 Ratio of time in ninth grade English language arts to average time in English language arts: 1.12
Create individual attention		
Assess student learning on an ongoing basis and adjust instruction and support accordingly	<ul style="list-style-type: none"> Formative assessments in ninth grade to place students based on skill level Flexible groupings of students in which students can progress through classes as skills improve 	<ul style="list-style-type: none"> Use formative assessments systematically to guide instruction throughout the year
Create smaller group sizes and reduced teacher loads for targeted purposes	<ul style="list-style-type: none"> Full-inclusion model in which special education teacher co-teaches some core classes; provides all students increased individual attention 	<ul style="list-style-type: none"> Average class size overall: 20 Average class size core: 18 Average class size English language arts: 17 Average class size math: 16 Average teacher load overall: 135 Average teacher load core: 118 Average teacher load English language arts: 120 Average teacher load math: 133
Organize structures that foster personal relationships between students and teachers	<ul style="list-style-type: none"> 12–15 student common gender advisories in which students stay with same teacher and students for all four years 	<ul style="list-style-type: none"> 15 students assigned to an adult advocate providing academic or personal support Student to core academic teacher ratio is 18:1 88 total yearly teacher hours spent in social and emotional support 482 students in grades 9–12 Looping practices around strategically grouped students through advisory

APPENDIX 2.2

Noble Street sample student schedule

	A	B	A	B	
	Monday	Tuesday	Wednesday	Thursday	Fridayⁱ
7:40–9:25	Gym (Girls)	Gym (Boys)	Gym (Girls)	Gym (Boys)	Advisory (7:40–9:00)
9:25–9:35	Advisory	Advisory	Advisory	Advisory	English/Math (9:05–10:00)
9:40–11:00	English	Math	English	Math	Reading/Science (10:05–11:00)
11:05–12:25	Reading	Science	Reading	Science	Art/Band/Chorus/ROTC (11:05–11:30)
12:30–12:55	Lunch	Lunch	Lunch	Lunch	Literature Group (11:35–12:00)
1:00–2:20	History	Math (10th)/ Russian (11th and 12th)	History	Math (10th)/ Russian (11th and 12th)	History/Tech. (12:05–1:00)
2:25–3:05	Literature Group	Literature Group	Literature Group	Literature Group	Lunch (1:00–1:25)
3:05–3:35	Art/Band/ Chorus/ROTC	Art/Band/ Chorus/ROTC	Art/Band/ Chorus/ROTC	Art/Band/ Chorus/ROTC	
3:35–4:15	Gym/Sports	Gym/Sports	Gym/Sports	Gym/Sports	

ⁱ Noble Street students participate in town hall for one hour every other Friday, which is not shown in this sample schedule.

APPENDIX 2.3

Noble Street graduation requirements

Subject	Number of years
English language arts	4
History	3
Math	4
Science	4
World language	2
Visual and performing arts	1
Physical education	1
Enrichment credits	2
Community service	—

Note: Forty-two total credits are required for graduation.

APPENDIX 2.4

Noble Street staff list

Position	Full-time equivalent	ERS coding categories	Other
President Northwestern University Settlement	0.2	Leadership	CMO
Assistant to president Northwestern University Settlement	0.2	Leadership	CMO
Director of External Affairs	0.2	Business services	CMO
Superintendent: Network	0.3	Leadership	CMO
Intern principal: Network	0.5	Leadership	CMO
Intern principal: Network	0.5	Leadership	CMO
Manager, resource development: Network	0.3	Business services	CMO
Administrative assistant: Network	0.3	Business services	CMO
Accountants: Network	2.0	Business services	CMO
Dean of students	0.7	Pupil services	
Dean of students	0.3	Pupil services	
Principal	0.7	Leadership	
Principal	0.3	Leadership	
Disciplinary dean	1.0	Pupil services	
Social work	1.0	Pupil services	
Technology	1.0	Instructional support and professional development	
Office manager	1.0	Business services	
Administrative assistant	1.0	Leadership	CMO
Administrative assistant: Community service	1.0	Leadership	
Administrative assistant to principal	1.0	Leadership	
Administrative assistant to Office of Discipline	1.0	Leadership	
Administrative assistant to dean of students	0.5	Pupil services	
Kitchen aide	0.5	Operations and maintenance	
Kitchen aide	0.5	Operations and maintenance	
Security	1.0	Operations and maintenance	
Administrative assistant/attendance	1.0	Leadership	
Math	1.0	Instruction	
Health	1.0	Instruction	
Reading	1.0	Instruction	
History	1.0	Instruction	
Special education	1.0	Instruction	
Civics	1.0	Instruction	
English	1.0	Instruction	
English	1.0	Instruction	
Engineering coordinator	1.0	Instruction	

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Position	Full-time equivalent	ERS coding categories	Other
Chemistry	1.0	Instruction	
Music	1.0	Instruction	
English	1.0	Instruction	
English	1.0	Instruction	
Biology	1.0	Instruction	
Physics	1.0	Instruction	
Reading	1.0	Instruction	
Social studies	1.0	Instruction	
Math	1.0	Instruction	
English	1.0	Instruction	
ROTC	1.0	Instruction	
Math	1.0	Instruction	
Russian	1.0	Instruction	
Special education	1.0	Instruction	
Special education	1.0	Instruction	
Math	1.0	Instruction	
Technology	1.0	Instruction	
ROTC	1.0	Instruction	
Russian	1.0	Instruction	
English	0.5	Instruction	
Technology	1.0	Instruction	
Special education	1.0	Instruction	
Math	1.0	Instruction	
Art	1.0	Instruction	
World history	1.0	Instruction	

CMO = Charter management organization

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Education Resource Strategies, Inc., is a nonprofit organization that has worked extensively with urban public school systems to rethink the use of district- and school-level resources and build strategies for improved instruction and performance.

Our mission is to be a catalyst for the creation of high-performing urban school systems by promoting and supporting the strategic management of education resources. Our unique strength is in our action research where our partnerships with school systems bridge research and practice. We support our clients with Web-based tools, research and training, and diagnostic analyses tailored to their districts. Together, we outline strategies that are actionable and transformational both within and beyond the districts in which we work.

ERS's work and research have identified several areas in which school systems effectively leverage their resources to improve instruction, forming the basis for our five practice areas: Strategic School System Design; School Funding and Staffing Systems; Strategic School Design; School Support, Planning, and Supervision; and Human Capital.

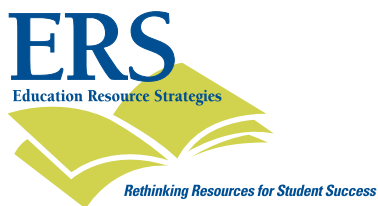
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Rethinking the Cost of Small High Schools Project

The Bill & Melinda Gates Foundation supported Education Resource Strategies in a three-year effort aimed at building understanding and tools that would support districts in creating cost-effective systems of high-performing urban high schools.

Out of our extensive research, we created the following reports and tools to support leaders as they consider and design small high schools in their districts. All materials are available at www.educationresourcestrategies.org.

- *"The Cost of Small High Schools: A Literature Review"*
- *"Strategic Designs: Lessons from Leading Edge Small Urban High Schools"*
- *"Case Studies of Leading Edge Small Urban High Schools"*
- *"District Spending in Small and Large High Schools: Lessons from Boston, Baltimore, and Chicago"*
- **Going to Scale Tool**
- **Small Secondary School Design Tool**
- **District Assessment Tool**



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