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*Core Academic Strategic Designs*  
**University Park Campus School**

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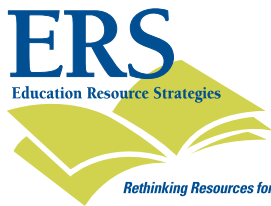
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Case Studies of Leading Edge  
Small Urban High Schools

*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](http://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](http://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)

**T**hirty 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](http://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](http://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

### 3. University Park Campus School

12 Freeland Street  
Worcester, MA 01603  
[www.upcsinstitute.org](http://www.upcsinstitute.org)

Located in the Main South neighborhood of Worcester, MA, just down the road from Clark University's red-brick campus, is University Park Campus School, a nationally recognized, award-winning high school serving 230 students in grades seven through 12.

#### University Park's mission

The goal of University Park Campus School is to produce students who become confident in their ability to tackle new learning situations, who grow in an appreciation of community, who come to understand that desire beats adversity, and who learn to realize that people working together with a common cause can indeed make promises come true.

[www.upcsinstitute.org](http://www.upcsinstitute.org)

University Park is a place of hope in Worcester, the second-largest city in Massachusetts. The school, which opened in 1997, provides a rigorous curriculum and personal support that prepares every one of its students for college and has them aspiring to attend places like Clark, Brown, and Harvard.

University Park was developed by Clark University, Worcester Public Schools, and local community development organizations to be a public school of choice that would admit neighborhood students regardless of their academic standing. A public high school within the Worcester Public Schools system, University Park serves students primarily from Main South, one of the poorest sections of Worcester. Nearly 80 percent of the students speak English as a second language,

and almost 70 percent qualify for free and reduced-price lunch.

As a neighborhood school, University Park's only admissions requirement is that students live in the immediate neighborhood surrounding the school. Students complete an application and are selected first with preference given to siblings of attending students and then by lottery. For SY2005–06, there were 27 siblings and 35 slots, so the school opened nine additional spots to accept 44 new students in total.

All applicants to University Park must accompany their parents to an informational meeting where they are told about the school's academic rigor, including the expectation of two hours of homework each night. The school accepts students at all grade levels, but it prefers not to take them beyond eighth grade because of the intensive academic preparation the school provides in seventh and eighth grades. Sometimes University Park loses a few students at the end of eighth grade to vocational high school, but once students enter ninth grade at University Park, they usually stay until they graduate.

## Core academics: Preparing students for success

University Park focuses on rigorous preparation in core academics for all students. University Park students often come to the school performing several years below grade level in most subjects. The school uses the seventh and eighth grades to help these students catch up and become prepared for the high school curriculum. Beginning in ninth grade, all students take an honors-level curriculum that gives them a foundation for success in college. Students take math, science, English, and history each year, as well as three years of Spanish. University Park's small size ensures that teachers get to know each of their students. Teachers often help students before and after school and coach them to reach their maximum potential.

University Park's teaching staff members, who have both experience and content expertise, are a key to students' success. The faculty is a mix of veteran and newer teachers who all have more than three years of experience and who average 11 years of experience. As part of the collaborative, professional culture at University Park, the faculty meets weekly to review assessments, discuss student needs, and develop its skills and knowledge. Educators from other schools routinely visit University Park to learn from the faculty about how to support students for success. University Park students consistently outperform the district and state on the annual state test of English language arts and math proficiency.

University Park maintains a close relationship with Clark University, and it relies on the university to help students view college as a given instead of a remote and intangible concept. University Park students use the Clark campus library and gymnasium, attend labs, interact with university students and staff, take mini-seminars in grades seven through 10, and enroll in college classes for credit during their junior and senior years. To be eligible for these college-level classes, students must be on the honor roll and be academically mature enough to enroll as a regular college student. Students who complete these courses receive college credit. University Park students wear college IDs and even point to the dorms they hope to live in after they graduate. When they do graduate from University Park, if they meet the admissions criteria, they may attend Clark University free for four years, "eliminating real and perceived financial barriers to college."<sup>1</sup> To date, all University Park students have attended college, and more than 95 percent are the first in their families to do so.<sup>2</sup>

As a district school in Worcester Public Schools, University Park is subject to the same district and union regulations as other schools in the district, including hiring and firing requirements and the length of student and teacher day and year, which it cannot alter. University Park must use the district salary schedule, and the school has little discretion over the budget.

Despite these limitations, University Park's focus on rigorous core academic coursework — supported by a collaborative teacher professional culture and strengthened through a strong partnership with Clark University — supports its students' consistently high performance.

## Student demographics

University Park reflects the diversity of the city of Worcester. Twelve percent of University Park students have disabilities, and although technically only 1 percent of the students are considered English language learners, in reality 67 percent of University Park students do not speak English at home but choose to attend University Park with its full-immersion, rigorous academic curriculum. As shown in Figure 3.1, the school's percentage of students of color and who qualify for free and reduced-price lunch is higher than the district average.

**FIGURE 3.1**

*Student demographics: University Park and Worcester Public Schools district average, SY2005–06*

	University Park	Worcester Public Schools district average
<b>Race/ethnicity</b>		
Hispanic	37%	34%
Caucasian <sup>i</sup>	35%	43%
Asian	17%	8%
African American	11%	13%
<b>Socioeconomic status</b>		
Free and reduced-price lunch	68%	63%
<b>Program</b>		
Students with disabilities	8%	19%
English language learners	1% <sup>ii</sup>	17% <sup>iii</sup>

Source: Boston Public Schools, <http://boston.k12.ma.us/schools>, and Massachusetts Department of Education, <http://profiles.doe.mass.edu/>; percentages are rounded to the nearest whole number.

Note: University Park data are for SY2005–06; district data are for SY2006–07.

- <sup>i</sup>. Most of the school's white students are recent immigrants from Eastern Europe and do not speak English at home.
- <sup>ii</sup>. University Park students sign a waiver out of English language learner services.
- <sup>iii</sup>. District "First Language Not English" is 38 percent versus 67 percent at University Park.

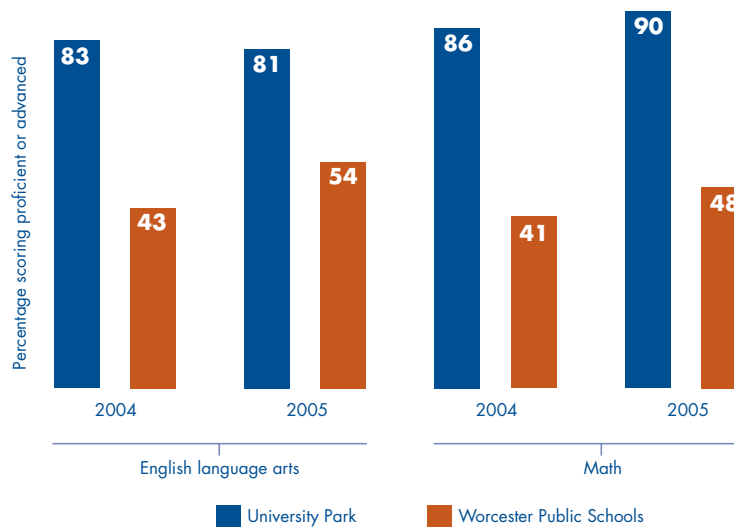
## Student performance

University Park is a high-performing school within Worcester Public Schools, based on student performance on the Massachusetts Comprehensive Assessment System (MCAS), a criterion-based test that all public school students take in 10th grade and must pass to receive a high school diploma. As shown in Figure 3.2, University Park students outperformed the district average in English language arts and math. In 2005, all University Park 10th graders passed the English language arts and math MCAS, with 82 percent of 10th graders receiving a score of proficient or advanced in English language arts and 89 percent of 10th graders receiving a score of proficient or advanced in math.

A deeper examination of these results reveals that a significant number of University Park students scored in the advanced performance level. For example, 53 percent of University Park students scored advanced in math, and 37 percent were proficient, whereas the district average was 14 percent of students scoring advanced and 21 percent proficient in math. University Park students also outperformed students across the state of Massachusetts (see Figure 3.2).

**FIGURE 3.2**

*Percentage of students scoring proficient or advanced on MCAS: University Park and Worcester Public Schools, 2004 and 2005*



Source: Massachusetts Department of Education, <http://profiles.doe.mass.edu>.



University Park also exceeds Worcester Public Schools in other dimensions of performance, such as attendance, promotion, and college-going rates. It also has far lower suspension rates (see Figure 3.3).

**FIGURE 3.3**

*Other indicators of student performance, SY2005–06*

	<b>University Park</b>	<b>Worcester Public Schools district average</b>
Attendance	96%	94%
Promotion rate	98%	96%
Out-of-school suspensions	2%	10%
Dropout rate	1%	4%
Graduation rate	91%	67%
College-going rate	100%	79%

Source: Massachusetts Department of Education, <http://profiles.doe.mass.edu/>; percentages are rounded to nearest whole number.

### Per-pupil spending

As described above, University Park has little discretion over its budget and feels the districtwide financial squeeze. In the past two years, University Park lost two full-time employees due to budget cuts, and there are no Title I dollars because in Worcester Public Schools all Title I funding goes to the elementary schools. In SY2005–06, the school received about \$130,000 in external funds (much of it through the district), which it used for before- and after-school academic support, a summer academy for incoming seventh graders, teacher stipends, and other professional development. The school raises no funds beyond a small amount of approximately \$10,000, which comes from hosting institutes and professional development for educators interested in learning about the University Park model.

As seen in Figure 3.4, University Park is quite similar to the district comparison high school in terms of per-pupil expenditures. All the positions over which University Park has control (i.e., are not required by the district) are used for classroom instruction. Though University Park appears to spend slightly more per pupil overall (\$7,238 versus \$6,751 for the comparison school), the difference is explained by private fund data, which were available for University Park but not the comparison school.

**FIGURE 3.4***Per-pupil operating expenditures, SY2005–06*

	<b>University Park</b>	<b>Worcester Public Schools comparison school<sup>i</sup></b>
Total fully allocated operating budget <sup>ii</sup>	\$1,134,869	\$14,040,386
General education per pupil (unweighted, fully allocated, including private, no geographic adjuster)	\$7,238	\$6,751
Percentage above that is privately funded	7%	N/A <sup>iii</sup>
Percentage spent on instruction	58%	60%
Student-teacher ratio	18:1	15:1
Percentage spent on leadership <sup>iv</sup>	8%	8%
Percentage spent on pupil services <sup>v</sup>	7%	6%

<sup>i</sup> 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.<sup>3</sup>

<sup>ii</sup> Fully allocated operating budget includes the costs of running a school on a daily basis.<sup>4</sup>

<sup>iii</sup> Data on private funding were not collected for the comparison schools.

<sup>iv</sup> 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.).

<sup>v</sup> Pupil services coding includes all functions associated with noninstructional programs.<sup>5</sup>

### **Flexibility dimensions<sup>6</sup>**

As a district school within the Worcester Public School system, University Park has little flexibility over its resources (see Figure 3.5). The district allots staff positions based on the number of students in the school. The principal can decide what subject areas the positions are in, although the district requires some positions (guidance counselor, custodian, part-time adjustment counselor, and special education staff). Although the school is permitted to change the class size and staff composition to meet student needs, in practice there is little room to maneuver with these regulations and University Park's small size.

**FIGURE 3.5**

*Flexibility dimensions*

<b>Flexibility dimension</b>	<b>University Park</b>
Hiring and firing	No
Teacher time	No
Class size	Yes
Student time	No
Staffing composition	Limited (within special education requirements; several required nonteaching positions)
Salary	No
Option to opt out of district services	No
Discretion over nonsalary budget	No

### Resource strategies

University Park strategically uses resources across several indicators to support student success. The following sections highlight University Park’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.<sup>7</sup>

#### University Park resource strategy highlights

- 1. Invest to continuously improve teaching quality through hiring, professional development, job structure, and collaborative planning time*
  - Strategic hiring that ensures high-quality teachers, often with multiple certifications
  - Significant investment in multifaceted professional development
  - Professional development for other educators while supporting individual growth
- 2. Use student time strategically, linking it to student learning needs*
  - Resources focused on core curriculum, including a heavy focus on literacy
  - Academic support and rigorous standards in core academic subjects
  - External resources leveraged through strong partnership with Clark University and other organizations
- 3. Create individual attention and personal learning environments*
  - Personal relationships fostered between students and faculty through structures, including August Academy, looping, and formative assessments

## ■ Resource strategy 1

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

- *Strategic hiring that ensures high-quality teachers, often with multiple certifications*
- *Significant investment in multifaceted professional development*
- *Professional development for other educators while supporting individual growth*

### *Strategic hiring that ensures high-quality teachers, often with multiple certifications*

Although University Park’s hiring process is subject to the local teacher’s union bidding process, the school is usually able to hire teachers who fit the school’s philosophy and needs. To ensure that the school hires highly skilled educators who can serve multiple roles, the principal posts University Park job descriptions that require multiple certifications. If no Worcester Public Schools teachers apply for open positions, the school can hire from outside the district. In recent years, there has been an increase in in-district applicants, with three of the open positions at the school filled by other Worcester public school teachers. Although there is little turnover, when the school needs a new teacher, the principal actively recruits particular people she believes would be a good match for the school.

Both teachers and students are involved in the interview process. University Park principal June Eressy says if a candidate is uncomfortable with the idea of teachers and students participating in the interview process, it sends up a red flag. “There is no room for poor teachers,” Eressy says. “We’re so small that one weak link can make a huge impact on the school.”

One-third of the school’s teachers have more than one certification, and more than half teach multiple subjects. This flexibility with teacher expertise allows the principal to adjust classes based on students’ needs, interests, and academic strengths and weaknesses. This is especially necessary in math and science: 100 percent of math teachers at University Park have master’s degrees, and 100 percent of the ninth grade core academic teachers have master’s degrees. During budget cuts in the district, University Park lost two teacher positions (Spanish and history), but the school was able to shift resources, create longer blocks of English and math at the middle school level, and use multiple certifications and Master of Arts in Teaching (MAT) students from Clark University to fill the gaps.

### *Significant investment in multifaceted professional development*

University Park integrates much of its professional development time into the school day to support teacher and student needs. Although there is little available contractual time for professional development, University Park manages to triple the percentage of teacher time in professional development to a total of 5 percent. The principal uses creative scheduling and staffing to embed time during the school day as well as to strategically using time during staff meetings.

Every Wednesday morning, the faculty spends an hour meeting to analyze data, develop curricula, work on scheduling, and share best practices. The school creates this time by hiring part-time teachers to teach noncore classes on Wednesday mornings. Additionally, there are 90-minute staff meetings after school the first and third Mondays of every month. The first of these is devoted to logistics and the other is devoted to curricular and departmental meetings. This 90-minute monthly collaborative planning time, plus the weekly 60-minute meeting, adds 44 hours of professional development annually to the 20 hours of time stipulated by the teachers' union contract — which calls for two districtwide professional development days plus eight hours. The district has professional development offerings for the two days, but a principal can decide the professional development in which teachers engage.

University Park promotes a culture of collaboration and support among its teachers. Says Principal Eressy: “Teachers are expected to share and work together. ... All teachers are part of the shared leadership. I don't make any decisions here without the teachers.” There is frequent cross-curricular sharing, which Eressy says generates common expectations, a common language for the students, and aligned curricula.

In addition to professional development time, University Park hosts MAT students from Clark University, which adds to the professional culture of the school. In SY2005–06, University Park had five MAT students, each of whom had a mentor from the school's faculty. The presence of the student-teachers, and the mentoring that takes place for them, encourages a climate of shared practice and open dialogue.

MAT students host two professional development “rounds” per semester as a way to gain feedback on their teaching. Several University Park teachers lead courses in the university's education program and serve with college faculty on curriculum teams in each discipline to improve instruction through careful analysis of data, student work, and classroom practice. During SY2005–06, all but three of the teachers at University Park had at least one degree from Clark. Three teachers who did MAT work at University Park joined the school's faculty full time.

The rounds strategy, based on the medical model, is most frequently used by MAT students, but it often involves University Park teachers. Rounds provide teachers with the opportunity to observe one another's classrooms, discuss lessons learned, and provide feedback in a safe and supportive environment. To begin rounds, the host teacher prepares the group for a lesson by sharing strategies and objectives and preparing the observers for what they will see in the classroom. After observing the lesson, the group discusses the experiences and provides

feedback to the host teacher. Sometimes the principal will arrange a round so that teachers can see a particular strategy. Student-teachers substitute in the classes while teachers participate in rounds.

University Park's partner, Clark University, also provides professional development for teachers. Teachers can take up to five classes for free at Clark, an arrangement that is open to all teachers in the district. Says Principal Eressy: "Everyone here [at University Park] takes advantage of the courses, including me." All the professional development at University Park results in the investment of \$8,750 per teacher, including professional development and collaborative planning time.

### *Professional development for other educators while supporting individual growth*

University Park, together with Clark University and Jobs for the Future, co-sponsors an annual professional development institute for school teams from early college high schools across the country. At the institute, University Park teachers share strategies that have led to the school's academic and student success. In 2005, about 150 people from early college high schools and other small schools attended the summer institute. University Park faculty led the training and workshops, which provided both leadership opportunities for them and additional income. Teachers are paid a stipend of \$35 per hour for the extra time, which is specified by their contracts. Institute participants also observe University Park teachers during the school's August Academy, an orientation program for all incoming seventh graders. The school also hosts a structured visit program that has welcomed as many as 150 visitors in one school year. As part of the visit program, outside educators observe University Park classes and participate in training and workshops during 10 days of the school year. A full-time staff member coordinates and runs the institute and visit program. His salary was initially supported by Jobs for the Future but is now funded by a Gates Foundation grant. In a school with few personnel, he also helps the principal and will occasionally substitute teach.

In addition to providing professional development for other educators, University Park promotes individual growth for its own faculty through collaborative professional development as well as supervision and evaluation. Principal Eressy, the only administrator in the building, spends one and a half hours in classrooms every day. Eressy, who was one of University Park's founding teachers, considers herself to be the informal literacy coach and is a National Board Certified Teacher in English language arts. As a teacher at the school, Eressy designed the school's literacy initiative. Now as principal, Eressy conducts two formal classroom observations of every teacher every year, which exceeds the district requirements. She also makes informal visits to classrooms and has conferences with teachers about their goals.

## ■ Resource strategy 2

Use student time strategically, linking it to student learning needs

- *Resources focused on core curriculum, including a heavy focus on literacy*
- *Academic support and rigorous standards in core academic subjects*
- *External resources leveraged through strong partnership with Clark University and other organizations*

### *Resources focused on core curriculum, including a heavy focus on literacy*

University Park focuses heavily on core academics; students spend 75 percent of their time on core academics, a total of 886 hours per year, which is the highest of all the Leading Edge Schools. This time in core academics at University Park is 72 school day equivalents above the Worcester district average. Students take four years of math, science, English, and history. They spend almost all of their time in core academic classes, with 60 to 90 minutes per week for physical education, art in ninth grade, and one elective in grades 11 and 12 (see Appendix 3.2 for sample student schedule).

University Park's course requirements exceed state graduation requirements and are based on Clark University's expectations for first-year students' work. The principal believes a strong core curriculum is essential in the early grades, but she wishes the school could offer more course options for juniors and seniors. Faculty members at University Park teach four of six periods, and some teach five of six. Teachers with heavier loads have MAT student-teachers assigned to their classes for additional support.

At the high school level, student time is divided evenly among the core academic subjects. All high school classes at University Park are 60 minutes, except for in 10th grade, which has 90-minute blocks of English and math. The extra time is designed to solidify students' skills and prepare them for more rigorous upper-level courses.

University Park's schedule is flexible, and nearly every year adjustments are made in response to students' needs. For example, one year when a teacher voiced concern about student preparedness for the upcoming state exam, the school created a weekly, two-hour skill-building block staffed by four teachers for additional small-group instruction.

University Park attributes much of its success to literacy being part of every lesson. The principal defines literacy as reading, writing, speaking, and thinking. "It is a strong focus from day one at the school," she says. "Literacy is so deeply embedded in what we do, it permeates everything." All content teachers are expected to use literacy strategies in the classroom, and

they receive coaching to learn how to do so. Eressy co-taught with a science teacher to help the teacher develop literacy skills. The science teacher did the content, and Eressy shared the literacy strategies. Examples of literacy in different content areas include the following:

- Science — writing a creative story about the water cycle.
- Social studies — creating literature circles with primary-source documents.
- Math — tracking the order of operations through a story or writing a letter to a fellow student to help explain a math problem.

These literacy-integrated strategies are valuable practice for the state MCAS exam. According to the school's item analysis, University Park students are much stronger on open response questions than they are on multiple-choice questions, which is an opposite pattern from the rest of the state. The principal credits this difference to the preparation students have had in their classes. "Kids don't panic about the exam. They're well prepared," says Eressy. "Students are being trained for AP exam open response questions, and comparatively, the MCAS questions are much easier."

University Park helps students rise to this level of academic excellence early in their career at the school — in seventh grade. Most incoming seventh graders arrive at least a couple of years below grade level in literacy and math. The school spends seventh and eighth grade bringing students up to grade level and preparing them for high school level work. Seventh and eighth graders have 90-minute blocks of English, and eighth graders have 90-minute blocks of math. Additionally, students have a 60-minute course devoted to study skills (particularly literacy strategies) in one grade and project-based math (Connected Math Program curriculum) in the other grade.

The school has a very deliberate strategy for preparing students in literacy and math, and it does not adjust its curriculum to match the state MCAS exam. In turn, University Park students score worse on the eighth grade math exam than on any other state assessment (though they still outperform the district and the state). University Park faculty members choose not to teach some concepts they know might appear on the exam, but which they think do not serve the students well mathematically at that point.

Instead, the school focuses on building skills and a foundation so students are successful later. By 10th grade, all students are well prepared, and most pass the state exam with proficient and advanced status. Principal Eressy says she would like to start working with students even earlier than seventh grade. She would like to expand to include grades five through 12. However, space is limited; there are only 12 rooms in the building, and they are always in use.



### *Academic support and rigorous standards in core academic subjects*

Rather than track students or use structured support, University Park differentiates instruction in classrooms. In addition, the school focuses on math and English language arts skills in the early grades so that all students can participate in the college-preparatory high school curriculum. All courses at University Park are honors courses, and the school has an open enrollment policy for AP classes. “The level of rigor kids are exposed to at University Park is really helping them to think and learn,” says Eressy. “Classrooms are busy places. It’s not seat time; it’s active learning.”

There were four AP classes offered in SY2005–06: 20 students were in AP English, 30 in each section of AP History, and seven in AP Calculus. There also are AP offerings and add-ons within existing classes. Interested students do extra work and add on an extra block of time after school to turn a regular honors class into an AP class. University Park was ranked 68 by *Newsweek* magazine as one of the “100 best high schools in America” because of the high percentage of their student population taking AP classes.<sup>8</sup> Other than AP classes, all students take essentially the same schedule with two sections at every grade level (except grade 12, which has one section).

To ensure that every student is accessing the rigorous curriculum, and to provide the opportunity for extra support, University Park offers an optional morning and afternoon homework center that almost all of the middle school students and a majority of the high school students attend. This time for remediation and acceleration is outside the school day and is voluntary for students. The school has established a culture of asking questions; students have no embarrassment about not knowing something, and they are encouraged to go to teachers for extra support. A math teacher hosts a “breakfast club” four days a week and gives students special invitations to attend. Teachers receive a stipend for working in the homework center before or after school or for any additional support they provide. Says Eressy: “Basically, my teachers are teachers. Anything out of the realm of their teaching duties, they are paid extra for.”

### *External resources leveraged through strong partnership with Clark University and other organizations*

University Park’s partnership with Clark University mirrors the school’s mission to focus on core academics to prepare students for college. University Park students directly benefit from the partnership. They can take classes at Clark while in 11th and 12th grades, giving them an opportunity to experience success in college. In 2006–07, two-thirds of University Park’s graduating class took courses at Clark, in addition to a full load of their regular high school classes. Clark faculty members volunteer to teach seminars at University Park, such as an eighth grade Shakespeare seminar. Clark sponsors a summer camp for all neighborhood children, starting in third grade, and University Park students work as counselors at the summer camp while University Park teachers direct the program. All neighborhood students are eligible for free tuition to Clark. About 20 percent of University Park students have taken advantage of this opportunity.

These experiences help establish an expectation of and familiarity with college for University Park students. “The key is to start talking to kids about college early and constantly,” says Eressy. “They’re part of the college campus [through the local partnership with Clark University]. They see the MAT students [doing their internships at the school], and so many of the teachers went to Clark and tell their college stories. When kids are older, they become ‘too snobby’ for Clark and have a desire to get out of the city.” The school also takes students to visit other college campuses.

This college preparation sets University Park apart from other schools and is perhaps one of its greatest accomplishments. The partnership with Clark enriches University Park on many levels — through professional development, providing a pipeline for teachers, student support, and instructional resources. This in-kind support is critical to the school’s mission and allows University Park increased flexibility with its own limited resources.

University Park partners with nearby elementary schools to use their gyms and auditorium space, and it shares a nurse with a nearby elementary school. The school also partners with the Worcester Art Museum and the Worcester Ecotarium. University Park is hailed as an exemplar school with more than 300 visitors per year for school visits and the summer institute program.

University Park’s partnerships have allowed it to offer its students an after-school program from 3:30 p.m. to 4:30 p.m. that includes hip hop, art (taught by an artist from a local museum), a healthy choices program (funded by Blue Cross and Blue Shield), and athletic activities, including cross country, track, and basketball. Students can play all other sports at the nearby comprehensive high school.

### ■ Resource strategy 3

#### Create individual attention and personal learning environments

- *Personal relationships fostered between students and faculty through structures, including August Academy, looping, and formative assessments*

#### *Personal relationships fostered between students and faculty through structures, including August Academy, looping, and formative assessments*

“A personalized learning environment is our specialty,” says University Park principal Eressy. She notes that size does matter, and it contributes to a close culture in the school in which everyone works together. The teachers and Eressy know the students. “I make it a point to know every kid,” she says. “I have a relationship with them, too.” One major factor to the close connections is moderate average class sizes (21) and teacher loads (90). University Park also uses a number of strategies to provide a personalized learning environment, such as its August Academy and looping.

### **August Academy**

University Park provides a three-week summer session called August Academy for incoming seventh grade students to ease the transition from elementary school to high school. August Academy is three hours of academic time (English language arts, math, science) and three hours of enrichment activities in the afternoon. The orientation session allows students to get acquainted with one another, their teachers, and the school. “For a lot of kids, this is the only stability they have in their lives. They like that the school is a safe zone for them,” says Eressy. Students begin to internalize the culture of the school, and teachers begin to assess student strengths and weaknesses and tailor curricula for the upcoming year to meet the needs of the incoming students. August Academy not only affects school culture but also results in more academic time for incoming students and teachers getting to know their students before the first day of school.

### **Looping and assessment**

The school loops students with teachers for two years. Not all teachers loop, but students are likely to have one or two of the same teachers from one year to the next. In addition, University Park uses data to inform instruction and track student progress over time; the school uses MCAS results and Measured Academic Progress assessments three to four times per year, as well as ongoing daily assessment of student learning.

Students also serve a role in personalizing the learning experience: Older students serve as role models for younger students and work with other students academically. For example, 10th graders taught a fraction workshop to seventh graders. Overall, personalization at University Park tends to be less formal than one might see at other schools because the school’s small size automatically lends itself to individual attention.

## NOTES

- <sup>1</sup> [www.upcsinstitute.org/upcsdesign/overview.html](http://www.upcsinstitute.org/upcsdesign/overview.html). The benefit of free tuition at Clark is open to all graduates who live in the neighborhood, not just University Park students.
- <sup>2</sup> [www.upcsinstitute.org](http://www.upcsinstitute.org)
- <sup>3</sup> In Worcester, where we did not have a prior relationship, we met with district leaders to seek feedback on which comparison school to use and to obtain school budgets. Worcester comparison school demographics: 1,575 students; 14 percent African American; 7 percent Asian; 55 percent Caucasian; 23 percent Hispanic; 36 percent free or reduced-price lunch; 21 percent students with disabilities; 6 percent English language learners.
- <sup>4</sup> 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 charter management organization (CMO), some of these costs are administered at the CMO level.
- <sup>5</sup> 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.).
- <sup>6</sup> 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.
- <sup>7</sup> This framework for analysis, the “Big 3” resource strategies of high-performing schools, is more fully described in Appendix 3.1.
- <sup>8</sup> [www.msnbc.msn.com/id/18757087/site/newsweek/?sort=Rankandcount=1043andstart=0andlimit=100andyear=2005](http://www.msnbc.msn.com/id/18757087/site/newsweek/?sort=Rankandcount=1043andstart=0andlimit=100andyear=2005)

## APPENDIX 3.1

### Resource strategies

Resource principles	What we see in the school	Diagnostic indicators
<b>Invest in teaching quality</b>		
Hire and organize staff to fit school needs in terms of expertise, philosophy, and schedule	<ul style="list-style-type: none"> <li>Committee of teachers and students review applications; strong emphasis placed on finding the right fit</li> <li>Veteran staff; 0% of core academic teachers have fewer than three years' experience</li> </ul>	<ul style="list-style-type: none"> <li>Use of a rigorous, strategic hiring process</li> <li>0% of core academic teachers with three or fewer years' experience</li> <li>39% of core teachers teaching more than one subject</li> <li>Leverage outside experts for noncore courses</li> </ul>
Integrate significant resources for well-designed professional development that provides expert support to implement the schools' instructional models	<ul style="list-style-type: none"> <li>Weekly professional development time every Wednesday morning; accomplished by hiring part-time teachers for noncore academics</li> <li>Veteran teachers support internal delivery of professional development</li> </ul>	<ul style="list-style-type: none"> <li>\$5,175 per teacher on professional development (not including teacher time)</li> <li>8% staff with instructional leadership roles</li> </ul>
Design teacher teams and schedules to include blocks of collaborative planning time effectively used to improve classroom practice	<ul style="list-style-type: none"> <li>All teachers have 90 minutes of collaborative planning time once a month</li> <li>Culture of support embedded; teachers develop curriculum, look at student data, and share best practices</li> </ul>	<ul style="list-style-type: none"> <li>5% of teacher year in professional development (with collaborative planning time)</li> <li>64 total yearly teacher professional development hours (with collaborative planning time)</li> <li>45 minutes collaborative planning time per week</li> <li>21% professional development in content-based teams</li> </ul>
Enact systems that promote individual teacher growth through induction, leadership opportunities, professional development planning, evaluation, and compensation	<ul style="list-style-type: none"> <li>Principal has evaluative responsibilities and serves an instructional leadership role</li> <li>Summer Institute and structured visit program to share best practices</li> </ul>	<ul style="list-style-type: none"> <li>Ratio of teachers to school-based evaluators is 17:1</li> <li>Regular review of teacher performance and growth</li> <li>0% of teacher compensation devoted to leadership roles</li> </ul>

(continued)

(continued)

Resource principles	What we see in the school	Diagnostic indicators
<b>Use student time strategically</b>		
Purposefully align the schools' schedules with their instructional models and student needs	<ul style="list-style-type: none"> <li>Literacy across the curriculum</li> <li>Use of block schedule in 10th grade</li> <li>Focuses resources on core curriculum (not noncore)</li> </ul>	<ul style="list-style-type: none"> <li>School schedules reflect instructional model and academic needs of students</li> <li>137 total yearly hours in noncore academics</li> <li>12% of student year in noncore academics</li> </ul>
Maximize time on academic subjects, including longer blocks of uninterrupted time	<ul style="list-style-type: none"> <li>Offers a college-preparatory program; focused on core academics</li> <li>Focus on literacy and math in grades seven and eight</li> <li>Same length of school day as the district</li> </ul>	<ul style="list-style-type: none"> <li>1,185 yearly student hours</li> <li>886 average yearly hours in core academics</li> <li>888 yearly hours in ninth grade core academics</li> <li>712 yearly hours in 12th grade core academics</li> <li>75% of student year in core academics</li> <li>3,544 total core academic hours over four years</li> </ul>
Vary individual student time when necessary to ensure all students meet rigorous standards	<ul style="list-style-type: none"> <li>Extra academic support is voluntary and provided before and after school</li> <li>Rigorous curriculum and AP classes available to all students; all students have the same schedule (no tracking)</li> <li>Exceeds graduation requirements set by the district</li> </ul>	<ul style="list-style-type: none"> <li>41 average yearly hours in academic support</li> <li>4% student year in academic support</li> <li>Ratio of time in ninth grade math to average time in math: 0.92</li> <li>Ratio of time in ninth grade English language arts to average time in English language arts: 0.96</li> </ul>
<b>Create individual attention</b>		
Assess student learning on an ongoing basis and adjust instruction and support accordingly	<ul style="list-style-type: none"> <li>Uses assessment data to monitor progress and provide support; student data used to individualize instruction</li> </ul>	<ul style="list-style-type: none"> <li>Use formative assessments systematically to guide instruction throughout the year</li> </ul>
Create smaller group sizes and reduced teacher loads for targeted purposes	<ul style="list-style-type: none"> <li>Class sizes of 21 and teacher loads of 90</li> <li>Use of Clark Master of Arts in Teaching students</li> </ul>	<ul style="list-style-type: none"> <li>Average class size overall: 21</li> <li>Average class size core: 20</li> <li>Average class size English language arts: 17</li> <li>Average class size math: 21</li> <li>Average teacher load overall: 90</li> <li>Average teacher load core: 82</li> <li>Average teacher load English language arts: 68</li> <li>Average teacher load math: 79</li> </ul>
Organize structures that foster personal relationships between students and teachers	<ul style="list-style-type: none"> <li>August Academy for incoming seventh grade students</li> <li>Looping</li> </ul>	<ul style="list-style-type: none"> <li>Student to core academic teacher ratio is 19:1</li> <li>No yearly teacher hours spent in social and emotional support</li> <li>149 students in grades 9–12</li> <li>Looping practices around strategically grouped students through core academics</li> </ul>

### APPENDIX 3.2

#### University Park sample student schedules

	Grade 9	Grade 11
8:00–9:00	English Language Arts	Algebra II
9:00–10:00	Art (PE Friday)	History
10:00–11:00	Spanish	Physics
11:00–11:23	Lunch	Lunch
11:23–12:23	Biology	Spanish
12:23–1:23	Algebra	Elective (TV Studio or Journalism)
1:23–2:23	World History	English Language Arts

### APPENDIX 3.3

#### University Park graduation requirements

Subject	Number of years
English language arts	4
History	4
Math	4
Science	4
World language	3
Miscellaneous noncore classes	3

## APPENDIX 3.4

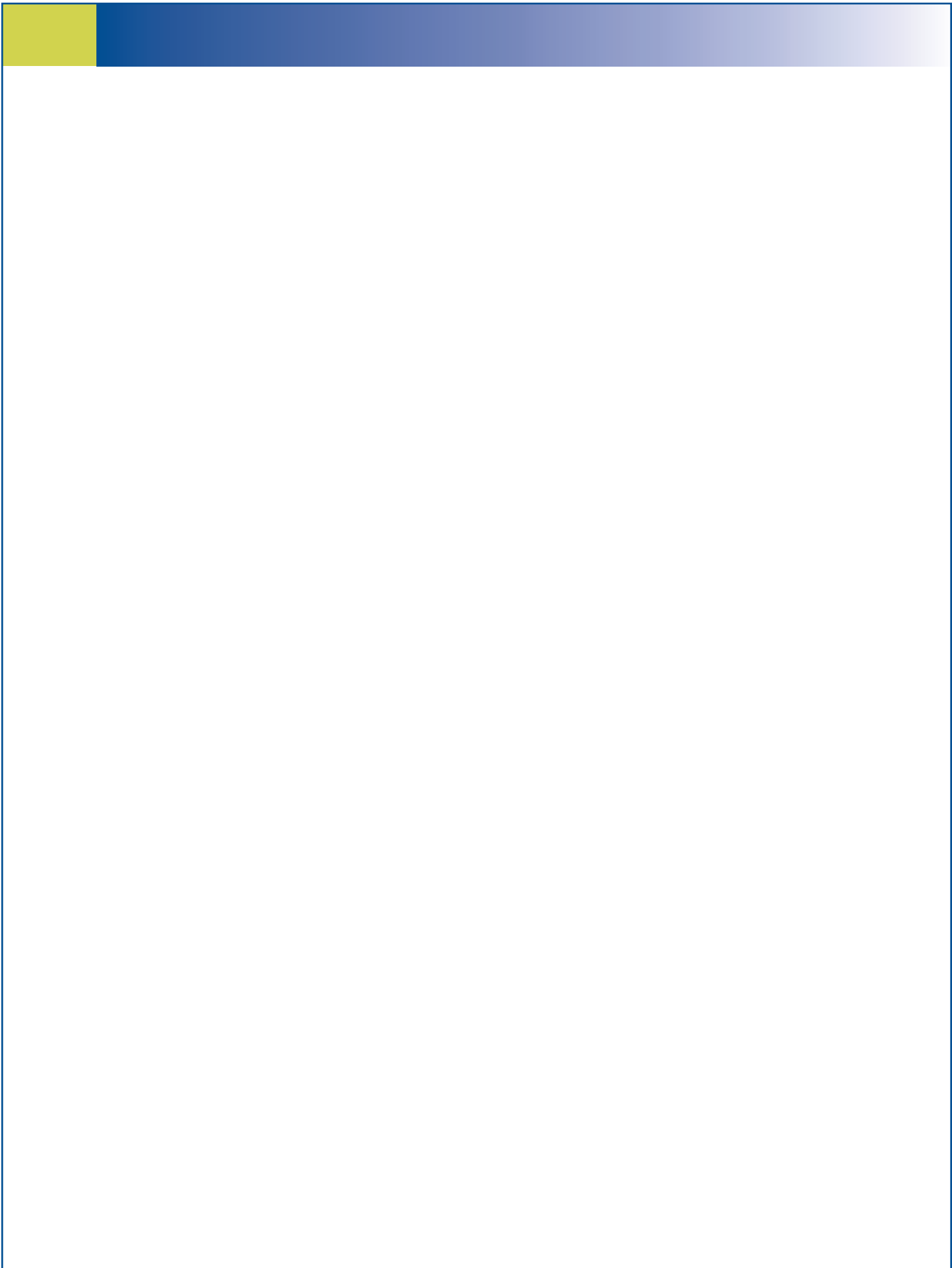
### University Park staff list

Position	Full-time equivalent	ERS coding categories	Other
English language arts	0.5	Instruction	Position shared with middle school <sup>i</sup>
English language arts	1	Instruction	
Foreign language	1	Instruction	
Foreign language	0.5	Instruction	
Math	0.5	Instruction	
Science	1	Instruction	
Social studies	1	Instruction	
Social studies	0.5	Instruction	
Math	0.5	Instruction	Position shared with middle school
Social studies	0.5	Instruction	
Special education teacher	0.52	Instruction	Position shared with middle school
Health	0.2	Instruction	
Art	0.3	Instruction	
Principal	0.65	Leadership	Position shared with middle school
Clerical	0.65	Leadership	Position shared with middle school
Guidance	1	Pupil services	
Custodian	0.65	Operations and maintenance	Position shared with middle school
Visitor program coordinator/substitute	0.75	Instructional support and professional development and instruction	In-kind support (private funds/partnership)

<sup>i</sup> Of the positions shared with middle school, only the high school portion of the full-time equivalent is included in the table.







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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.

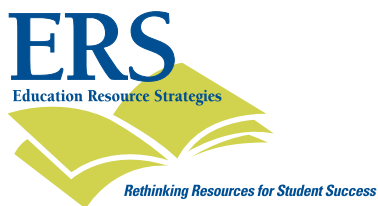
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## Rethinking the Cost of Small High Schools Project

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](http://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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