For years, Orchard Gardens K–8 Pilot School was plagued by low student achievement and high staff turnover. Then, in 2010, with an expanded school schedule made possible through federal funding, Orchard Gardens began a remarkable turnaround. Today, the school is demonstrating how increased learning time, combined with other key turnaround strategies, can dramatically improve the performance of even the nation’s most troubled schools. This case study, the first in a new series, takes you inside the transformation of Orchard Gardens.
About the Series

Policymakers and educators across the country are grappling with the compelling challenge of how to reform our nation’s underperforming schools and better prepare all American students—especially those living in poverty—for long-term success. In 2009, President Barack Obama and Secretary of Education Arne Duncan set out an ambitious effort intended to spur dramatic improvement among persistently low-performing schools by infusing over $3.5 billion into the School Improvement Grant (SIG) program.

To be eligible for this money, schools must adopt one of four models prescribed by SIG guidelines: Restart, Closure, Transformation, or Turnaround. Schools that choose the Turnaround and Transformation models are required, as essential elements of their overall strategy, to bring in new leadership, upgrade their data systems, and increase learning time. This new time requirement for SIG schools has led to widespread experimentation with a diversity of programs and schedules that increase learning time beyond the conventional school day and year.

As momentum is growing for schools to expand their calendar to promote positive change, a new question is emerging for the education field: How can schools that are undergoing major turnaround efforts maximize the great potential of expanded time? To explore the answer to this question, the National Center on Time & Learning has launched Transforming Schools through Expanded Learning Time, a series of case studies examining schools that have increased learning time as part of a comprehensive school turnaround and are showing promising early results.

Like Orchard Gardens, all the schools that will be profiled in this series are doing more than just expanding the school day or year; they are also making fundamental improvements in teaching and learning, using data more effectively, building a more positive learning environment, and addressing the social and emotional needs of their high-poverty students. No matter what their institution’s history, current situation, or record of progress, leaders across these schools agree that more learning time galvanizes and strengthens their other reforms.

“You have to have the right people, in an environment that encourages learning, and data to guide what you’re doing. To make all these things work well, you also need more time—for students to catch up academically and for teachers to become even better.”

Andrew Bott, Principal
Orchard Gardens K–8 Pilot School (OGPS) opened in 2003 amidst much fanfare. Its $30 million building—complete with computer and science labs, a music room, and dance studio—represented a large-scale effort to revitalize one of Boston’s poorest communities. For its first few years, however, this promising new school was plagued by low academic performance and high staff turnover.

With five different principals over the course of the school’s first seven years, student achievement at Orchard Gardens regularly ranked near the bottom of all schools in Massachusetts. Scores for the school’s 800 students—92 percent of whom qualify for free and reduced-price lunch—placed OGPS consistently in the lowest tier, even when compared to other schools serving similarly large proportions of low-income students. From 2003 to 2010, OGPS’s proficiency rates on the Massachusetts Comprehensive Assessment System (MCAS) stagnated below 20 percent in both English language arts (ELA) and math. “The best this school had ever done in the past was getting one-fifth of our students to proficiency,” recalls Toby Romer, the school’s director of professional development and data inquiry.

In April 2010, Boston Public Schools (BPS) designated Orchard Gardens and 11 other district schools for turnaround due to chronically low student achievement. To lead the turnaround efforts at Orchard Gardens, BPS Superintendent Carol Johnson tapped Andrew Bott, one of the district’s rising young principals, who had led Boston’s Rogers Middle School to significant student gains. “When the superintendent calls you and asks you to take on Orchard Gardens, which had been a huge failure for so many reasons, it’s hard to say no. I believe that the success of BPS is dependent on the success of all schools, and I wanted to take on this challenge,” Bott now explains.

Shortly after his appointment was announced, Bott spent significant time in the building to observe classrooms and the climate at OGPS. Ultimately, Bott made the decision to replace approximately 80 percent of the school’s staff. With support from the school’s strategic partner, Massachusetts 2020 (a state affiliate of the National Center on Time & Learning), Bott also initiated the school’s application for School Improvement Grant (SIG) funds, securing $3.7 million to be used over three years. These funds allowed the school to increase per pupil spending by approximately $1,500 each year. Federal guidelines for the SIG program also granted Bott, as a principal of a turnaround school, increased flexibility and control over budgeting, staffing, and curriculum. As Bott recounts, “You’re presented with all this freedom—staffing autonomy, curricular and assessment autonomy, and an infusion of money, and it’s very exciting.”

That excitement has been met with promising results. With an expanded school schedule and other resources, Orchard Gardens has made tremendous strides. After the school’s first year of expanded time, student performance on the 2011 MCAS jumped 10 percent in ELA and 16 percent in math, compared to the 2010 school year. These increases in student achievement translate to a median student growth percentile (SGP) of 63 in ELA and 79 in math, ranking OGPS among the state’s high-growth schools. The school’s median SGP ranked better than 87 percent of all Massachusetts schools in ELA and 98 percent of schools in math.

The 2012 school year brought a new challenge to Orchard Gardens—an influx of approximately 120 English language learners from a nearby school that had been closed due to low performance. Still, in 2012, OGPS continued its upward trajectory in student achievement, surpassing 2011 schoolwide MCAS proficiency rates by 6 and 4 percent in ELA and math, respectively. The median student growth percentile at Orchard Gardens was 70 in ELA and 74 in math, among the highest median SGP scores seen at any school in Massachusetts.

Altogether, the school’s achievement gains have outpaced the vast majority of schools in Massachusetts. Between 2010 and 2012, MCAS growth at OGPS ranked in the top 1 percent in math and top 6 percent in ELA across the state. The school’s combined growth in both ELA and math ranks in the top 2 percent of schools statewide, including the highest growth among all middle schools with at least 750 students.

This case study takes readers inside the powerful turnaround at Orchard Gardens to understand the significant catalyzing role expanded learning time has played in the school’s multifaceted reform effort.

1 In addition to theautonomies granted to any turnaround school, Orchard Gardens had enjoyed other freedoms since its opening in 2003. As one of Boston’s 21 pilot schools, OGPS already had more flexibility in its staffing, budgeting, governance, curriculum, and scheduling than traditional Boston Public Schools.

2 The Massachusetts growth model measures how individual students perform each year compared with peers across the state who have the same performance history. In turn, the relative capacity of a school to improve student performance is determined by identifying the median student growth percentile (SGP) of all its students. Using this method, approximately two-thirds of schools across the state fall between 40 and 60 median SGP. Schools above 60 are considered “high growth.”
Improving Schools with More Time

At Orchard Gardens, Andrew Bott and his leadership team intentionally embedded increased learning time within an innovative school improvement model. This model is composed of four interactive components:

1. **Time**: More time for rigorous academic instruction, engaging activities, and teacher collaboration
2. **People**: Significant improvements in human capital (strong leaders and teachers) by recruiting, hiring, and developing staff
3. **Data**: Intensive use of data to drive improvements in instruction and respond to individual student learning needs
4. **School Culture**: Dramatic changes to schoolwide behavioral and academic expectations

As depicted in the figure below, expanding learning time can have a mutually catalyzing and supporting effect with the three other reform gears. In the diagram, the gear labeled People refers to a wide range of efforts at Orchard Gardens to develop or hire talented school leaders and highly effective teachers. While not all improvements to human capital require additional time, this case study demonstrates the ways in which additional time can improve teacher effectiveness. Further, the corollary is that strong teachers and leaders use time well—that is, the two gears work together. The gear labeled Data refers to the many facets of improving the collection and use of data. While developing excellent data systems does not require an expanded school schedule, to make full use of these systems, schools do need more time to conduct assessments, analyze, and respond to data. Again, reciprocally, the deft use of this data renders learning time more effective because it guides investing instructional time exactly where individual students need it most. Finally, to establish a positive Culture, schools do not necessarily need to expand learning time, but additional time can allow them to offer a range of activities that build school spirit, teach shared values, and set and reinforce high expectations for behavior and achievement. This positive school culture also helps turn the other gears by making the time for learning more productive.

All four gears in the diagram have been fundamental to the gains at Orchard Gardens. While the gear of Time helps turn the other three gears, in the absence of the others, this gear will spin unproductively. In that event, more time will have only limited impact on student learning. Bott describes the implementation of this model at OGPS: “You need a lot of things working together. You have to have the right people, in an environment that encourages learning, and data to guide what you’re doing. To make all these things work well, you also need more time—for students to catch up academically and learn skills beyond those that are tested, and for teachers to look at data and share practices to become even better teachers.”

Using this framework, in the spring of 2010, Bott began planning for the upcoming school year. He started by...
creating a strong and unique leadership team composed of positions the school had never staffed in the past, such as a director of professional development and data inquiry (Toby Romer) and a chief operating officer (Michelle Boyers). School administrators then led a series of "redesign meetings," open to all staff, throughout late spring and into the summer to plan for the year ahead. (See “Planning for the 2010-2011 School Year,” page 6.) At that point, Bott brought in a number of partners to serve in various roles throughout the school year—providing assistance in implementation, in addition to the non-academic student supports and academic and enrichment programs.

### Assistance in implementing changes
- **Achievement Network (ANET):** creating assessments and data analysis tools and delivering data coaching
- **Boston Teacher Residency:** providing teachers-in-training for classroom instruction and support
- **Dudley Street Neighborhood Initiative (DSNI):** developing school reform map and engaging community in turnaround process
- **Mass 2020:** expanding learning time, hiring new staff, and supporting professional development
- **Teach for America:** recruiting and hiring teachers
- **Teach Plus:** recruiting, selecting, and hiring teachers

### Non-academic student supports
- **Arbor:** delivering student counseling services
- **City Sprouts:** integrating outdoor gardening in classroom instruction and building school culture
- **Greater Boston Food Bank:** providing nutritious meals and snacks to students and their families
- **Play Ball:** creating, coaching, and managing middle school sports teams
- **Playworks:** leading recess activities for students

### Academic and enrichment programs
- **BELL (Building Educated Leaders for Life):** delivering after-school academic supports for students in grades 1 to 5
- **Citizen Schools:** providing expanded-day academic support, enrichment, and apprenticeships for students in grades 6 to 8
- **City Year:** providing in-school and after-school academic supports
- **Imajine That:** delivering after-school academic supports for students in kindergarten
- **Thompson Island Outward Bound:** offering outdoor summer learning opportunities for selected students in grades 4 to 6
More Time for Focused Academics and a Well-Rounded Education

The longer school day presented a dramatic change for students when they returned to school in September 2010. One hour was added each day for students in grades K to 5, and 3.5 hours were added to the schedule for students in grades 6 through 8. For all students, the new school day has created more time for English language arts (ELA) and math, with over 100 minutes for each subject, compared to only 75 minutes in 2009.

“One of the biggest reasons for my students’ success was the extended period of time with them,” says Ben Rockoff, the school’s seventh-grade math teacher during the 2010-2011 school year, who now serves as the school’s Academy director for grades 6 to 8, providing support to teachers and students in those grades. “I could do so much more with my students, because I saw them for more time.” From 2010 to 2011, in Rockoff’s math classes, students’ median growth was at the 92nd percentile; among all Massachusetts seventh-grade students, only three other seventh-grade math classes in the state demonstrated greater one-year improvement. In 2012, the school began teaching to Common Core standards, and academic growth continued.

Planning for the 2010-2011 School Year

From May 25 to July 1, 2010, Orchard Gardens and Mass 2020 held a series of weekly “redesign” meetings open to both returning and new staff. While topics varied weekly, each was tied to people, data, culture, or time.

May 25th: Introducing New Staff and Changes
- Introduce new staff, including new principal, Andrew Bott
- Discuss people, data, and time strategies in small groups

June 15th: Developing an Academic Focus
- Discuss four potential focus areas: open response writing, non-fiction reading comprehension, vocabulary development, and number sense

June 1st: Building a Positive School Culture
- Address social and emotional well-being of students
- Suggest ways to engage parents and families
- Recommend ways to recognize student achievement

June 22nd: Differentiating Instruction and Support
- Discuss people, data, and time strategies among three academy teams (Grades K–2, 3–5, and 6–8)
- Design methods to monitor student progress
- Identify areas for further professional development

June 8th: Analyzing MCAS Data
- Deliver training on data inquiry protocol
- Identify skill gaps in prior year’s MCAS in small groups, by grade and content level
- Advance instructional strategies to address skill deficits

July 1st: Creating a Mission and a Vision
- Finalize plans for upcoming school year
- Plan grade-level and content teams
- Develop a new positive behavior incentive system


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<thead>
<tr>
<th>Time</th>
<th>2009: 9:25–3:21 (~6 Hours)</th>
<th>2012: 7:20–5:00 (9 Hours 40 Minutes)</th>
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<td></td>
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<td>8:32–10:20 / ELA</td>
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<td>9:25–9:35 / Homeroom</td>
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<td>10:31–11:21 / Social Studies</td>
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<td>12:17–12:42 / Lunch</td>
<td>2:20–5:00 / Citizen Schools*</td>
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<td>12:45–2:00 / ELA</td>
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<tr>
<td>2:00</td>
<td>2:03–3:21 / Math</td>
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*See “Partnership with Citizen Schools,” page 8, for detailed daily schedule
To support instruction, Orchard Gardens has partnered with three organizations—Boston Teacher Residency (BTR), Citizen Schools, and City Year—to provide nearly 50 additional support staff throughout the day, allowing each classroom to have at least two adults to deliver small group instruction and provide individualized support. “Having BTR, Citizen Schools, and City Year people alongside our teachers has been really helpful,” says Andrew Bott. “Having two, sometimes three, adults in the room, along with more time, has really allowed the workshop model to take off in our classrooms.”

Along with more time for core academics, the expanded day includes more time for enrichment courses—including visual art, theater, dance, music, and physical education. Each week, all students receive five to six hours of arts programming and two to three hours of physical education. In April 2012, President Obama’s Committee for the Arts and Humanities (PCAH) recognized OGPS as one of eight Turnaround Arts Schools across the country for utilizing the arts to raise overall student achievement in a previously low-performing school. Today, as part of a two-year Turnaround Arts Initiative, OGPS students receive instruction from renowned cellist Yo-Yo Ma and acclaimed dancer Damian Woetzel, while the school benefits from arts resources and training provided by national organizations such as Crayola and the NAMM Foundation, which supports innovative, community-based music learning programs.

More time also has created additional opportunities for academic support. From 2:20 to 5:00 PM, Monday through Thursday, the school’s sixth, seventh, and eighth graders receive additional academic supports and enrichment programs from Citizen Schools, a major partner of Orchard Gardens. (See “Partnership with Citizen Schools,” page 8, for daily schedule. Note that on Fridays, sixth, seventh, and eighth graders are dismissed at 2:20.) “The longer day gives me time to do homework and do things we’ve never done before, like apprenticeships [provided by Citizen Schools],” says Jessica, who began attending Orchard Gardens in 2008, as a fourth-grade student. “I have classes that I’d never had before, and it gives me more time to be with my friends.”

Although the school day for students in grades K to 5 technically ends at 2:20 every day, many stay at school until 5:00, like their middle school peers. From Monday to Thursday, approximately 180 of the school’s 450 first- to fifth-grade students receive academic support from another one of OGPS’s partners—BELL (Building Educated Leaders for Life). Meanwhile, a separate school partner, Imajine That, delivers academic help for kindergarten students from 2:20 to 5:00. Other K to 5 students receive after-school tutoring from their classroom teachers or are enrolled in enrichment programs after school.

“The [pre-expanded time] schedule just wouldn’t have allowed us to both make the gains we wanted to make academically and educate kids more broadly in ways that aren’t measured by MCAS,” says Toby Romer. As Andrew Bott explains, “We wanted to balance the additional academics with the enrichments for kids so they like school. Between the enrichments provided by our teachers as well as those by our partners, we’re able to provide kids with the educational opportunities and supports many suburban kids receive.”

“In our first year with expanded time, we definitely had students who complained about being in school longer, especially the older students,” Ben Rockoff recalls. Carlos, an eighth grader who has been at the school since he was in kindergarten, remembers his and his classmates’ reaction to the new schedule, and recognizes the change over time: “At first, we didn’t like the longer day. We thought we’d be really bored staying in school until 5:00 every day, but once we got used to [the expanded-time schedule] we realized that school was actually more fun.”
Partnership with Citizen Schools

Founded in 1995, Citizen Schools provides expanded-day programming for approximately 4,500 students in 17 communities across the country. Starting in the 2010-2011 school year, Orchard Gardens partnered with Citizen Schools to provide academic and enrichment programming for all sixth- and seventh-grade students. Since then, Citizen Schools has expanded its presence in the school to serve eighth-grade students as well. Today, from 2:20 to 3:20, Orchard Gardens sixth, seventh, and eighth graders receive homework support from the 15 Citizen Schools staff members. The schedule from 3:30 to 5:00 varies each day. On Mondays and Thursdays, students go from homework support to a 45-minute reading period focused on vocabulary and comprehension, from 3:30 to 4:15, which is taught by Citizen Schools teaching fellows. From 4:15 to 5:00, students are given choices among different academic and enrichment activities aimed at boosting their engagement. Each of these classes averages 15 students. On Tuesdays and Wednesdays, after homework help, students participate in apprenticeships from 3:30 until 5:00. Citizen Schools apprenticeships give Orchard Gardens students the opportunity to learn about a particular career path directly from volunteers who work in that field. Apprenticeships vary—from staging mock trials and building solar cars to creating video games. Each semester’s apprenticeship culminates in a “WOW” presentation, featuring productions and exhibitions of finished products.

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No Programs
New Teachers and More Time for Relevant Professional Development

Prior to 2010, chronic staff turnover at Orchard Gardens had created not only a sense of instability, but also a general lack of commitment from teachers who had been placed at the school. Kellie Njenga, one of only two current staff members who have been at OGPS since its opening in 2003, describes previous years’ staff climate and composition: “Every year, at least half our staff turned over. A lot of them had been placed here because they had tenure and we had open positions, but they didn’t really want to be here.” Starting in spring 2010, Orchard Gardens leadership began determining which of the school’s existing teachers would be replaced, and began working with Mass 2020, Teach for America (TFA), and Teach Plus to recruit talented teachers who had demonstrated past success in urban classrooms. “Massachusetts 2020, TFA, and Teach Plus really helped us get some great teachers,” says Principal Andrew Bott. “They met with us over the spring and summer to select individuals who would be a really good fit here.” Although students had grown accustomed to seeing new teachers in the school each year, the 2010-2011 staff was distinctive. “A big difference between Andrew’s [Bott’s] first year and past years,” says Njenga, the school’s Academy director for grades 3 to 5, “is that our new teachers were not only good teachers, but they also wanted to be here and be part of this effort to really turn Orchard Gardens around.” Bott agrees, noting, “Now we have great teachers who’ve been teaching for a few years and other great teachers who have been teaching for 35.”

Additional Time for Structured Teacher Collaboration
Along with a talented and committed staff, OGPS school leaders also have created time for teachers to meet, plan, and learn from one another. With a longer school day, Orchard Gardens teachers are given additional time for both instruction and collaboration. Although the actual teacher work week has been extended by 5 hours, teachers typically teach only 4 more hours each week; the additional hour is instead devoted to added planning and teacher collaboration. Prior to the start of expanded learning time at OGPS, teachers received just one 57-minute planning period each day, totaling approximately 5 hours each week. In the expanded-time schedule, OGPS teachers have seven 55-minute planning periods, in addition to two content team and two grade-level meetings weekly, totaling approximately 10 hours each week. Content team meetings last 100 minutes and follow a highly structured protocol intended to focus teachers solely on data analysis and instructional strategies. Such sessions have become all the more critical as teachers transition to Common Core instruction.


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<tr>
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*not mandatory for all teachers
Meanwhile, grade-level teams convene two times each week for a total of 100 minutes (each meeting is 50 minutes) to discuss administrative and discipline issues. “We thought setting aside two separate times would help teachers focus only on the data and instruction during the 100-minute planning period,” explains Toby Romer, the school’s director of professional development and data inquiry.

Each 100-minute meeting is led by one of the school’s 15 teacher leaders. Orchard Gardens teacher leaders are part of a program called T3 (Turnaround Teacher Teams) that is managed by Teach Plus. The T3 program recruits, selects, and trains effective teachers who collaborate to help turn around low-performing schools. For taking on additional leadership responsibilities in the school, T3 teachers receive a $6,000 stipend. Romer serves as a coach to the T3 teacher leaders, and works with them to create agendas and debrief previous weeks’ meetings. Romer also listens and provides occasional feedback as teachers discuss data and their students’ progress. “We had common planning time in the past, but it happened infrequently, and the time was almost always spent on operational issues,” says Kellie Njenga. “Now, during the 100-minute meetings, the teacher leader always has an agenda and clear objectives. For example, in one meeting, the objective may be ‘identify and place students into small group instruction during guided reading.’ Just like we have objectives for our students to reach in each of our lessons, we want teachers to be able to come away from each meeting with something they’d accomplished.”

Redesigned Professional Development

In addition to weekly collaboration meetings, Orchard Gardens schedules 127 hours of professional development during the year—compared to only 30 hours at other Boston public schools. At OGPS, this time is distributed throughout the year, including the summer months. Over the school year, 40 professional development hours are devoted to 90-minute schoolwide, teacher-led professional development sessions held every two weeks. While Orchard Gardens has always had more professional development time compared to other Boston public schools, the time was often misspent. “In the past, more than 50 percent of the school’s staff said professional development opportunities didn’t fulfill their needs,” says Andrew Bott.

To provide teachers with relevant strategies they can use to improve instruction, Orchard Gardens has made a number of changes to its professional development objectives. These changes include empowering teachers to design and lead trainings, aligning professional development to schoolwide academic goals and the Common Core, and conducting frequent teacher observations. The school’s Instructional Leadership Team (ILT)—consisting of its 15 teacher leaders, the Academy directors, Bott, and led by Romer—meets for 90 minutes every other Tuesday after school to plan professional development and to identify and prepare teachers to lead these trainings. During the first year of the turnaround, Massachusetts 2020 also attended ILT and professional
development meetings, providing support in planning sessions and monitoring teacher responses.

The new professional development model at Orchard Gardens has been effective in strengthening teacher development and collaboration among staff. Teachers who are selected to present during professional development sessions have the opportunity to practice their presentations in front of the ILT before presenting to the whole staff, gaining feedback from administrators and other teachers. “Having our own teachers lead sessions did a few things,” says Njenga. “First, we’re recognizing our teachers for their strengths. Second, presenters are getting valuable feedback from the ILT. Third, as an audience, teachers are much more likely to listen to one of their peers than an outside coach or someone brought in by the district.” Adds Romer, “I think teachers really get a lot out of our professional development, both as an audience and also as presenters. We survey our staff after each session on a five-point scale, with ‘5’ being the highest score.” Professional development trainings throughout the 2010-2011 and 2011-2012 school years averaged scores of 4.1 and 4.2, respectively, compared to previous years in which fewer than half the staff found professional development to be meaningful.

**Frequent Observation and Feedback**

At OGPS, teachers also are supported through frequent observations by school administrators. During observations, all administrators follow a defined guide created by the school’s leadership team to identify quality teaching and areas for improvement. Administrators then share observations with one another in order to ensure consistency in their observations and feedback.

“I think you drive the biggest change in instruction through observations and feedback,” says Andrew Bott. “I visit two to five classrooms every day, each for about 10 to 30 minutes, using my laptop to take notes. Afterward, I email my notes to the teacher. The feedback is not given as a mandate; it’s more like things the teacher can think about—strategies to reach a particular student or ways the teacher can consider that might turn a good lesson into a great one.”
Data is like a guide,” says Toby Romer. “It tells us where we are and also where we need to go as educators.” In the years before the school’s turnaround, Orchard Gardens teachers had looked at student data only sparingly and mostly in isolation. The school’s new administration prioritized data-driven instruction, hiring Romer to oversee data analysis and dedicating time before and during the school year for teachers to analyze and plan around data. As Principal Andrew Bott was recruiting new teachers during the spring and summer of 2010, he looked specifically for teachers who were comfortable using data and working in teams. “When we scheduled interviews, I asked teachers to bring in their data from previous classes. You can really tell a lot about how a person teaches based on the data they bring,” Bott says. “What I want to know is, ‘Are you good at using the data to drive instructional outcomes for kids?’ And then I ask specific questions to get an understanding of how someone works on a team.”

Before each school year, Orchard Gardens staff review prior years’ MCAS data to identify areas of academic improvement and develop consensus around the specific academic skills on which to focus. Throughout the summer, Romer leads trainings on data inquiry cycles—standardizing and improving the protocol and vocabulary by which all teachers discuss student achievement data during their weekly 100-minute content meetings. “Collecting, analyzing, and actually planning around data requires a lot of time,” Romer maintains. “Setting aside 100 minutes each week to do that vital work is really important for our teachers to teach at a high level.”

At Orchard Gardens, data inquiry cycles consist of three steps that all teachers follow: First, teachers collect and analyze data. In grades 3 to 8, this includes data from interim assessments in both ELA and math, which are administered every six weeks, created by the Achievement Network (ANET). Second, from the data analysis, teachers identify individual student learning needs, allowing them to set student goals and create lessons to help students reach those goals. As Ben Rockoff, the school’s former seventh-grade math teacher and current grades 6-8 Academy director, describes: “From the ANET assessments, I can tell what specific concepts a student might be struggling with, whether it’s in geometry or algebra. From that information, I might spend more time with that student on those concepts during class, or work with them one-on-one outside of class.” Third, teachers plan assessments to monitor student progress toward their goals and to target individual students for additional support. Once results from these assessments become available, the cycle starts again. “The data inquiry process is meant to be very teacher-driven,” says Romer. “Grade-level and content teams are always allowed and
encouraged to make their own decisions about instructional strategies, but we want to establish the processes by which they respond to data so they can align these strategies with what they know about their students.”

Staff Pushback to Data Use
Despite hiring data-driven teachers and implementing structured protocols around data analysis, Orchard Gardens administrators experienced some early pushback from staff. Teachers questioned whether too much emphasis was being placed on data—particularly data from ANET assessments, which had not fully captured students’ low academic levels at the start of the 2010-2011 school year. “Because we had stressed the role of data so much,” Bott recounts, “we inadvertently sent the message that it was the most important piece, when we wanted teachers to just recognize it as one important piece of knowing the student fully.” To resolve the issue, administrators have since allowed staff to suggest other measures of data and to incorporate them into ways to monitor student progress and motivate students. “Today, we have teachers using more of their data to complement the information taken from the ANET data,” Romer explains. “For instance, in third grade, teachers plan weekly quizzes together and track progress publicly. The fourth-grade and middle-school math teams use data from their own assessments and ANET to identify students for after-school tutoring.”
More Time to Strengthen School Culture

Before 2010, student expectations—both behavioral and academic—were inconsistent from year to year, as well as from classroom to classroom, at OGPS. “Students got into fights and misbehaved in class a lot,” says Carlos, an eighth grader. “Nothing would happen to them, so they would keep doing it.” Sarah White, the school’s guidance counselor who has been at Orchard Gardens since 2004, recalls, “By October, many teachers had lost control of their classrooms, and the chaos spilled out into the hallways, into the restrooms, cafeterias, and other spaces.” According to Kellie Njenga, the school’s grades 3-5 Academy director, “The change in our school culture has been huge. Now, we devote a lot of time at the beginning of the year to teach procedures and establish a consistent set of expectations for everyone.”

To reinforce common expectations for student conduct, OGPS developed a schoolwide incentive system for students called “Paws PRIDE.” Today, any adult in the building—from teacher to partner staff—can award students tickets, named “paws” after the school’s lion mascot, for exhibiting behavior aligned to the school’s values. These schoolwide values are captured in the acronym PRIDE: Perseverance, Respect, Integrity, Daring, and Excellence. Students who earn the requisite number of paws are invited to monthly celebrations and field trips, and they receive rewards and prizes as well. “It was so important for all our teachers to be on the same page before the school year started, even use the same language, to communicate and enforce our expectations,” Njenga recalls. “In the past, we had a lot of students saying, ‘Well, we don’t do it this way in my other teacher’s classroom,’ which was demoralizing for our staff and sent an inconsistent message to our students.”

As with many other aspects of the school’s transformation, staff experienced some initial resistance to these cultural changes. “Students really tested the adults at the beginning of my first year,” acknowledges Principal Andrew Bott. “They didn’t know how strongly their teachers were committed to the expectations that had been set, and they weren’t used to those expectations being consistent in every classroom.” Now, students are testing teachers less frequently and, OGPS staff believe, the school culture has changed dramatically. Today, district staff who visit the school regularly remark that Orchard Gardens feels like a completely new place. “Once students realized that everyone was going to keep them to a common set of expectations, they actually started to like it,” says Njenga. “We found that our kids wanted to be at a school where everyone is on board and they know what is expected of them.” As eighth grader Jessica attests, “Everyone follows the rules because the teachers are stricter now, but they also really care about you.”

“One of the biggest reasons for my students’ success was the extended period of time with them. I could do so much more with my students, because I saw them for more time.”

Ben Rockoff
Grades 6-8 Academy Director
Rewarding and Reinforcing Positive Student Behavior

Over the past two years, Orchard Gardens students have become increasingly invested in the school’s incentive system. “The kids really get into earning paws,” states Bott. “Part of it is that it’s nice to be recognized daily, and to know what you can get recognized for. The other part is just celebrating and recognizing those students who have earned a lot of paws. Last year, we took a group of students to Six Flags Amusement Park, and one of our most popular events for recognizing kids was just taking them outside one afternoon in the winter so they could play in the snow.” Improvements in student culture led to improvements in classroom instruction, by minimizing the time teachers and administrators spent on behavioral issues. “I’ve definitely been able to support teachers more in their classrooms because of the changes in culture and climate,” as Njenga affirms. “I’m not spending nearly as much time on behavior. Because of the changes we deliberately made to our culture, it has allowed my role to be what it should be.” According to eighth-grade student Carlos, “Teachers have more control of their classrooms now, and learning is more fun because we can do more activities.”

Improving Staff Culture

Like student culture, staff culture at Orchard Gardens has improved as well. “When we first started working together as a math team,” remembers Ben Rockoff, “we got into some pretty heated arguments over how to get our students to the next level. We needed some time to understand how the other members of our team think and work before our planning time could really take off.” In addition to providing this valuable time for new colleagues to get to know one another, administrators also took steps to create a positive staff environment. “There is a lot more teacher recognition now,” Njenga says. “Teachers are recognized each day during announcements, and Andrew [Bott] gives up his principal parking spot each week to a different teacher who has gone above and beyond. They’re small gestures, but they go a long way toward making staff feel appreciated.”

Due in part to the increased time for common planning, and also because the school leadership has recruited teachers who value collaboration, Orchard Gardens teachers communicate with one another, and they share practices and strategies more frequently as well. “There is a lot of collaboration,” Rockoff confirms, “and I’ve never been part of such a talented staff. There is no weak link here. When you’re around teachers who are so good, it makes you want to learn things from them and improve just to keep up.”
n total, all Orchard Gardens students are in school at least one extra hour beyond the standard Boston Public Schools schedule, with approximately 550 of the school’s 800 students—nearly 70 percent—staying from 7:20 AM to 5:00 PM. The expanded school day has allowed Orchard Gardens to focus more than ever before on improving school culture, teacher development, and data analysis, resulting in significant gains in student achievement. However, additional time, by itself, has not transformed the school. In fact, administrators and teachers have been able to effectively leverage additional time—creating routines, protocols, and schedules that have ultimately begun to turn around Orchard Gardens. Most importantly, the improved instruction, school culture, stronger staff, and rigorous data analysis have worked in concert with the expanded learning day to create a more positive educational experience for OGPS students.

**Strengthened Instruction and the Common Core**
Specifically, more planning time for teachers has resulted in stronger lessons for students, particularly in English language arts (ELA) and math periods. Along with improving instruction, more time devoted to data analysis has helped to identify students who are in need of individualized support within and beyond the school day.

During the 2012–2013 school year, Orchard Gardens implemented the Common Core standards—a year earlier than required. When asked about the transition to the Common Core, Principal Bott acknowledges that it was extremely challenging and required teachers to spend the vast majority of their professional development and collaborative planning time delving into the new standards and approaches. It wasn’t until the end of October that teachers said to him, “This is really hard, but I am starting to get it.” Bott believes that progress on the Common Core would “not have been possible without the extra time for teachers.”

**Meeting Students’ Needs**
The longer school day also has enabled Orchard Gardens students to engage in enrichment courses beyond MCAS-tested subjects, provided by both the school’s teachers and its numerous partner organizations. Says grades 6–8 Academy Director Ben Rockoff: “The school day is long for students, but it isn’t always about MCAS. We want to give them opportunities to take other classes that expand their interests and make school more fun for them.”

Moreover, a considerable number of students also participate in academic and enrichment programming beyond the expanded school day. Each summer, the school connects approximately 100 fourth, fifth, and sixth graders to outdoor learning opportunities offered by Thompson Island Outward Bound Education Center.

And last year, over the district’s February and April vacations, 185 students—85 during February vacation and 100 in April—attended the school’s Acceleration Academy, a week-long MCAS prep course for targeted students.

**Commitment to Continuous Improvement**
While the school has dramatically expanded student programming and made great strides in only two years, Orchard Gardens is still far from attaining the ultimate goal its leaders had established in 2010: 90 percent of all students scoring proficient or above in both ELA and math in the next three years. “Our culture is one of continuous improvement, for both students and adults,” affirms Principal Andrew Bott. “Our fourth-grade team is a perfect example of this: We got back their reading scores in 2011, and they weren’t where we’d expected them to be. The grade-level team was really crushed, but a week later, they got back together and started to brainstorm ideas, and that energy really carried them throughout the school year. We were thrilled, but
not surprised, when we saw that our fourth-grade MCAS reading scores had jumped 15 percent from 2011 to 2012.”

**Sustainability**

In June 2013, its School Improvement Grant (SIG) funding will expire, depleting Orchard Gardens of $1.2 million. To prepare, school administrators have developed a three-year plan for sustainability. “We see the end of this three-year period (2010-2013) as the end of phase one, marked by the end of the federal grant,” says Michelle Boyers, the school’s chief operating officer. “We have made a number of tough choices about which strategies we can, and must, continue in phase two (2013-2016), given that we will have fewer resources.” OGPS staff have already identified structures and programs—including expanded learning time, talented teachers, personalized learning, and enrichment programming—that they feel have been crucial to their success and that they need to maintain, despite the decrease in federal funding. To do so, OGPS is watching closely as leaders in Massachusetts and at the federal level propose new funding options to support expanded learning time. In addition, the school is considering options such as staggering teacher schedules, raising private dollars, re-allocating existing resources, and, perhaps most importantly, making tradeoffs. “We are at a critical turning point,” says Boyers. “We can’t afford to slip backwards once we lose SIG money. Our leadership team is committed to ensuring that our kids are successful and that Orchard Gardens becomes a citywide and national model for what is possible in even the most disadvantaged, failing schools.”

Although the upcoming loss of federal funds has led to uncertainty over the future of the school redesign model that Orchard Gardens has created, the school’s leaders and staff recognize the urgency to create high-quality and sustainable change. “If it takes us five years to fully turn around this school,” says Andrew Bott, “that means we haven’t done anything for all our kids in grades 3 and above. Our kids don’t have the luxury to wait for this school’s full transformation. They needed this to happen yesterday.”

**Results at Orchard Gardens**

In just two years, from 2010 to 2012, Orchard Gardens dramatically improved the instruction and programming students receive. Among the highlights:

- **Higher English Language Arts (ELA) and Math Achievement**

  In 2011, schoolwide MCAS proficiency rates rose in both ELA (to 30 percent proficient) and math (to 35 percent proficient), higher than they had ever been in the school’s seven-year history. The school’s median student growth percentile (SGP)—an index that compares yearly growth in individual student MCAS scores against those of other students with similar testing backgrounds—was 63 in ELA and 79 in math. (Massachusetts considers a school with a median SGP of at least 60, in either subject, as “high growth.”) In 2011, the median SGP for students in Orchard Gardens ranked better than 87 percent of schools in Massachusetts in ELA and 98 percent of schools in math.
In 2012, schoolwide MCAS proficiency rates rose again, this time by 6 and 4 percent in ELA and math, respectively. This rise in MCAS scores translated to a median SGP in ELA of 70 and in math of 74, placing Orchard Gardens among the top schools in all Massachusetts in terms of growth.

Throughout the past two years, the achievement gains at OGPS have outpaced the majority of schools in Massachusetts. Orchard Gardens ranks in the top 1 percent of all Massachusetts schools in growth on the math MCAS, and in the top 6 percent in growth on the ELA MCAS. Combining both ELA and math, the school’s growth ranks in the top 2 percent of schools statewide, and Orchard Gardens has achieved the most growth in ELA and math among all Massachusetts middle schools with at least 750 students.

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**OGPS MCAS ELA Performance (2007–2012)**

*Student achievement in these grades includes nearly 120 English language learners from a failing school, which was closed due to its performance. These students have benefited from only one year of the turnaround efforts at OGPS.*

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**Increased Teacher Satisfaction with Professional Development**

In 2010, fewer than half the teachers who were surveyed found the school’s professional development to be useful. During the past two years, in contrast, teacher-led, bi-weekly PD received average scores of 4.1 (in 2010-2011) and 4.2 (in 2011-2012) out of 5 from all teachers. “Having our own teachers lead sessions did a few things,” says grades 3-5 Academy Director Kellie Njenga. “First, we’re recognizing our teachers for their strengths. Second, presenters are getting valuable feedback from the ILT (Instructional Leadership Team). Third, as an audience, teachers are much more likely to listen to one of their peers than an outside coach or someone brought in by the district.”

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**Broader Student Opportunities and Stronger Partnerships**

To staff additional time for sixth, seventh, and eighth graders, Orchard Gardens partnered with Citizen Schools to deliver academic and enrichment programming for all students in these grades from 2:20 to 5:00 PM, every Monday through Thursday. Citizen Schools—along with Boston Teacher Residency and City Year, among other school partners—also provides a range of services for students in all grades throughout the day. Additionally, approximately 200 students in grades 1 to 5 receive after school academic support from BELL, another school partner. Orchard Gardens has also utilized Teach Plus and Teach for America to identify and recruit highly skilled teachers, as well as Massachusetts 2020 to implement the expanded-day schedule.
We would like to express our gratitude to the principal, teachers, staff, and students of Orchard Gardens K–8 Pilot School for their time, insights, and participation in this case study.

We also appreciate the contributions of members of the NCTL team, including:

Jennifer Davis
Co-Founder & President

Chris Gabrieli
Co-Founder & Chairman

Colleen Beaudoin
Managing Director, School & District Support
The National Center on Time & Learning (NCTL) and its state affiliate, Massachusetts 2020, are dedicated to expanding learning time to improve student achievement and enable a well-rounded education. Through research, public policy, and technical assistance, NCTL supports national, state, and local initiatives that add significantly more school time for academic and enrichment opportunities to help students meet the demands of the 21st century and prepare for success in college and career. Massachusetts 2020 leads the country’s first statewide initiative to redesign district public schools by adding significantly more school time.