

The Impact of City Connects

Progress Report 2014



BOSTON COLLEGE CENTER FOR
OPTIMIZED STUDENT SUPPORT

☆ ☆ ☆

ACKNOWLEDGEMENTS

We gratefully acknowledge the support of the Boston Public Schools: the Superintendent, the Office of Data and Accountability, and the Office of Individualized Student Learning. We also gratefully acknowledge the support of the Springfield Public Schools: the Superintendent; the Office of Information, Technology, and Accountability; and the Pupil Services staff in the Department of Special Education. We could not have accomplished this work without the unwavering support of the principals, teachers, staff, and students of the participating City Connects schools. Finally, we thank the Lynch School of Education, Boston College, and our funders for their generous support.

CURRENT FOUNDATION SUPPORT

Barr Foundation
Better Way Foundation
Charles Hayden Foundation
GHR Foundation
Mathile Family Foundation
New Balance Foundation
The Philanthropic Initiative
Strategic Grant Partners

GOVERNMENT SUPPORT

Massachusetts Department of Elementary and Secondary Education
Boston Public Schools
Springfield Public Schools

Introduction

It has long been recognized that in high-poverty urban school districts, children face challenges outside of school that impede academic success. In the 1960's, the Coleman Report concluded that students' socioeconomic and home background are significant factors affecting academic achievement.¹

Current research confirms that larger social structures and contexts beyond the school are critical, accounting for up to two-thirds of the variance in student achievement.² Schools cannot close the achievement gap without a systemic approach to addressing out-of-school factors.³

While the challenge of poverty may be society's to solve, and while some non-academic barriers to learning cannot be addressed by schools, in the absence of a large-scale societal solution, schools can provide supports that mitigate some of the impact of poverty.

To address these out-of-school factors that impede learning, we designed City Connects (CCNX). The mission of CCNX is to have children engage and learn in school by connecting each child with the tailored set of prevention, intervention, and enrichment services he or she needs to thrive. To accomplish this mission, CCNX relies on the rich supports and enrichments provided by district programs and community agencies. To link schools and community agencies, CCNX has developed a school-based system that coordinates comprehensive supports for learning and healthy development. The intervention identifies each student's strengths and needs in academic, social-emotional, physical, and family domains and works with community agencies to deliver a tailored set of services to every child. This system transforms existing school structures and is aligned with conceptual consensus regarding optimal practice. The intervention described in this report is designed for elementary school students. The CCNX Implementation Team is currently adapting the model for early childhood and for middle and high school students. The Evaluation Team is following the elementary school students once they leave the intervention and enter middle school and then high school.

Over time, the evaluation of CCNX has responded to the expansion of the intervention within and beyond Boston. In the academic year 2001-02, CCNX was initially implemented in six schools located in one

1 Harrington, 1962; Coleman, et al., 1966; Blow, 2011

2 Rothstein, 2010; Phillips, Brooks-Gunn, Duncan, Klebanov, & Crane, 1998

3 Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010

geographic neighborhood in Boston; CCNX was replicated in another BPS neighborhood (five new schools) in 2007. In September of 2010-11, at the invitation of the district, CCNX expanded to six “Turnaround” schools—that is, schools officially designated by No Child Left Behind (NCLB) standards as in the category of “Restructuring.” In 2012-13, CCNX was implemented in a total of 16 elementary and K-8 schools in Boston.⁴ Most recently, in September of 2011-12, CCNX expanded to five Springfield, MA elementary and K-8 schools, and added three Springfield middle schools in September of 2012-13. Access to data for analyses has also expanded over time, allowing us to increase the number of comparison schools (previously seven randomly-chosen comparison schools in Boston and now including all schools not implementing CCNX in Boston). Through the collaboration of the Springfield, MA district, student data is also now available for Springfield.

This report summarizes the quantitative and qualitative outcomes of the CCNX ongoing evaluation in Boston. Previous findings demonstrated the significant impact of the CCNX intervention, across K-5 grade levels, on academic achievement and measures of student thriving. These positive findings are particularly pronounced for English Language Learners and extend beyond elementary school, after students leave the CCNX intervention, into middle school and high school. See previous reports at www.cityconnects.org. Our appendices for this report and past reports present more detailed information about the CCNX intervention, its phased rollout in Boston Public Schools (BPS), and the demographic context of its implementation. The data sources and methodologies employed and the full results of the quantitative and qualitative analyses of those data are described more fully in the appendices.

In addition, for the first time, this report presents findings on the implementation of City Connects in Springfield, MA. Information on the context of implementation in Springfield and on such intermediate outcomes as reviews and services delivered are presented in this report. Because data from only one year of implementation are available to us at this time, outcomes analyses drew on the 2011-12 data.

For Boston, in this report, we present selected new analyses drawing on the new data available to us in 2011-12. Quantitative analyses drew on a rich variety of sources, including report card scores, state test scores, student and teacher surveys, and publicly available demographic data.

⁴ A pilot expansion of City Connects in high school was also started at Quincy Upper School. The total number of schools for 2012-13 differs from the cumulative total because of school closures and mergers.

As with Springfield, the most recent data from Boston Public Schools available at this time are from 2011-12 and earlier. In order to supplement and illuminate the quantitative data, CCNX also rigorously analyzed qualitative data from key participants at the heart of the intervention: teachers, principals, and community partners. Qualitative data were gathered and analyzed in academic year 2012-13.

We begin with a short description of how urban poverty creates out-of-school factors that impact student development and learning. Next, we describe current approaches to student support and how they compare with “best practices.” Then we briefly outline the CCNX intervention. Next, we describe the expansion of CCNX to Springfield, comparing the context of implementation there and in Boston. We summarize the reviews, services delivered, and partnerships in both implementation sites. Then we present selected new and previously established quantitative findings on the impact of CCNX on academic achievement and on factors related to thriving, school success, and life chances. Finally, we present data on the impact of CCNX on principals, teachers, and community agencies.

The Impact of Urban Poverty on Children’s Development and Learning

The pervasive effects of poverty on academic achievement underscore the importance of addressing out-of-school factors in *any education reform effort*.⁵ Poverty impacts children’s achievement and growth in at least three noteworthy ways: 1) **limits investment**—a family’s ability to invest money, time, and energy in fostering children’s growth (e.g., less time to read and talk with their children); 2) **creates pervasive stress** within families and their neighborhoods—this undermines children’s sense of well-being and safety (e.g., inconsistent parenting behavior or increased exposure to community violence that may undermine children’s self-regulation and social-emotional stability); and 3) **contributes to chaotic life**—unpredictable support systems (e.g., less-reliable transportation, municipal services, and businesses).

For children living in poverty, the impact of out-of-school factors is clearly evident in their ability to succeed in school. Limited resources, stress, and the chaos of poverty result in poor attendance, high mobility, social-emotional dysfunction, a lack of readiness for school, and limited cultural capital to understand schools as institutions.⁶ Rothstein describes the impact on achievement of out-of-school factors relative to in-school factors:

5 See Walsh & Murphy, 2003; Berliner, 2009; and Rothstein, 2010.

6 Dearing, 2008

“Decades of social science research have demonstrated that differences in the quality of schools can explain about one-third of the variation in student achievement. *But the other two-thirds is attributable to non-school factors*” (emphasis added).⁷

Figure 1 illustrates that academic success is predicated on children’s readiness to engage and thrive in school. It also shows the overlapping impact of the various domains of development on children’s readiness to learn and thrive.

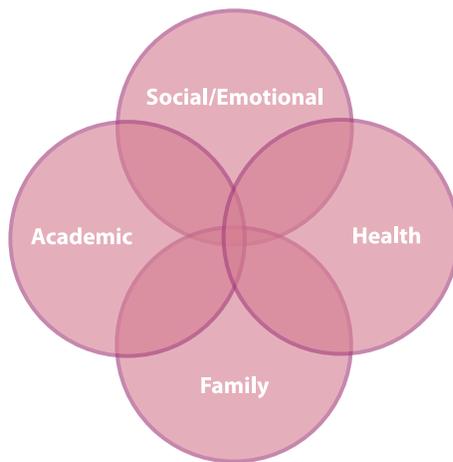


Figure 1. Academic success is predicated on students’ readiness to engage and thrive in school

In all areas in Figure 1, the harm inflicted by poverty on students’ readiness to engage in school is complex and dynamic, because poverty itself is dynamic. The manifestations of childhood poverty are not only pernicious; they also interact, influencing one another. For example, Coley and Baker (2013) explore in depth how childhood poverty manifests itself in family and parenting behaviors; exposure to environmental toxins, access to adequate health insurance, food insecurity, parent employment, and access to (and quality of) child care.⁸ The impact of poverty in each of these areas affects the others.

Richard Rothstein argues, “if we want to raise the achievement of disadvantaged children substantially in our own country, we will have to improve the collection of interacting and mutually reinforcing characteristics” that impact children living in poverty.⁹ To succeed in

⁷ Rothstein, 2010, p. 1

⁸ Coley and Baker, 2013. As Coley and Baker note, this list is not exhaustive.

⁹ Rothstein, 2013

addressing poverty's effect on achievement and thriving, an intervention in schools must be similarly dynamic and multi-faceted.

Current Models of Student Support

Many schools currently are unable to respond to the pressing challenges facing students' out-of-school lives. Student support structures are the product of an earlier time, a different set of needs, and a less diverse demographic. The typical approach to student support in most schools: 1) is fragmented and idiosyncratic, serving a small number of high-need students; 2) does not address the full range of needs, focusing mainly on risk; 3) does not collect data on the effectiveness of the supports offered students; and 4) in practice, does not operate as a core function of the school, and as a result, seeks minimal teacher engagement.¹⁰

Best Practices in Student Support

Grounded in research on child development and the need that it be implemented as a core function of schools, optimized student support has six identifying characteristics. It is: 1) **customized** to the unique strengths, needs, and interests of each student; 2) **comprehensive**, serving the academic, social/emotional, health, and family needs of all students from a variety of cultural and ethnic backgrounds; 3) **coordinated** among families, schools, and community agencies; 4) **cost-effective to schools** by leveraging the resources provided by community agencies; 5) **continuously monitored for effectiveness** through collecting and analyzing data to evaluate and improve service delivery and student outcomes; and 6) **implemented** in all sites with fidelity and oversight.

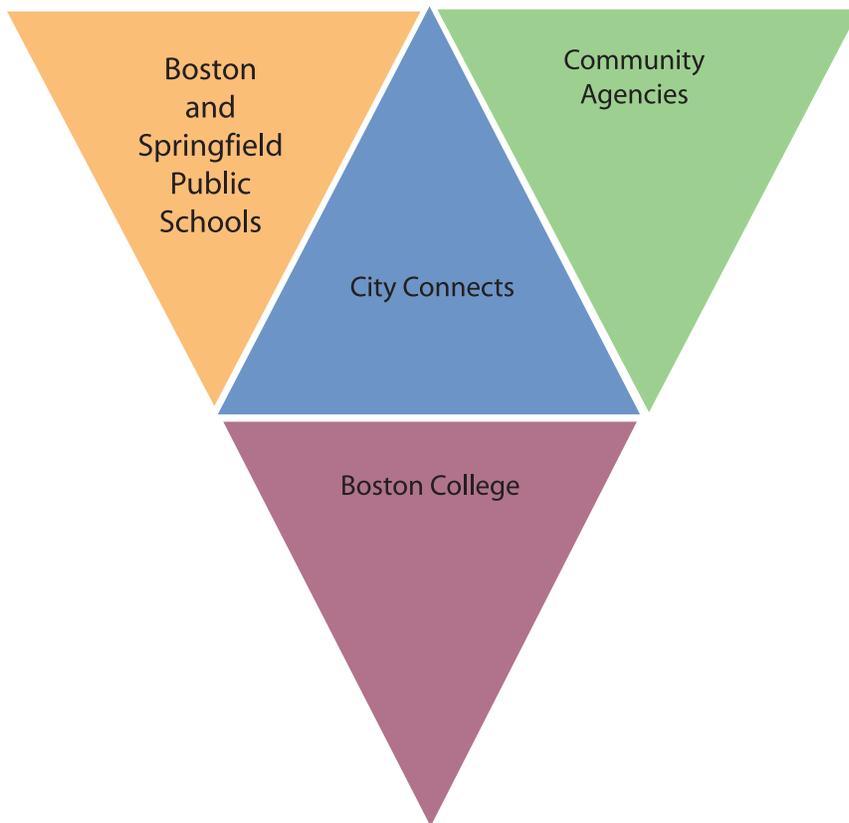
¹⁰ Walsh & DePaul, 2008

The City Connects Model

Partners

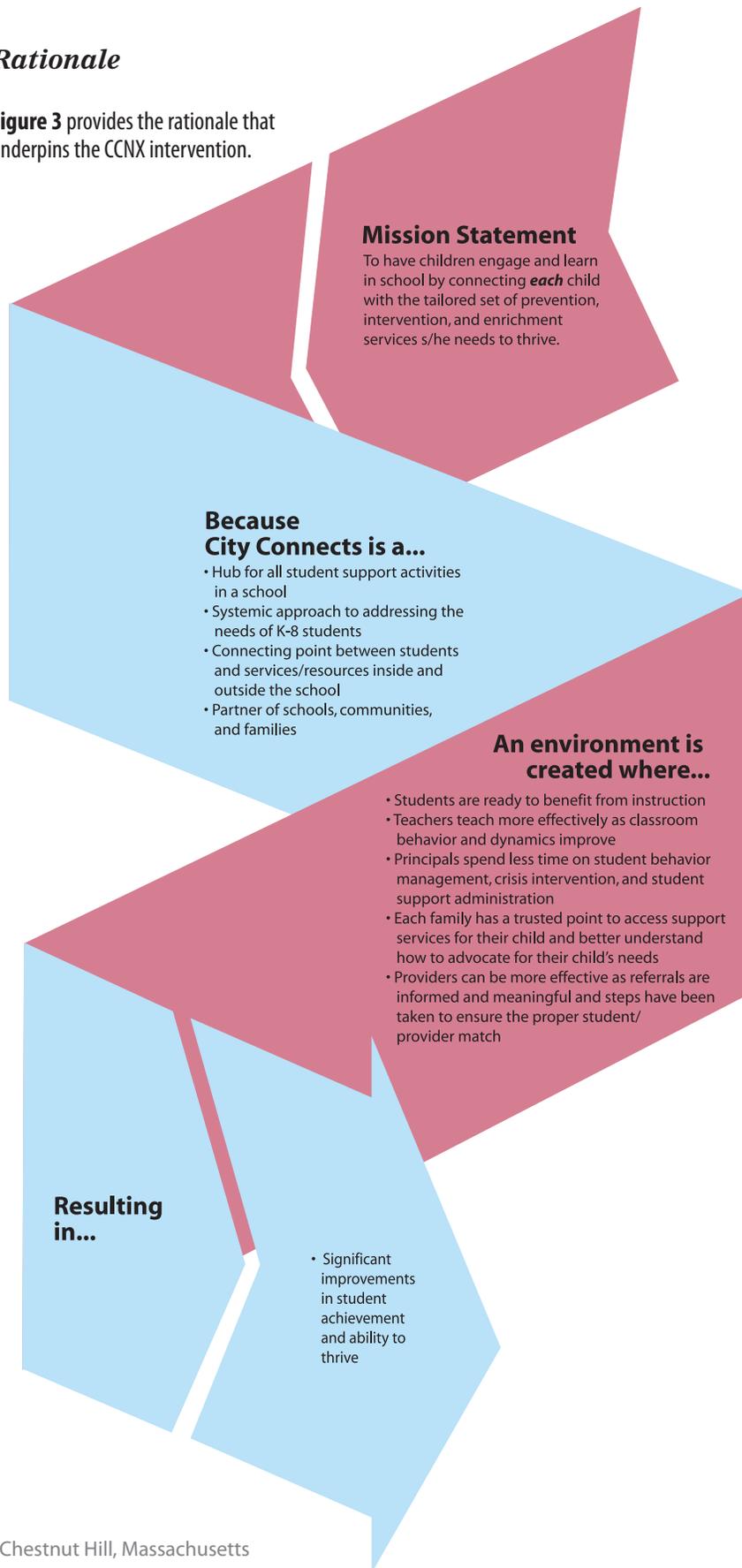
Built on the best practices described above, CCNX is a partnership delivering optimized student support. Figure 2 shows the partners - the Boston and Springfield Public Schools, a wide range of community agencies, and Boston College. Boston College is the nerve center of CCNX. The Center for Optimized Student Support at Boston College developed and delivers the CCNX intervention and is the home of the Leadership and Implementation Teams. The Boston College Center for the Study of Testing, Evaluation, and Education Policy is the home of the Evaluation Team.

Figure 2. The CCNX partnership



Rationale

Figure 3 provides the rationale that underpins the CCNX intervention.



History of the City Connects intervention

In the academic year 2001-02, CCNX was initially implemented in six schools located in one geographic neighborhood (BPS Cluster 5, which includes Allston, Brighton, and Mission Hill sections of the city). An external funder, who provided a planning grant in 1999, stipulated that development and design of CCNX take place in Cluster 5. In 2007, the District stipulated that expansion of CCNX occur in BPS Cluster 2 (the North End, South End, and Lower Roxbury), adding five new schools. At that time, seven schools from other BPS clusters were randomly chosen to serve as comparison schools. CCNX and comparison schools are our “legacy schools.”¹¹ By this we mean that the students from these schools are being followed longitudinally from kindergarten through high school to assess the long term impact of the CCNX intervention. In September of 2010-11, at the invitation of the district, CCNX expanded to six “Turnaround” (or “Transformation”) schools—that is, schools officially designated by No Child Left Behind (NCLB) standards as in the category of “Restructuring.” The comparison data set now includes all schools in Boston not implementing CCNX. In September of 2011-12, CCNX expanded to its first Massachusetts public school system outside Boston, and as of September 2012-13 was implemented in five elementary and K-8 schools and three middle schools in Springfield, MA.¹²

Description of the City Connects intervention

CCNX connects students with the individually tailored set of prevention, intervention, and enrichment services that they need to succeed in school.

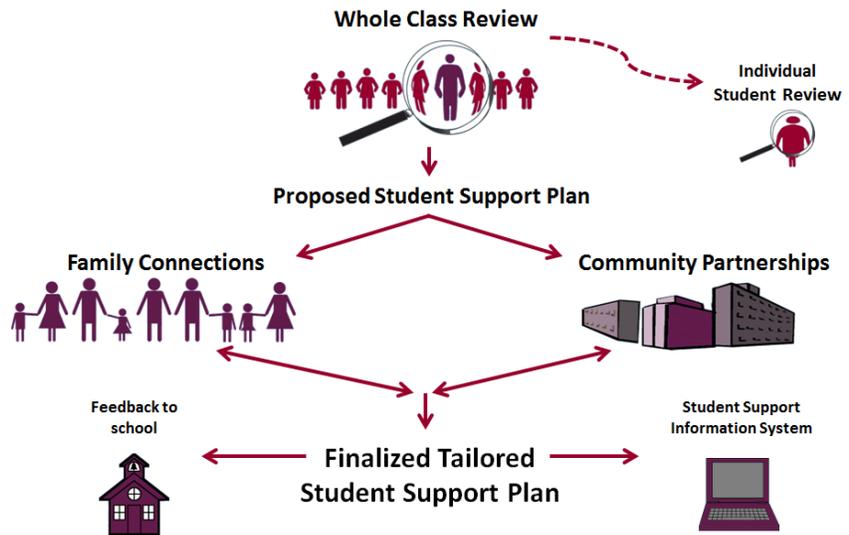
There are six key components of the model:

School Site Coordinator. At the core of the intervention is a full-time School Site Coordinator (SSC) in each school, trained as a school counselor or school social worker, who connects students to a customized set of services through collaboration with families, teachers, school staff, and community agencies. The ratio of SSC to student population is 1:400. The SSC follows standardized practices codified in the CCNX Practice Manual, schematized in Figure 4 and detailed in the components below.

11 It is important to note that during the history of CCNX implementation, there have been several school closings and mergers, which is a common fact of life in any urban school district.

12 Springfield is the third-largest city in Massachusetts.

Figure 4. City Connects student support process

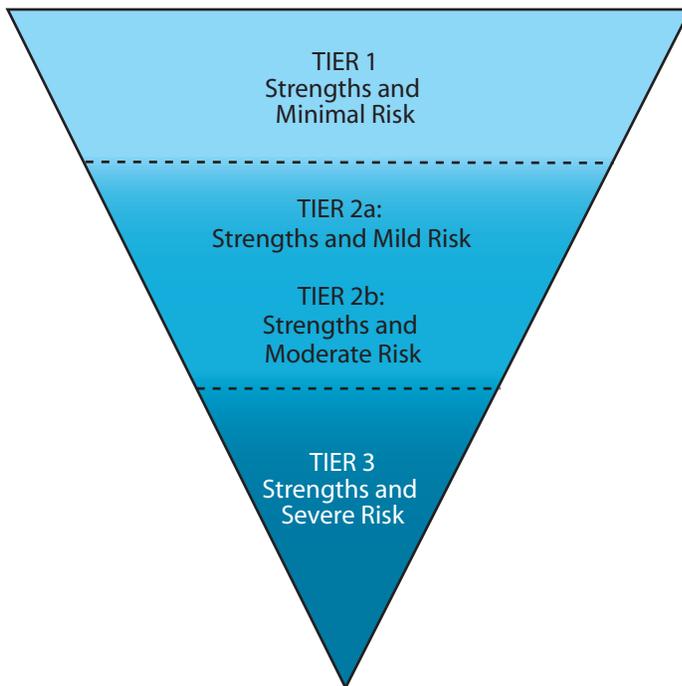


Whole Class Review. The SSC works with each classroom teacher to review every student in the class and develop customized support plans that addresses their individual strengths and needs. There are five aspects of the Whole Class Review (WCR): 1) identifying the strengths and needs of each student across four domains (academic, social/emotional/behavioral, health, and family); 2) identifying and locating appropriate school- and/or community-based services and enrichments; 3) establishing the

connection between these service providers and individual children and their families; 4) documenting and tracking the delivery of the service, and 5) following up to ensure appropriateness of fit.

As they conduct the WCR, at the most general level, the teacher and SSC group the students in a class into three tiers: strengths and minimal risk (Tier 1); strengths and mild to moderate risk (Tier 2); or strengths and severe risk (Tier 3). Tier 2 is divided into two levels: 2a (mild risk) and 2b (moderate risk).

Figure 5. Tiers in the CCNX triangle



Individual Student Review. Students identified as having intensive needs, *at any point during the school year*, receive an Individual Student Review (ISR). This review is independent and distinct from a Special Education referral. A wider team of professionals discuss and develop specific measureable goals and strategies for the student. The ISR is conducted by the student support team—an existing school structure that can include school psychologists, teachers, principals, nurses, and occasional community agency staff members and that is typically led by the SSC. The School Site Coordinator communicates with the family before and after the ISR.

Community agency partnerships. A critical aspect of the role of the SSC is developing and maintaining partnerships with community agencies and institutions. These relationships are formalized through a CCNX Community Resource Advisory Board, comprised of selected citywide agency leaders, and a CCNX Resource Advisory Council, which includes selected agency representatives working at the local neighborhood level.

Connecting students to services, tracking, and following up. During and after the conversations with teachers, school staff and leaders, and community agency representatives, CCNX School Site Coordinators connect each student to the particular enrichment and service programs that best meet his or her strengths and needs. School Site Coordinators work closely with families as students are referred and connected to particular enrichments and services. To aid with the process, and to permit streamlined tracking and follow-up, CCNX has developed a proprietary Web-based database, Student Support Information System (SSIS). The SSIS allows for secure collection of data on student reviews, individual student plans, service referrals, and providers (both school-based and community agencies) who deliver services. SSIS data are used for three purposes: 1) record-keeping at the individual and school level; 2) monitoring and evaluating the implementation of the intervention throughout the school year; and 3) conducting research on the effectiveness of the intervention.

The tailoring of services is accomplished through different combinations of quantity and type of services, resulting in a unique set of services for each student. Services may be prevention and enrichment in nature, including before- and after-school programs, sports, summer programs, and health and wellness classes; early intervention services such as adult mentoring, academic support, social skills interventions, family assistance, and tutoring; or more intensive services or crisis interventions such as mental health counseling, health services, screening or diagnostic testing, violence intervention, or family counseling. For any single student, regardless

of tier, the tailored set might include a combination of prevention and enrichment, early intervention, and/or intensive services.

Providing specific services within the school. In response to specific needs, School Site Coordinators provide the following services within the school and classrooms: 1) leading small social skills groups on a time-limited basis that address focused topics such as making friends, bullying, and healthy eating; 2) crisis intervention for individual or small groups of children; and 3) family outreach and support addressing specific family needs that are impacting the child's performance in school.

Implementation of City Connects in Boston and Springfield

Expansion of City Connects to Springfield, MA

The expansion to the Springfield, MA public schools followed the CCNX process for entering a district.

Program introduction. In a series of collaborative discussions, the CCNX team presented the model to the district's extended leadership team and school principals. A key member of the Springfield leadership team, the Program Manager, who oversees the work of the School Site Coordinators, helped lead discussions.

Recruiting. Using guidance and materials from CCNX, the Program Manager recruited School Site Coordinator candidates to serve in the schools. District leaders participated in this process, and the needed School Site Coordinators were hired.

Needs assessment. Through surveys with teachers, community partners, principals, and families, CCNX led a process of discovery in which the major needs of the district in the area of student support were identified. Results were presented to the district.

Environmental scan. Local agencies, institutions, and other community partners that might be able to serve students in the participating schools were identified and categorized.

Launch of Professional Development. Newly hired School Site Coordinators were inducted in a weeklong August Institute, where they gained familiarity with the model and began building the professional network that was further strengthened during yearlong in-service professional development meetings.

Launch in schools. During meetings with school principals, the results of the needs assessment and environmental scans were discussed in light of the school's priorities. A signed Memorandum of Understanding was provided by each school's principal, who also assisted in preparing schools for the arrival of the new School Site Coordinators (e.g., setting up office space and technology).

Plan for evaluation. CCNX obtained district approval on the evaluation design and reporting structures.

With the completion of these steps, the CCNX School Site Coordinators, the Program Manager, and the district and schools were ready to begin the work of CCNX in Springfield. Throughout the first two years of implementation, indicators from the CCNX Fidelity Monitoring System revealed areas of high program fidelity (such as strong implementation of preparatory steps for Whole Class Review, the collaborative assessment of each student's strengths and needs).¹³ These indicators also assisted the Program Manager by highlighting areas of potential improvement or need (such as the need to support teachers in filling out Whole Class Review forms during the first year of implementation).

Drawing on feedback over the course of the year from the fidelity indicators, the Springfield Program Manager collaborated with School Site Coordinators to arrive at high fidelity at year's end in the areas of student reviews and service delivery. Highlights of program fidelity at the end of 2012-13 include:

- In 2012-13, 100% of students in Springfield CCNX schools received a Whole Class Review and had complete data entry in the electronic tracking system. In the experience of CCNX, this percentage is unusually high for a district in only its second year of implementation. It matched the percentage for Boston in 2012-13 (100%).
- Springfield School Site Coordinators were similarly successful with their implementation of the practice of Individual Student Review, intensive reviews by a team for students most at risk. Across the Springfield schools, 6% of students in Springfield CCNX schools received Individual Student Reviews. This percentage was the same in Boston in 2012-13 (6%).
- Across the Springfield schools implementing CCNX, 91% of Springfield CCNX students received at least one service.

13 For a description of the Fidelity Monitoring System, see the *City Connects 2012 Progress Report*. This section presents results from selected indicators only.

Additionally, more than 80% of the students received three or more district- or community-provided services. These percentages also align with program targets and are similar to percentages in Boston, where 98% of students received at least one service and 81% received three or more services.

- By the end of 2012-13, Springfield School Site Coordinators had established and cultivated collaborations with 179 community partners.

Boston and Springfield context

Characteristics of the public schools of Boston and Springfield are important to interpreting and understanding the challenges CCNX students face and the impact of the intervention. Previous CCNX reports present a detailed overview of the social and economic disadvantages faced by many Boston residents. This year, we compare the context of implementation across the districts of Boston and Springfield.

CCNX was implemented in sixteen Boston Public Schools (totaling 6,845 students) and five Springfield Public Schools in 2012-13 (2,732 students). Six of the Boston schools and one Springfield school were K-8 schools; three Springfield schools were middle schools where implementation focused on grade 6; all others were K-5. Table 1 presents a summary of elementary school (grades K to 5) student characteristics for CCNX schools and all schools in each district not implementing CCNX during school year 2011-12, the most recent year for which data are available.

Table 1. Boston and Springfield elementary school (K-5) student characteristics, 2011-12

	Boston			Springfield	
	Charter Schools	Comparison Schools	City Connects	Comparison Schools	City Connects
% Female	51.3	48.3	47.9	48.3	48.1
Race/Ethnicity					
% Black	60.6	33.2	31.5	19.7	16.9
% White	8.2	13.8	7.2	15.8	7.8
% Asian	2.3	5.6	10.8	2.3	2.4
% Hispanic	26.2	44.8	48.0	58.7	70.2
% Multi-Race Non Hispanic/Other	2.8	2.6	2.5	3.5	2.6
% First Language Not English	18.8	40.7	49.1	21.3	33.9
% English Language Learners	7.2	14.9	18.1	16.9	29.3
Poverty: Eligible for Lunch Subsidy					
% Reduced Price Lunch	14.1	4.6	3.8	3.9	3.1
% Free Lunch	61.6	67.8	76.3	84.0	88.5
% Special Education	10.8	17.7	21.0	10.4	10.1
Mobility (% Attending Same School)	96.4	78.3	69.4	87.7	89.2
Average Number of School Absences	8.3	6.8	7.4	2.9	4.4

Source: Boston Public Schools and Springfield Public Schools student data for 2011-12; Massachusetts Department of Education enrollment data for Charter Schools column.

Table 1 shows that in Boston, CCNX and comparison students were similar across several characteristics, including gender and special education status. However, CCNX students were more likely to be Asian than comparison students, and there were significantly more students whose first language is not English in CCNX schools. Significantly more students in CCNX schools were living in poverty, as measured by eligibility for free school lunch. There was also significantly more mobility (e.g., fewer attended the same school as the previous year) and a higher average number of school absences among CCNX students. Students in both CCNX and comparison schools were less likely to be African-American than those in charter schools, were much less likely to speak English as a first language, and were more likely to be eligible for free school lunch.

In Springfield, CCNX and comparison students were similar in gender, poverty status, enrollment in Special Education, and mobility. However, CCNX students were more likely to be Hispanic/Latino, were more likely to be English Language Learners, and had higher average number of school absences.

Table 1 reveals that students in CCNX schools differed in several key ways across Boston and Springfield. First, in Springfield, CCNX students were more likely to be Hispanic. Second, they were even more likely than Boston students to be eligible for free or reduced-price school lunch, a measure of poverty (92% in Springfield vs. 80% in Boston). Finally, mobility and school absenteeism were lower in Springfield than in Boston.

Reviews and services delivered in Boston and Springfield

In the 2012-13 school year, 100% of students in both Boston and Springfield received a Whole Class Review. As noted above, during the WCR, the SSC and teacher group the students in a class into three tiers: strengths and minimal risk (Tier 1), strengths and mild to moderate risk (Tier 2); or strengths and severe risk (Tier 3). Tier 2 is divided into two levels: 2a (mild risk) and 2b (moderate risk). Table 2 shows the number and percentage of students in each tier for Boston and Springfield.¹⁴

Table 2. Number of students placed in each tier, Boston and Springfield

	Boston	Springfield
Tier 1	2192 (32%)	915 (34%)
Tier 2a	2130 (31%)	896 (33%)
Tier 2b	1620 (24%)	575 (21%)
Tier 3	871 (13%)	317 (12%)
Total	6813	2703

Source: CCNX Student Support Information System database, 2012-13

Students placed in Tier 3 are considered for an Individual Student Review so that a team of professionals can assess strengths and needs and develop specific, measurable goals and strategies. (See the full description of ISRs above.) In 2012-13, the number of ISRs was 331 in Boston and 154 in Springfield.

In both districts, SSCs developed and maintained relationships with community agencies that offer services to students. As noted above, services range from prevention and enrichment to early intervention to intensive intervention. In 2012-13, CCNX worked with 380 community

¹⁴ The total N for Table 2 is slightly smaller than the total number of students in CCNX schools because the table does not include students whose Whole Class Review record lacked a tier (32 students in Boston and 29 in Springfield).

partners in Boston and 179 in Springfield. Along with school and district service providers, these partners delivered approximately 39,000 services in Boston and 21,000 in Springfield. Figures 6 and 7 show the numbers and percentages of services delivered across categories.

Figure 6. Total number of services delivered to students, by service category, Boston Public Schools

		Service N	Category %	Total %
CATEGORY 1 (Prevention and Enrichment)	Before School Program	209	2%	37%
	Enrichment: Arts	2706	20%	
	Sports/Physical Activity	5221	39%	
	Enrichment: Youth Development	1166	9%	
	Enrichment: Academic	3540	26%	
	Violence Prevention	123	1%	
	New Balance Health & Wellness Curricula	496	4%	
	Category Total	13461	100%	
CATEGORY 1.5	After School Program	1279	50%	7%
	Summer Program	812	32%	
	Vacation Program	469	18%	
	Category Total	2560	100%	
CATEGORY 2 (Early Intervention)	Behavior Plan Special Observation	236	2%	29%
	Classroom-based Social Skills Intervention	2992	28%	
	Adult Mentoring	704	7%	
	Psycho-social Group	316	3%	
	Academic Support	3113	29%	
	ESL	25	<1%	
	Classroom-based Health Intervention	3200	30%	
	Category Total	10586	100%	
CATEGORY 2.5	Supplemental Educational Services	105	2%	18%
	Tutoring	71	1%	
	Family Support	4238	65%	
	Family Assistance/Outreach	2152	33%	
	Category Total	6566	100%	
CATEGORY 3 (Intensive / Crisis Intervention)	Check-in with CCNX Site Coordinator	253	9%	8%
	Mental Health Counseling	211	7%	
	Informal Screening/Diagnostic	20	1%	
	Health/Medical	1227	43%	
	SPED Eval/Screening	91	3%	
	Crisis Intervention	88	3%	
	Attendance Support	960	33%	
	Family Counseling	13	<1%	
	Violence Intervention	17	1%	
	Category Total	2880	100%	
Grand Total		36053		

Source: CCNX Student Support Information System database, 2012-13. School Site Coordinators noted an additional 7,960 health screenings that were delivered by school nurses.

Figure 7. Total number of services delivered to students, by service category, Springfield Public Schools

		Service N	Category %	Total %
CATEGORY 1 (Prevention and Enrichment)	Before School Program	25	< 1%	32%
	Enrichment: Arts	2878	46%	
	Sports/Physical Activity	824	13%	
	Enrichment: Youth Development	1570	25%	
	Enrichment: Academic	639	10%	
	Violence Prevention	7	< 1%	
	Health & Wellness Curricula	330	5%	
	Category Total	6273	100%	
CATEGORY 1.5	After School Program	280	66%	2%
	Summer Program	143	34%	
	Category Total	423	100%	
CATEGORY 2 (Early Intervention)	Behavior Plan Special Observation	105	2%	36%
	Classroom-based Social Skills Intervention	1537	22%	
	Adult Mentoring	663	10%	
	Psycho-social Group	196	3%	
	Academic Support	3424	49%	
	Classroom-based Health Intervention	996	14%	
	Category Total	6921	100%	
CATEGORY 2.5	Additional Academic Services	38	1%	19%
	Tutoring	131	4%	
	Family Support	2699	73%	
	Family Assistance	814	22%	
	Category Total	3682	100%	
CATEGORY 3 (Intensive/ Crisis Intervention)	Check-in with CCNX Site Coordinator	208	10%	11%
	Mental Health Counseling	129	6%	
	Informal Screening/Diagnostic	6	< 1%	
	Health/Medical	1222	56%	
	Crisis Intervention	37	2%	
	Attendance Support	579	27%	
	Family Counseling	1	< 1%	
Category Total	2182	100%		
Grand Total		19481		

Source: CCNX Student Support Information System database, 2012-13. School Site Coordinators noted an additional 3,890 health screenings that were delivered by school nurses.

Table 3 and Figures 8-9 present the distribution by tier of students receiving different numbers of services for Boston and Springfield.

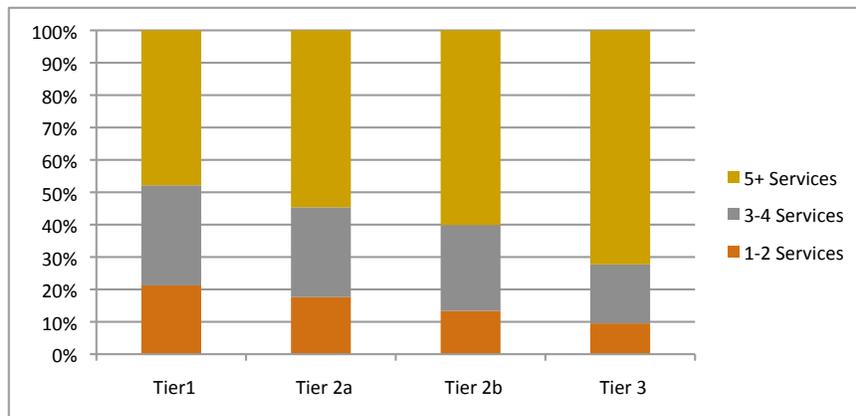
Table 3. Proportion of students in each tier receiving different numbers of services

Number of Services by Tier				1-2 Services		3-4 Services		5+ Services		Total Student N Receiving Services	Total Student % Receiving Services	
	Student N	Mean # of Services	Standard Deviation	Student N	Row %	Student N	Row N %	Student N	Row N %			
Boston Public Schools	Tier1	2192	5.16	3.76	459	21.2%	668	30.9%	1034	47.8%	2161	99%
	Tier 2a	2130	5.56	3.88	368	17.6%	578	27.7%	1139	54.6%	2085	98%
	Tier 2b	1620	5.90	4.05	211	13.4%	419	26.5%	949	60.1%	1579	97%
	Tier 3	871	7.09	4.78	81	9.5%	155	18.2%	615	72.3%	851	98%
	Total	6813	5.71	4.05	1119	16.8%	1820	27.3%	3737	56.0%	6676	98%
Springfield Public Schools	Tier1	915	6.02	6.46	107	13.4%	235	29.4%	456	57.1%	798	87%
	Tier 2a	896	7.93	7.55	89	10.6%	194	23.1%	556	66.3%	839	94%
	Tier 2b	575	8.83	7.71	38	6.9%	103	18.8%	407	74.3%	548	95%
	Tier 3	317	9.68	7.98	22	7.1%	52	16.9%	234	76.0%	308	97%
	Total	2703	7.68	7.40	256	10.3%	584	23.4%	1653	66.3%	2493	92%

Source: CCNX Student Support Information System database, 2012-13

Table 3 shows first that in both Boston and Springfield, the mean number of services per student is smallest at Tier 1 and largest at Tier 3. Second, as shown in both Table 3 and Figures 8-9, the proportion of students receiving 1-2 services is highest for Tier 1 students and lowest for Tier 3. Third, the corresponding proportions for 5 or more services are the mirror image: the proportion of students receiving 5 or more services is smallest for Tier 1 and largest for Tier 3.¹⁵

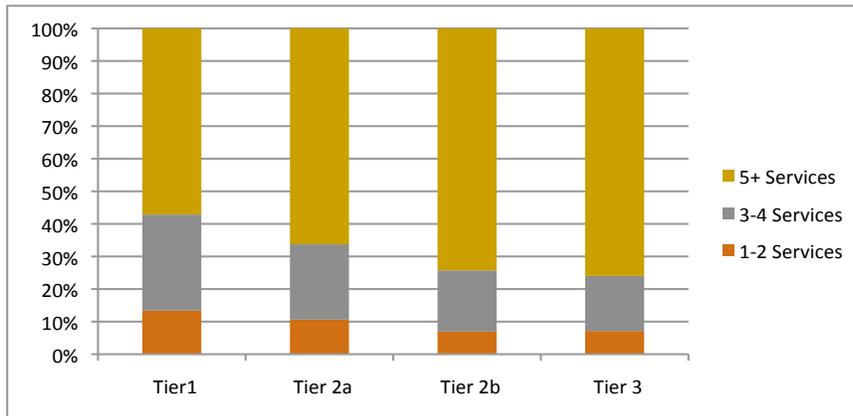
Figure 8. Proportion of students in each tier receiving 1-2, 3-4, or 5 or more services, Boston



Source: CCNX Student Support Information System database, 2012-13

15 The total N for Table 3 is slightly smaller than the total number of students in CCNX schools because the table does not include students whose Whole Class Review record lacked a tier (32 students in Boston and 29 in Springfield).

Figure 9. Proportion of students in each tier receiving 1-2, 3-4, or 5 or more services, Springfield



Source: CCNX Student Support Information System database, 2012-13

Impact on Students

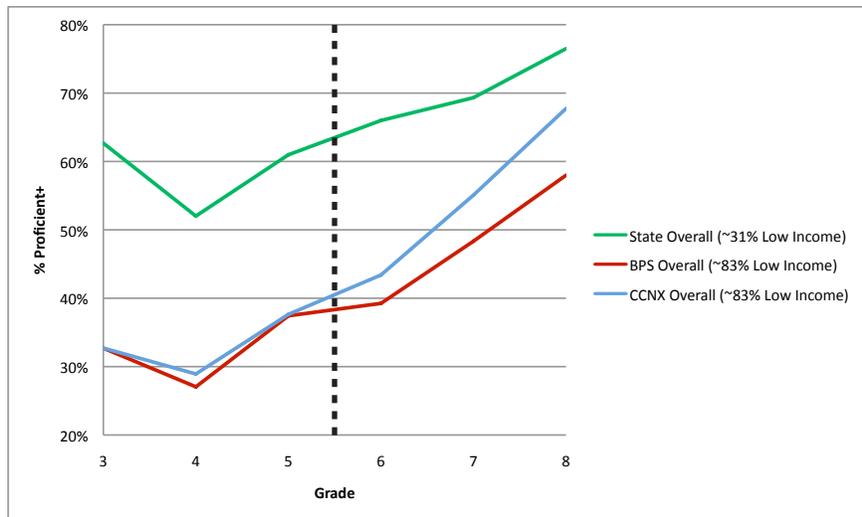
Earlier reports have documented the beneficial effects of CCNX on student achievement and thriving, as summarized in the preface to this report. Here, we review two of these earlier outcomes: the beneficial effect of CCNX on students' achievement of proficiency on the Massachusetts statewide test and lower rates of chronic absenteeism. It is notable that these effects document long-term improvements in indicators of academic achievement and life chances, showing that students enrolled in CCNX schools benefit long after they have left the intervention itself.

Next, we present new findings from the most recent analyses. First, an updated analysis of high school dropout that included two additional cohorts of data confirmed earlier findings and also included a new calculation: attendance in a CCNX elementary school from kindergarten on leads to approximately 50% lower probability of dropout in high school. Second, students enrolled in CCNX schools significantly outperform their comparison-school peers on the Stanford Achievement Test in elementary school. The positive finding is seen for all students and also, notably, for immigrant students. Third, students previously enrolled in CCNX are more likely to attend one of three selective public high schools ("exam schools") in Boston—an indicator of academic success. Finally, the first analysis of student outcomes for Springfield, MA demonstrates a positive effect: the gap in statewide test scores between the CCNX Transformation schools and other Springfield schools narrowed in 2011-12, the first year of implementation of CCNX.

Improving standardized test scores in middle school (Massachusetts Comprehensive Assessment System, or MCAS)

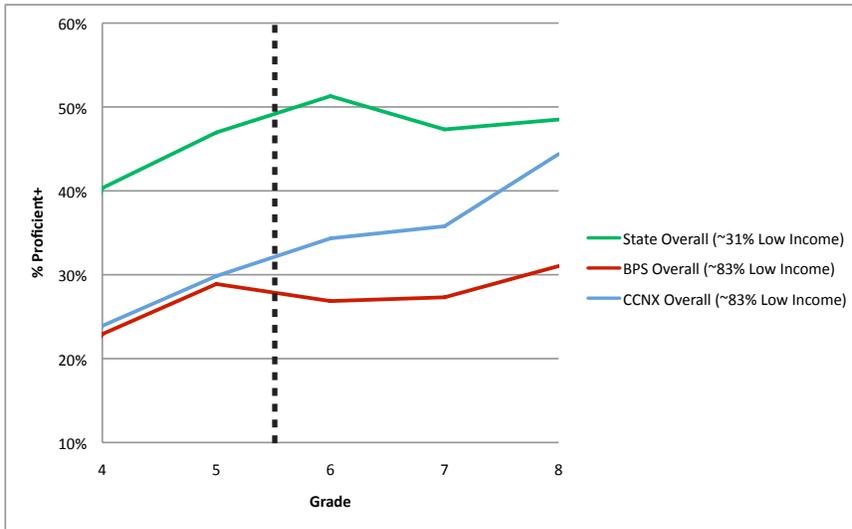
As reported in the 2010 CCNX Annual Report, the analysis of MCAS mean scores relative to comparison schools yields encouraging results that show positive effects of CCNX. Analysis of scores by **results category** provides corroborating positive evidence. Students' MCAS scores are classified into four categories: advanced, proficient, needs improvement, and warning/failing. An analysis comparing the percentage of CCNX students scoring proficient or above in ELA and Math yields the results shown in Figures 10 and 11. Figure 12 shows the percentage of ELL students in CCNX and comparison schools scoring proficient or above on the ELA test, relative to overall statewide scores. Here and elsewhere in this report, the vertical dotted line represents the point at which students leave CCNX and move on to middle school.

Figure 10. Percentage of students scoring at proficient or above, MCAS English Language Arts



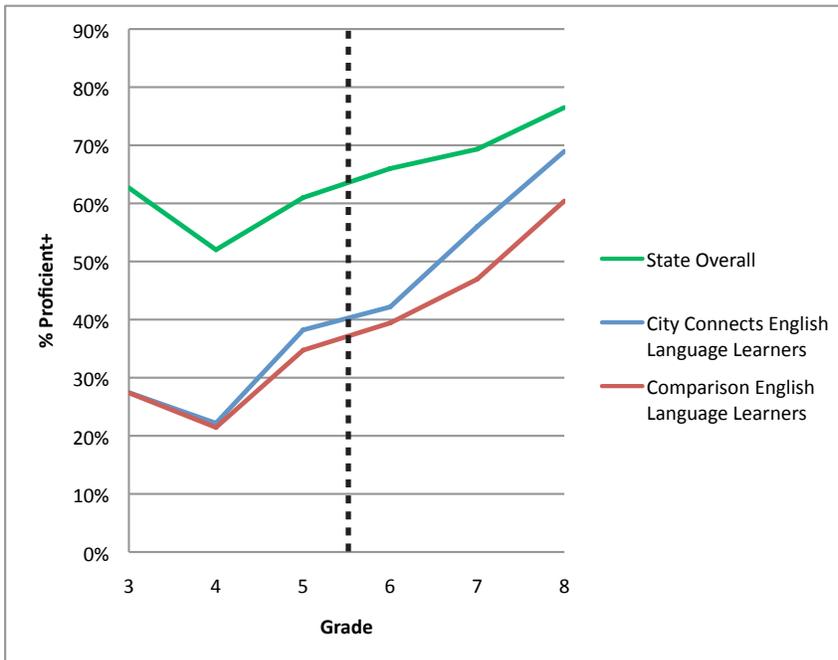
Source: CCNX and comparison schools: Boston Public Schools MCAS data, 2003-2009. Boston Public Schools and state data: Massachusetts Department of Elementary and Secondary Education.

Figure 11. Percentage of students scoring at proficient or above, MCAS Math



Source: CCNX and comparison schools: Boston Public Schools MCAS data, 2003-2009. Boston Public Schools and state data: Massachusetts Department of Elementary and Secondary Education.

Figure 12. Percentage scoring at proficient or above, MCAS English Language Arts: CCNX ELL students, comparison school ELL students, and all students statewide



Source: CCNX: Boston Public Schools MCAS data, 2003-2009. State data: Massachusetts Department of Elementary and Secondary Education.

- Figures 10 and 11 show that CCNX students outperform both students from the comparison schools and their Boston peers in middle school and achieve close to state proficiency levels on both English and Math on MCAS.
- Figure 12 shows that ELL students in CCNX achieve gains that move them close to statewide levels of proficiency in the MCAS ELA test by grade 8. The positive impact of CCNX is seen for students particularly at risk for literacy outcomes.

Preventing chronic absenteeism

High rates of absence from school are an important predictor of academic risk and dropout. As reported in the 2012 CCNX Progress Report, students who attended CCNX schools in elementary school are significantly less likely to be chronically absent (defined as being absent for 10% or more of the days within the school year) than students who never attended CCNX schools. In this section, we provide details on the analysis and findings.

Students included in the analysis and analytic techniques

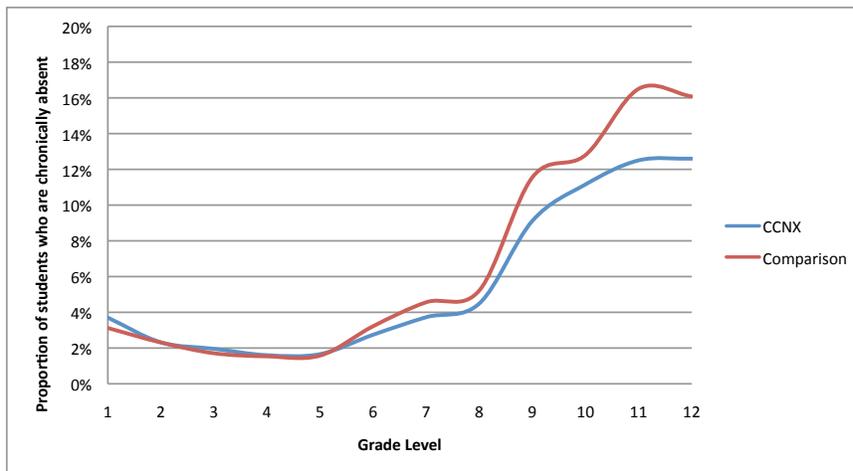
The analysis drew on students' longitudinal data record (i.e., records of the student's absences within and across years). A given student's data may be represented at more than one grade level.

Descriptive analyses, including *t*-tests, were used to examine the present and absent days in grades 1-12, overall and by treatment group. Next, hierarchical linear models were estimated to examine longitudinal changes in student absenteeism across grade levels.

Results

Figure 13 presents the longitudinal change (or estimated probabilities) in chronic absenteeism for the CCNX and comparison groups.

Figure 13. Proportion of students who were chronically absent, CCNX vs. comparison students.



Source: Boston Public Schools school attendance data, 2001-2009

- Although CCNX students start out with higher rates of chronic absenteeism in grade 1, rates of chronic absenteeism were significantly lower than comparison students in all middle and high school grades 6-12, except for grade 10.
- Beyond chronic absenteeism, CCNX students were found to have a significantly lower total number of days absent than students from the comparison group in grades 4 to 12.

Preventing school dropout

As reported in the 2012 CCNX Progress Report, students who attended CCNX schools in elementary school are significantly less likely to drop out of school. A new analysis adding two more cohorts of data confirmed this earlier finding. In this update, we present both average effects on dropout in each high school grade and also a cumulative effect on dropout rate across the years of high school.

The school-level proxies for dropout typically used in education program evaluations have been criticized as misrepresenting true dropout rates. These proxies may produce biased estimates of true dropout rates because they are solely based on aggregate counts of the number of students enrolled in a school at the beginning and end of high school, even though a number of factors other than dropout contribute to enrollment figures. In contrast, we directly examine student-level, longitudinal enrollment trajectories.

Through this process, we are able to account for each student's reason for disenrollment and produce a more precise measure of dropout than aggregate proxies. Before presenting the findings, we briefly explain which students are included in the analysis sample and provide some background on how students were classified as dropouts or non-dropouts.

Students included in the analysis

For a student's data to be used in the analysis, several conditions needed to be met:

- The student was enrolled in Boston Public Schools (BPS) prior to the completion of grade 5 and also at the start of high school.
- The student was not enrolled in a substantially separate Special Education classroom at any point during high school.
- The student's longitudinal record included data on all control variables.¹⁶

Students whose records met these conditions were included in either the CCNX group (all students ever enrolled in a CCNX school) or the comparison group (all who had never attended a CCNX school).

How students were classified as dropout or non-dropout

When students leave BPS, the reason for departure is recorded. The analysis drew on this information to create a dichotomous dropout variable at the repeated measures level for each student reflecting whether a student did or did not drop out at a given time point in his or her longitudinal record.

Students classified as non-dropout: Students who leave BPS for reasons other than dropout, such as graduation or transfer to another district.

If a student does not depart BPS, but his or her longitudinal record does not reach grade 12 simply because the student is not old enough to have completed high school, no withdrawal information appears in the record. These students are also included in the non-dropout group.

Students classified as dropout: Students who (1) withdraw from BPS entirely; (2) never return to BPS; and (3) have a record that clearly indicates non-graduation (such as drop out, pregnant, expelled, or incarcerated).¹⁷

¹⁶ Control variables include race, gender, ever eligible for free/reduced priced lunch, ever classified as an English Language Learner, ever eligible for Special Education services, total number of school transfers experienced since kindergarten, and grade level at end of longitudinal BPS record.

¹⁷ Full description of the information in district school withdrawal records are provided in the appendices.

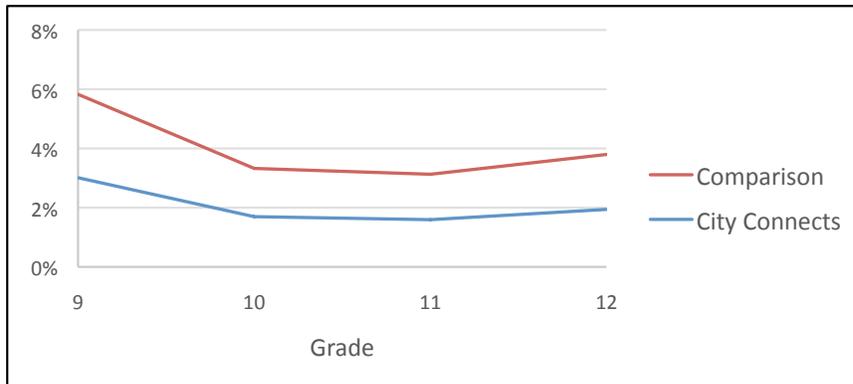
Modeling dropout

The CCNX effect on dropout is modeled using discrete event history analysis: repeated measures are nested within students using hierarchical logistic regression, where repeated measures and student-level characteristics serve as controls.

Results

This analysis finds that comparison students (those who never attended a CCNX school) are more likely to drop out than students who had attended CCNX schools in elementary school from kindergarten on; see Figure 14.

Figure 14. Proportion of students who drop out from school at each high school grade level, comparison vs. CCNX students

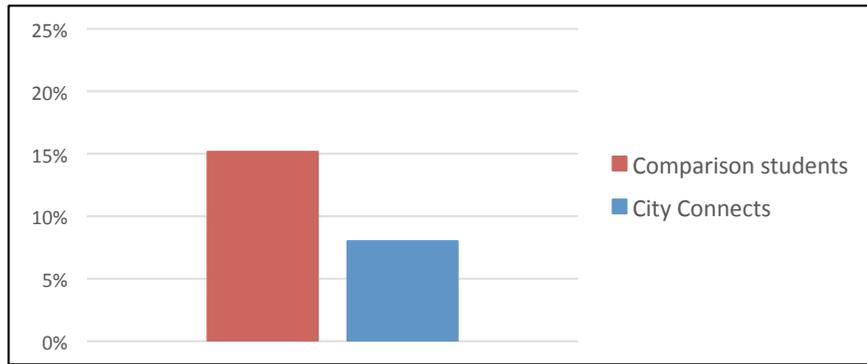


Proportions adjusted for demographic student characteristics. Source: District withdrawal code data, 2004-2009. Comparison N= 19,979; CCNX N=2,265

As shown in the line graph above, at every grade level, students who attended CCNX elementary schools from kindergarten on are less likely to drop out of school. The difference at grade 9 is particularly notable (almost 6% for comparison students and 3% for CCNX students).

The cumulative percentage of students who drop out across the four years of high school is also significantly lower for students who attended an elementary school implementing CCNX from kindergarten on than for those who never attended a CCNX school, as shown in Figure 15.

Figure 15. Cumulative percentage of students who drop out from high school, comparison vs. CCNX students



Proportions adjusted for demographic student characteristics. Source: District withdrawal code data, 2004-2009. Comparison N= 19,979; CCNX N=2,265

- As shown in Figure 15, the adjusted dropout rate for students who attended comparison schools was about 15%, compared with 8% for students who attended CCNX elementary schools from kindergarten on.
- For students who started CCNX in kindergarten, the difference between students who attended CCNX elementary schools and comparison students translates to **50% lower odds of dropping out** between grades 9 and 12.
- If an entire district experienced dropout at a rate similar to that of CCNX students, for a cohort of 5,000 students, approximately **358 fewer students would have dropped out of high school.**

High school graduation is widely argued to yield public economic benefits, including higher tax revenue and lower spending on the justice system, healthcare, and public assistance programs. A conservative estimate of the benefit is \$127,000 per graduate.¹⁸ Assuming this estimate, if a district with a cohort of 5,000 had experienced dropout at a rate similar to CCNX students, the public benefit would have exceeded \$45 million.

18 Levin, Belfield, Muennig, & Rouse, 2006

Improving standardized test scores in elementary school (Stanford Achievement Test)

In past years, CCNX has documented a significant positive effect on report card scores in elementary schools. Similar positive effects were seen on middle school, but not elementary school, scores for the high-stakes statewide standardized achievement test, the Massachusetts Comprehensive Assessment System (MCAS). In new analyses, we studied the effect of CCNX on scores for a different standardized test—the Stanford Achievement Test, version 9 (SAT-9). Prior to 2006, elementary school students in Boston completed the SAT-9 to determine eligibility for advanced work class. Although the test was not required of all students, scores were available for most Boston elementary school students (over 88% of students) for 2002-03 through 2005-06. While advanced class placement is important for many students, performance on the SAT-9 is not used by schools to make important decisions such as promotion for all students, or for teacher evaluation. For “low-stakes” tests like the SAT-9, teachers tend not to teach to the test—and thus the outcomes represent more generalized academic skills. Nonetheless, long before high school, scores on the SAT-9 have proven to predict high school graduation rates. In fact, there is some evidence that fewer than half of students below the 50th percentile on the SAT-9 during middle school (sixth, seventh and eighth grade) later graduate from high school, while nearly 75% of those above the 50th percentile graduate.¹⁹

Students included in the analysis. The analyses drew on students’ longitudinal data (i.e., records of student test scores within and across years). For a student to be included, SAT-9 scores must have been available for at least one year. Also, Grade 1 Fall report card scores and student demographic characteristic data were required. CCNX students in the models were required to be enrolled in CCNX during kindergarten or first grade, and stayed in CCNX through grade 5. Comparison students included in these analyses were all BPS students who never attended a CCNX school.

Analytic methods and results. Analyses compared CCNX and comparison student SAT-9 Reading and Mathematics performance. Grade 3, 4, and 5 unadjusted SAT-9 Reading and Math scores were significantly higher for CCNX students than for comparison students (see Table 4).

¹⁹ <http://www.attendancecounts.org/wordpress/wp-content/uploads/2010/04/LAUSD-Study-2008.pdf>

Table 4. Unadjusted SAT-9 Reading and Mathematics scores, CCNX vs. comparison students

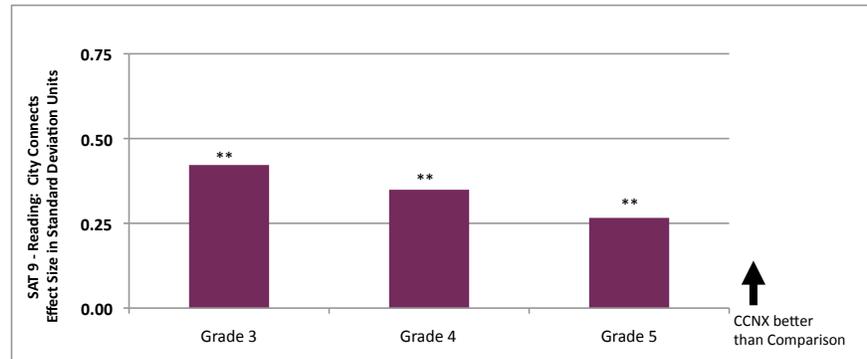
	SAT-9 Reading*		SAT-9 Math*	
	CCNX (N=249)	Comparison (N=5774)	CCNX (N=256)	Comparison (N=6033)
Grade 3	589.3	579.2	571.8	561.4
Grade 4	618.6	608.3	604.8	592.1
Grade 5	645.8	634.9	634.8	626.9

* All within grade mean differences are significant, $p < .001$. Source: Boston Public Schools SAT-9 data, 2003-04 – 2008-09

Next, hierarchical linear models were used to estimate longitudinal changes in test scores across grade levels. Generalized propensity scores and covariate adjustments were used to control for baseline differences between treatment groups.²⁰

In these models, CCNX was found to have a significantly positive effect on SAT-9 scores in Reading and Math at every grade. Figure 16 compares CCNX and comparison student SAT-9 Reading scores in terms of effect sizes based on multi-level models.²¹ Figure 17 presents the same comparison for Math scores. Each bar represents the difference between CCNX and comparison students at the corresponding grade in effect size units. The difference between CCNX and comparison students was largest in 3rd grade.

Figure 16. Positive CCNX effects on SAT-9 Reading scores, CCNX vs. comparison students

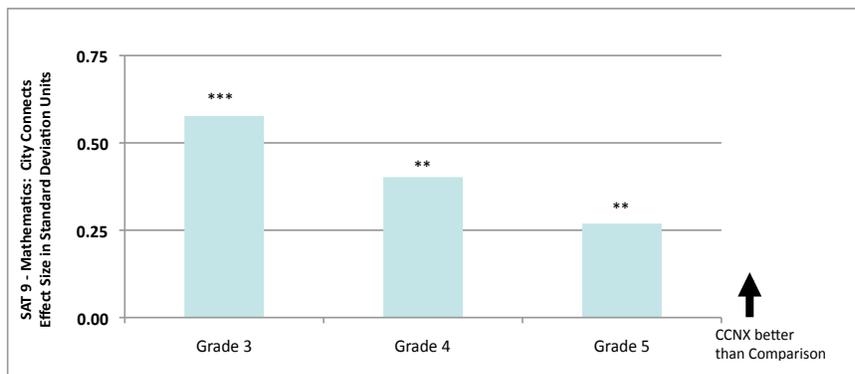


** $p < .01$. Source: Boston Public Schools SAT-9 data, 2003-04 – 2008-09.

20 See Imbens 2000. Using propensity score weights helps to minimize possible study selection effects by adjusting for the probability of being in CCNX given baseline observed background variables (race, gender, eligibility for free- or reduced-price school lunch, bilingual status, special needs status, school mobility, distance from home to school, and baseline Reading, Math, Writing, Behavior, and Work Habits report card scores were used to calculate propensity score weights).

21 Effect sizes were calculated as the difference between CCNX and comparison group adjusted mean score for cases at the average level of model covariates, divided by the within-group standard deviation of the true scores (Raudenbusch & Liu, 2001).

Figure 17. Positive CCNX effects on SAT-9 Mathematics scores, CCNX vs. comparison students



*** $p < .001$; ** $p < .01$. Source: Boston Public Schools SAT-9 data, 2003-04 – 2008-09

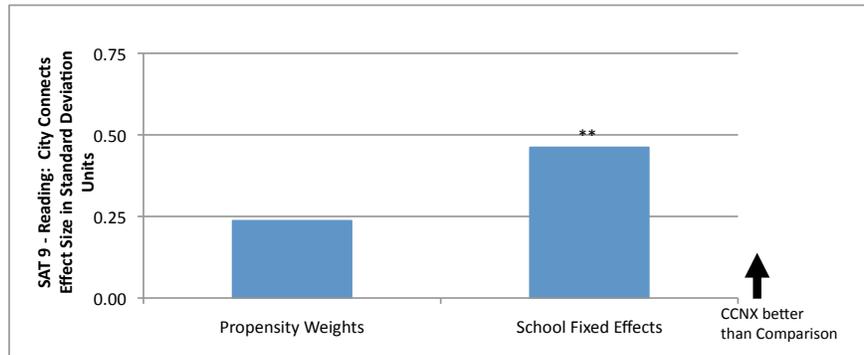
In addition to examining all students, we conducted focused analyses on first-generation immigrant students. Again, hierarchical linear models were used with generalized propensity scores and covariate adjustments to control for baseline differences between treatment groups, which we refer to below as “Model 1.” However, because matching immigrant students on baseline characteristics is more difficult than matching within the entire sample of students, we also used school fixed effects methods to control for baseline differences.²² We refer to the school fixed effects analyses as “Model 2.”

Figure 18 compares CCNX and comparison student SAT-9 Reading scores in terms of effect sizes based on multi-level models. Each bar represents the difference between CCNX and comparison students at fifth grade in effect size units.²³

22 For some schools with large numbers of immigrant students, we were able to compare achievement in the school prior to the introduction of the intervention to achievement in that same school after the intervention had been introduced.

23 The immigrant analyses are among the most recent additions to the evaluation work. The first analyses focused on fifth grade because it represents the end point of the elementary school intervention. In future work, we will examine the effects on grades 3-4.

Figure 18. Positive CCNX effects on SAT-9 Reading scores for fifth grade immigrant students

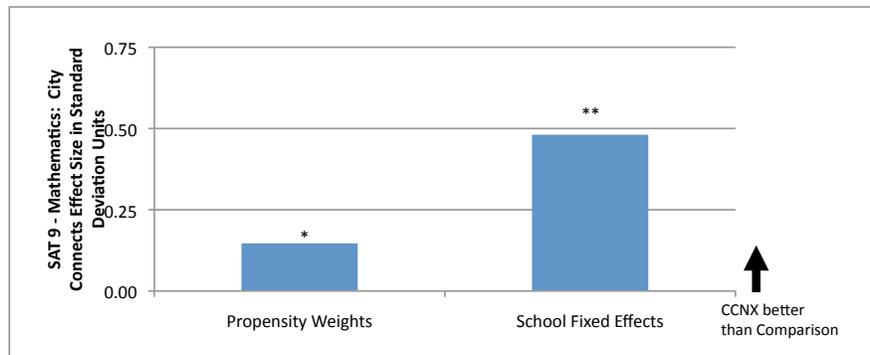


** $p < .01$. Source: Boston Public School SAT-9 data, 2003-04 – 2008-09

Using Model 1 (propensity score weights), although not statistically significant, the difference between CCNX and comparison immigrant students' reading scores approached 25% of a standard deviation, favoring those in CCNX schools. Using Model 2 (school fixed effects), the difference was statistically significant and nearly twice as large (approaching 50% of a standard deviation).

Figure 19 presents the same comparison for Mathematics.

Figure 19. Positive CCNX effects on SAT-9 Mathematics scores for fifth grade immigrant students



** $p < .01$; * $p < .1$. Source: Boston Public School SAT-9 data, 2003-04 – 2008-09

Similar results held for math scores. Using Model 1 (propensity score weights), the difference between CCNX and comparison immigrant students' scores was approximately 15% of a standard deviation. Using Model 2 (school fixed effects), the difference was statistically significant and was nearly 50% of a standard deviation.

Achievement gains on the SAT-9 were of great practical significance: even the smallest effect sizes on the SAT-9 were equivalent to moving students from the 44th to 51st percentile, and the largest effect sizes were equivalent to moving immigrant students from the 34th to the 51st percentile.

Improving exam school attendance

Attending one of the three selective public secondary schools in Boston known as “exam schools” has been viewed as an indicator of academic success.²⁴ A new analysis examined the relationship between attendance at a CCNX elementary school and later Boston exam school attendance.

Students included in the analysis. The analysis drew on students’ longitudinal data (i.e., records of student test scores within and across years). Students whose longitudinal records extended to at least grade 7 were eligible for inclusion. Students with severe special needs were excluded from the sample, although other students enrolled in Special Education were included. A total of 1107 students attending one of 13 elementary or K-8 schools that implemented CCNX were eligible for the treatment group. The comparison group included 6058 students in the same grades attending non-CCNX Boston schools. In addition to CCNX participation, the number of years in a CCNX school also was studied as a treatment variable.

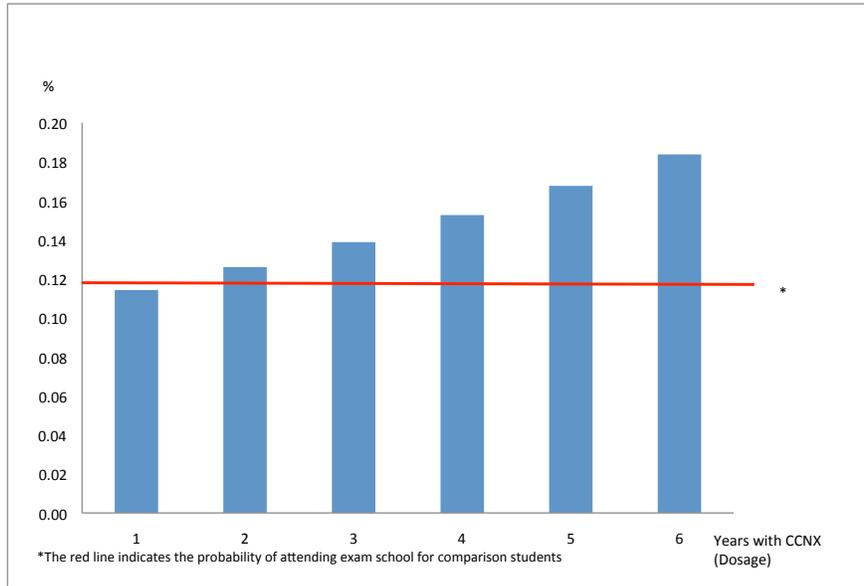
Analytic methods and results. The effect of CCNX on exam school attendance was estimated through multi-level logistic regression models in order to take into account the nested structure of students within schools (Raudenbush & Bryk, 2002). The dependent variable was student exam school attendance, e.g., whether or not a student attended one of the three exam schools in grade 7 to 9 after elementary school. Regression models included student characteristics (gender, race, Special Education status, bilingual status, and free or reduced lunch status) as covariates. Generalized propensity scores and covariate adjustments were used to control for baseline differences between treatment groups.²⁵

24 Admission to the Boston Latin School, Boston Latin Academy, and the John D. O’Bryant School of Mathematics and Science, typically in seventh grade, is based entirely on students’ academic performance and test scores on the Independent Schools Entrance Exam (ISEE).

25 See Imbens 2000. Using propensity score weights helps to minimize possible study selection effects by adjusting for the probability of being in CCNX given baseline observed background variables (race, gender, eligibility for free- or reduced-price lunch, bilingual status, special needs status, school mobility, distance from home to school, and baseline Reading and Math report card scores were used to calculate propensity score weights).

Attending a CCNX elementary school is associated with attending an exam school in later grades, as shown in Figure 20.

Figure 20. Estimated probabilities of attending exam school, by number of years in a CCNX school, CCNX vs. comparison students



Source: Boston Public Schools enrollment data, 2001-02 – 2009-10

Figure 20 shows the likelihood of getting into exam schools for CCNX and comparison students. The estimated probability of getting into exam schools is displayed on the vertical axis. The horizontal axis represents number of years attending a CCNX school, so that each bar displays the probability of attending an exam school for a given number of years' attendance in a CCNX elementary school. The red line indicates the probability of attending exam school for comparison students who were never enrolled in CCNX schools.

As Figure 20 shows, students in CCNX elementary schools are, on average, more likely to attend exam schools than comparison students. Moreover, probability of attending an exam school increased with each additional year in a CCNX elementary school.

Narrowing the gap between Transformation (Turnaround) City Connects schools and comparison schools in Springfield

Given that the schools where CCNX is implemented in Springfield are underperforming “Transformation” schools—i.e., there is a gap in MCAS performance between these schools and others—evaluation analyses were focused on whether this gap had been reduced.

We compared the gap in achievement between the five Springfield Transformation CCNX schools and other schools both prior to (2010-11) and after (2011-12) the implementation of CCNX. Grades 3, 4, and 5 raw MCAS scores for students attending the five Springfield Transformation schools that CCNX entered in 2011-12 were compared to those for all non-CCNX students at the same grade in the district. Multi-level regression modeling techniques were applied to take into account school clustering effects. Student demographic variables (race, gender, eligibility for free- or reduced-price lunch, primary language status, special educational needs status, and school mobility) were included in the model at the individual level and CCNX treatment was estimated at the school level.

After one year of CCNX, the gap between CCNX Transformation schools and other schools was significantly reduced at all grades for both ELA and Math. In 2010-11, students in the Transformation schools performed significantly worse than other students at all grades in both ELA and Math. However, in 2011-12, there were **no statistically significant differences** between CCNX Transformation and comparison students for MCAS ELA in grade 5 and MCAS Math grades 3, 4, and 5.

- For English Language Arts, the gap in MCAS scores between CCNX Transformation and comparison students was reduced by 30% in grade 3, by more than 40% in grade 4, and by more than 80% in grade 5.
- For math, the gap in MCAS scores between CCNX Transformation and comparison students was reduced by more than 10% in grade 3 and by almost 60% in grades 4-5. By the end of 2011-12, there was no significant difference between CCNX Transformation and comparison students for MCAS Math in grade 3, 4, or 5.

These results provide early evidence that the Transformation schools really are transforming, with the help of CCNX.

Promoting health and wellness knowledge

Our evaluation examines the impact of specific services, or combinations of services, on student outcomes. An important service offered to students in grades 2-5 in three Boston Public Schools was the New Balance Health and Wellness Curriculum. The curriculum was developed over the course of several years and was newly revised in 2011-12. The curriculum was delivered on a weekly basis in the classroom in each participating school and included four units: Nutrition, Physical Activity, Bullying Prevention, and Healthy Choices.

To assess the effectiveness of the curriculum, CCNX asked participating students to complete pre- and post-test surveys for each of the four units. Survey items measured a range of health and social competence outcome variables, which included knowledge, attitude, and behavior related to the content of each of the four units.

For all four units, students exposed to the curriculum demonstrated significant pre/post gains in health knowledge.

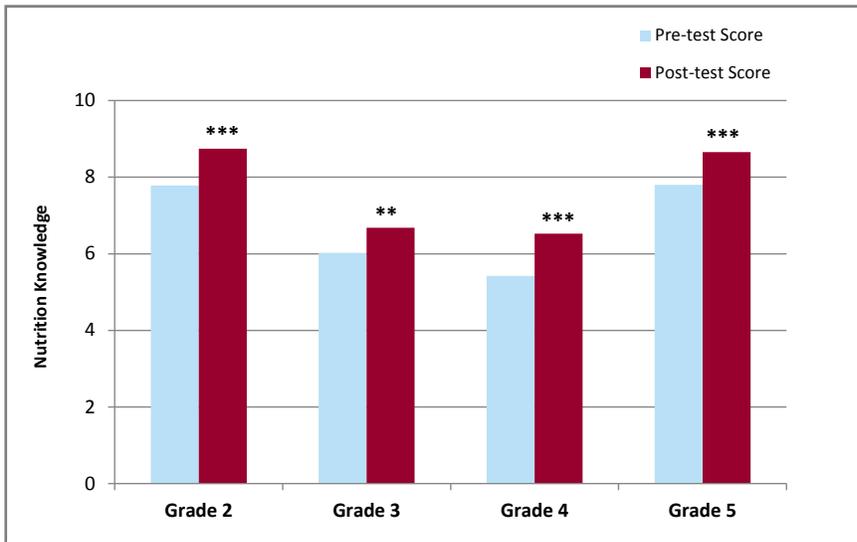
Nutrition

The Nutrition unit included lessons on the nutritional content of different foods, how to read nutrition labels, and how the body uses nutrients. In addition to this knowledge content, the unit explored attitudes and behaviors related to healthy eating.²⁶

For all grades, there was significant improvement in scores on nutrition knowledge items from pre- to post-test. Score improvements were largest at second and third grades; see Figure 21.

²⁶ In all four units, both content and survey items were tailored to the developmental level of the students. Surveys included 17-18 items for grades 2-3 and 25-29 items for grades 4-5.

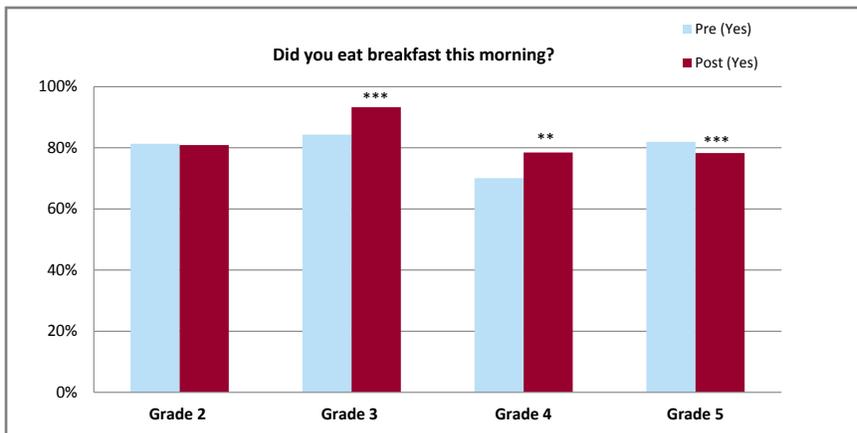
Figure 21. Nutrition knowledge, pre-test vs. post-test



*** $p < .001$; ** $p < .01$

One of the nutrition behavior items asked students, “Did you eat breakfast this morning?” Significant pre-post gains in the percentage of students responding “yes” were seen in grades 3-5, as shown in Figure 22.

Figure 22. Nutrition behavior: Percentage of students responding “yes” to “Did you eat breakfast this morning?”



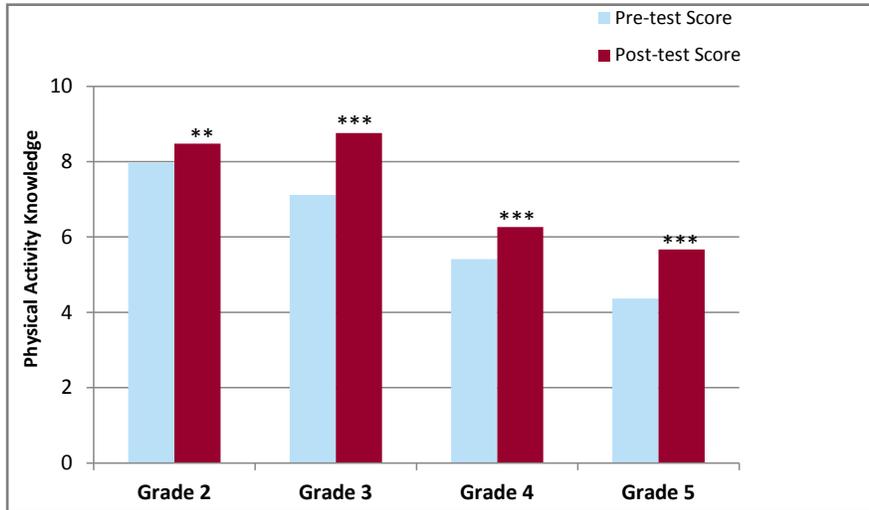
*** $p < .001$; ** $p < .01$

Physical Activity

The Physical Activity unit included knowledge content on the benefits of exercise, types of exercise, and the effects of physical activity on the body; lessons also incorporated attitude and behavior content.

Significant pre-test to post-test gains in physical activity knowledge were seen in all four grades, as shown in Figure 23.

Figure 23. Physical activity knowledge, pre-test vs. post-test



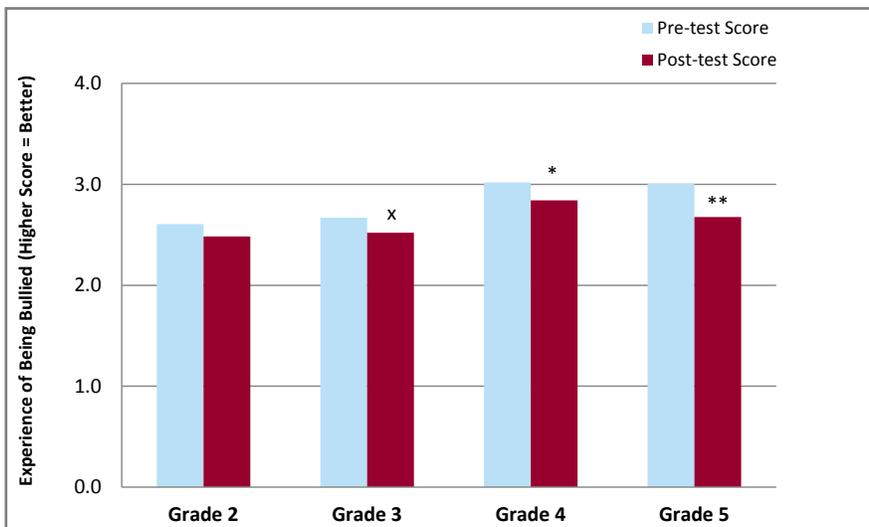
*** $p < .001$; ** $p < .01$

Bullying Prevention

The Bullying Prevention unit included content on friendships, bullying behavior, the experience of being bullied, and bullying prevention.

Figure 24 shows that in grades 3-5, students report significantly more frequent experience of being bullied in the post-test.

Figure 24. Experience of being bullied scores, by grade (reverse coded—higher is better)



** $p < .01$; * $p < .05$; ^x $p < .10$

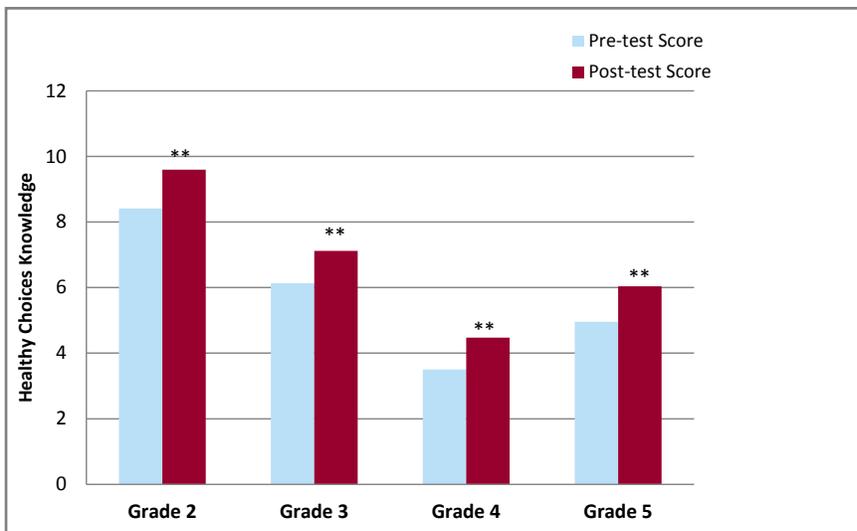
Although at first glance, this appears to be a negative trend, the higher reported levels of victimization may in fact be due to greater awareness of what bullying is and an enhanced capacity to recognize it.

Healthy Choices

In the Healthy Choices unit, lessons include decision-making, bike and car safety, fire safety, preventing illness from spreading, and (for grades 4-5) the effects of smoking and alcohol on the body.

Significant pre-test to post-test gains were seen for knowledge items in all four grades, as shown in Figure 25.

Figure 25. Healthy Choices knowledge, pre-test vs. post-test



** $p < .01$

Impact on Schools

Principal satisfaction

In spring of 2013, CCNX surveyed principals about their satisfaction with the program.²⁷ Of those who completed the survey, in both Boston and Springfield, 100% reported they were satisfied with CCNX as a whole, and with School Site Coordinator (SSC) work with students and families. Principals were also highly satisfied with SSCs' work with teachers: 88% in Boston and 100% in Springfield. Another strong indicator of principal satisfaction was that in both Boston and Springfield, 100% of principals would recommend CCNX to a principal in another school.

In addition to being satisfied with the School Site Coordinators' work, 86% of Boston and 100% of Springfield principals indicated that the delivery of student support has improved at their school as a result of CCNX.

An interesting trend emerged in the 2013 survey: increasingly, principals cited the importance of CCNX on academic achievement and standardized test performance. The trend is illustrated in the first rows of Table 5.

Table 5. Percentage of principals rating City Connects as helpful at addressing each area in their schools

Principal Ratings of the Impact of CCNX on Specific Areas	Boston 2011-12	Boston 2012-13	Springfield 2011-12	Springfield 2012-13
Student academic achievement (i.e., grades)	82%	100%	100%	100%
Student MCAS performance	64%	100%	75%	100%
Student classroom behavior	100%	100%	100%	100%
Student health and well being	100%	100%	100%	100%
Teacher ability to focus on instruction	90%	92%	75%	89%
Teacher ability to support students in the classroom	100%	100%	75%	100%

Source: City Connects 2012 and 2013 principal surveys

As shown in Table 5, over the past two years, a growing percentage of principals reported they believe CCNX is helpful at addressing student academic achievement and performance on statewide test (MCAS) scores. Principals also recognized the helpfulness of CCNX with such important areas as student behavior and teachers' ability to support students in the classroom.

²⁷ In Boston, 26 principals and assistant principals received the survey and 16 completed it; in Springfield, 15 received it and 9 completed it.

The 2012-13 survey asked principals via open-response, “What was the most valuable thing about having City Connects in your school this year?”

Example responses included:

“The way in which children are supported, either through direct service or by advocating for and ensuring they get services.”

—Boston principal

“Connecting with outside providers to obtain services for our students.”

—Springfield principal

“City Connects has placed high-quality professionals in our school who provide an outstanding level of effort and support to our students, families, and teachers.”

—Boston principal

Teacher satisfaction and impact on teaching

In the 2012-13 anonymous survey of teachers at CCNX schools, 98% percent of the 175 teachers responding in Boston and 91% of the 106 teachers responding in Springfield answered “yes” to the question “Are you satisfied with City Connects?”²⁸ Additionally, 97% of Boston and 91% of Springfield respondents would recommend CCNX to a teacher in another school.

In addition to these basic satisfaction questions, the survey asked teachers to report their satisfaction with the support SSCs provide to teachers, the school as a whole, and students. Table 6 summarizes findings.

Table 6. Percentage of teachers satisfied with the supports the School Site Coordinator provides in each area

Are you satisfied with the support City connects provides to:	Boston (N=165)*	Springfield (N=103)*
Teachers (e.g., conducting Whole Class Reviews and assisting with behavior challenges in the classroom)	92%	85%
The School (e.g., coordinating the Student Support Team, outreach to families, partnering with community agencies, their presence on the playground)	98%	92%
Students (e.g., securing services, providing individual support, running lunch groups)	96%	90%

*Not all teachers responded to this question set. Source: City Connects 2013 teacher survey

28 All 384 teachers in the Boston City Connects schools were invited to participate in the survey; of those who received the survey, 175 (46%) completed it. In Springfield, of the 207 teachers who received the survey, 106 (51%) responded. Not every teacher responded to every question.

Table 6 shows high levels of satisfaction across all types of support. The slightly lower percentages in Springfield are due in part to the fact that middle school teachers, new to CCNX in 2012-13, reported slightly lower levels of satisfaction than elementary teachers, who were in their second year of implementing the model. For example, although the table reports 85% satisfaction with support to teachers for Springfield overall, the percentage rises to 88% when only elementary school teachers' responses are analyzed. This pattern is consistent with that seen in implementation over time in Boston.

One of the most important components of School Site Coordinators' work with teachers is the Whole Class Review process. This process gives School Site Coordinators the information they need to tailor services for students. CCNX has learned that the Whole Class Review process enhances most teachers' non-academic knowledge of their students, which in turn informs their work in the classroom. In 2012-13, the majority of teachers agreed that the Whole Class Review process enhanced their awareness of their class as a whole and students as individuals; see Table 7.

Table 7. Percentage of teachers who agree with each statement about the Whole Class Review process, 2012-13

I agree that:	Boston (N=136)*	Springfield (N=76)*
a. The Whole Class Review process enhanced my awareness of the dynamics of my class as a whole.	87%	91%
b. The Whole Class Review process enhanced my awareness of my students as individuals.	89%	91%
c. The Whole Class Review supported my ability to identify new options for working with my students.	86%	87%
d. The Whole Class Review was helpful to me.	84%	89%
e. My instructional practices were enhanced as a result of the Whole Class Review	68%	84%
f. The Whole Class Review process added to my knowledge of the non-academic aspects of my students' lives (e.g., neighborhood and family context).	88%	87%
g. The Whole Class Review process increased my empathy for students.	81%	86%

**Not all teachers responded to this question set. Source: City Connects 2013 teacher survey*

The results in Table 7 suggest that teachers find the Whole Class Review process led to new knowledge and awareness, both of individual students

and of the dynamics of their class as a whole. Findings from this section of the survey begin to shed light on the complexity of how the CCNX intervention affects the work of schools, showing that the majority of teachers not only report higher levels of awareness of the context of students' lives, but also an increase in empathy for students.

These quantitative findings are echoed and expanded upon in open-response survey items. Teachers were asked, "What would you say to a colleague is the most important benefit to City Connects?" A majority of responses cited benefits to students, and many of the comments revealed that the close collaboration with teachers that leads to greater understanding of students as individuals was viewed as integral to these benefits. Example comments include:

"Our City Connects coordinator is ... not only resourceful and proactive because she establishes and strengthens relationships with community partners, but she simply knows and cares about the students. Talking with her about individuals is always helpful to understanding how students think, get motivated, and ultimately learn." —Boston teacher

"The connection they make with the students and their families and the information they pass on to the teachers. Their willingness to listen and consider our concerns. They provide a place where students feel safe and valued." —Springfield teacher

"It is wonderful to have someone who knows about behavior plans available for support. I have learned about making them more realistic for children, and more in line with promoting success." —Boston teacher

"The school has gained a watchful eye toward the emotional and academic needs of all students, and also an experienced [professional] that can function between the worlds of school counselor and teacher." —Springfield teacher

"City Connects helps us access services within the community. When students have specific needs City Connects almost always has a resource to help..." —Boston teacher

Teachers reported they recognize the services CCNX arranges are appropriate to the individual student. The survey asked teachers whether they agreed (yes/no) with the statement, "The support and enrichment

services most students receive are a good fit for their needs.” Agreement was high: in Boston, 93%, and in Springfield, 90%. At the same time, the teacher findings and comments above reveal that for teachers, the way these specific matches are established between students and particular supports matters. In the CCNX model, the connections are made teacher by teacher and student by student. Through this process, teachers gain insights into their students and their classes that deepen their empathy and help inform their strategies for reaching individual students.

Impact on Community Agencies

Number of 2012-13 partnerships

During the 2012-13 academic year, CCNX collaborated with 380 community partners in Boston and 179 in Springfield. Services to students and to schools were provided by (a) community agencies; (b) community institutions and businesses; and (c) universities. Table 8 displays the number of each type of community partner by year for the past two years.

Table 8. Number of CCNX community partners, by year and by partner type

Community Partner Type	Boston		Springfield	
	2011-12	2012-13	2011-12	2012-13
Community Agency	148	192	46	62
Community Institution/Business	83	102	56	91
University Partner	44	38	10	12
Other	16	31	6	14
Total across Partner Types	291	380	118	179

As Table 8 shows, the number of partnerships increased in both Boston and Springfield from 2011-12 to 2012-13. The table reflects growth in partnerships for both districts, and the increase in partnerships in Springfield is partly due to the expansion of the model to middle schools, where in some cases, students need different services than elementary school students do.

Community partner satisfaction

In the 2012-13, 132 community partners working with CCNX schools responded to an online survey. Of the responding partners, 105 identified themselves as working primarily in Boston and 27 in Springfield. In both cities, most respondents reported (via yes/no response) that they are satisfied with their partnership with CCNX: 99% in Boston and 92% in Springfield. Most also indicated that CCNX is effective at identifying students' needs: 99% (Boston) and 88% (Springfield). Almost all would recommend CCNX to another agency: 99% (Boston) and 96% (Springfield).

Partners were asked to rate their levels of satisfaction when working with CCNX schools and non-CCNX schools; they rated their satisfaction overall and along several dimensions of partnership.²⁹ For both Boston and Springfield, an important difference across CCNX and non-CCNX schools was the degree of satisfaction, with higher percentages of partners indicating they are “very satisfied” with CCNX school partnerships than non-CCNX school partnerships; see Table 9.

Table 9. Percentage of community partners who are very or somewhat satisfied with dimensions of partnership with CCNX vs. non-CCNX schools

	Boston		Springfield	
	CCNX (N = 88)*	Non-CCNX (N = 61)*	CCNX (N = 21)*	Non-CCNX (N = 18)*
a. Communication with primary contact	99%	67%	90%	89%
b. Referral process (e.g., identifying students that would benefit from your services)	98%	67%	95%	81%
c. Follow-up on service delivery (e.g., checking to ensure the student(s) received the service)	95%	62%	75%	65%
d. Effectiveness of your partnership in reaching goals	100%	65%	71%	76%
e. Providing you with feedback that would improve service delivery, when appropriate	90%	60%	79%	56%
f. Providing opportunities for you to provide feedback to the school	93%	61%	79%	53%
g. The cultural competence of your primary contact in the school	98%	86%	100%	67%

*Not all partners responded to every question. Source: City Connects 2013 community partner survey

Table 9 reveals several dimensions of good collaboration for which respondents were more often “very satisfied” or “somewhat satisfied” with

29 These dimensions of partnership included communication, referrals, follow-up, meeting goals, tailoring services, providing student support, and cultural sensitivity. Participants were asked to use a four-point scale to denote level of satisfaction: very satisfied, somewhat satisfied, somewhat dissatisfied, and very dissatisfied. Not applicable was also listed as an answer choice.

CCNX schools than with non-CCNX schools. Differences are particularly notable in the referral process, the opportunities provided for partners to give feedback to the school, and the cultural competence of the primary contact in schools. While Table 9 reflects somewhat higher reported rates of satisfaction in Boston than in Springfield, this difference across districts is less notable in Table 10, which reports only the “very satisfied” responses.

Table 10. Percentage of community partners who are very satisfied with dimensions of partnership with CCNX vs. non-CCNX schools

	Boston		Springfield	
	CCNX (N = 88)*	Non- CCNX (N = 61)*	CCNX (N = 21)*	Non- CCNX (N = 18)*
a. Communication with primary contact	81%	15%	62%	22%
b. Referral process (e.g., identifying students that would benefit from your services)	60%	16%	68%	13%
c. Follow-up on service delivery (e.g., checking to ensure the student(s) received the service)	69%	12%	60%	12%
d. Effectiveness of your partnership in reaching goals	65%	18%	57%	12%
e. Providing you with feedback that would improve service delivery, when appropriate	58%	16%	47%	17%
f. Providing opportunities for you to provide feedback to the school	55%	16%	47%	18%
g. The cultural competence of your primary contact in the school	78%	39%	75%	11%

*Not all partners responded to every question. Source: City Connects 2013 community partner survey

As Table 10 shows, in both Boston and Springfield, many more community partners were “very satisfied” with their work in CCNX in contrast to non-CCNX school partnerships.

The survey included open-ended questions that offered community partners the option to comment on their partnership with CCNX. Responses included the following:

“At the schools where I have been able to make contact with a City Connects Site Coordinator, I have had a much easier time identifying students who would be a good fit for our program and ensuring that those students follow through with the process. When I have made contact with City Connects, it has been a highly positive experience.”

—Boston community partner

“The City Connects staff members at our school are incredibly knowledgeable, helpful, and committed to the students as well as to working with partners at the school. They’ve taken the time to learn about our program and to ensure that they are making appropriate referrals to our program. They consistently follow up with us and are ... collaborative and easy to work with.”

—Boston community partner

“City Connects workers have helped identify students whose skills and needs make them good candidates for our...programs.”

—Springfield community partner

“I LOVE the City Connects Coordinators! They have gone above and beyond in connecting students to my program. They have helped students/families with the registration paperwork, sent it to me in a timely fashion and do check-ins to make sure we are ‘all set.’ I can’t say enough about them!”

—Springfield community partner

Conclusions

City Connects has shown that optimized student support can be delivered in a high-impact, cost-effective way. By making use of existing structures in the public schools, and by leveraging the rich resources of the city's community agencies, City Connects is able to link students to the services and enrichments that match their individual strengths and needs.

The successful expansion of City Connects to a new city—Springfield, MA—demonstrates that the model is scalable. Measures such as the number of Whole Class Reviews completed, community partnerships established, and services delivered indicate that City Connects is being implemented in Springfield with high fidelity to the model. The initial student outcomes analysis reported here suggests that City Connects contributes to improved academic achievement after only one year of implementation. Expansion to a new city with even higher levels of poverty and lower tax revenue has provided encouraging evidence of the robustness of the model, suggesting it is a feasible way to address out-of-school factors impacting achievement in urban settings across the state and country.

Students enrolled in City Connects elementary schools benefit long after they have left the intervention itself and move into middle school and high school. As shown in this report, students enrolled in City Connects schools outperform their non-City Connects peers on measures of academic achievement and life chances, such as middle school report card scores, standardized test scores, attendance at selective high schools, chronic absenteeism, and rates of school dropout. Careful attention to the unique skills, talents, and needs of each student makes a difference.

References

- Berliner, D. C. (2009). Poverty and potential: Out-of-school factors in school success. Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Available: epicpolicy.org/publication/poverty-and-potential
- Blow, C. M. (2011, October 28). American's exploding pipe dream. *The New York Times*. Retrieved November 22nd, 2011 from www.nytimes.com/2011/10/29/opinion/blow-americas-exploding-pipe-dream.html?_r=2&hp
- Bryk, A.S., Sebring, P.B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago: Chicago University Press.
- Coleman, J.S., Campbell, E.Q., Hobson, C.J., McPartland, J., Mood, A.M., Weinfield, F.D., et al. (1966). *Equality of educational opportunity*. Washington, DC: Office of Education, U. S. Department of Health, Education and Wellness.
- Coley, R.J., & Baker, B. (2013). Poverty and education: Finding the way forward. The ETS Center for Research on Human Capital and Education. Available: www.ets.org/s/research/pdf/poverty_and_education_report.pdf
- Dearing, E. (2008). The psychological costs of growing up poor. *Annals of the New York Academy of Sciences* (Special Issue: Scientific Approaches to Understanding and Reducing Poverty, S. G. Kaler & O. M. Rennert, Eds.), 1136, 324-332.
- Harrington, M. (1962). *The other America: Poverty in the United States*. New York: Macmillan.
- Imbens, G.W. (2000). The role of the propensity score in estimating dose-response functions. *Biometrika*, 87(3), 706-710.
- Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2006). The costs and benefits of an excellent education for all of America's children. Teachers College, Columbia University.
- Phillips, M., Brooks-Gunn, J., Duncan, G., Klebanov, P. & Crane, J. (1998). Family background, parenting practices, and the black-white test score gap. In C. Jencks and M. Phillips (Eds.), *The black-white test score gap*. Washington, D.C.: Brookings Institution Press.

Raudenbusch, S., & Bryk, A. (2002). *Hierarchical linear models: Applications and data analysis methods*. Second ed. Thousand Oaks, CA: Sage Publications.

Raudenbusch, S., & Liu, X. (2001). Effect of study duration, frequency of observation, and sample size on power in studies of group differences in polynomial change. *Psychological methods*, 6(4), 387-401.

Rothstein, R. (2010). How to fix our schools. *Issue Brief #286*. Washington, DC: Economic Policy Institute, October 14, 2010. Available: www.epi.org.

Rothstein, R. (2013). Does “poverty” cause low achievement? The Economic Policy Institute blog, October 3, 2013. Available: www.epi.org/blog/poverty-achievement/

Walsh, M.E., & DePaul, G. (2008). The essential role of school-community partnerships in school counseling. In H. L. K. Coleman & C. Yeh (Eds.), *Handbook of school counseling* (pp. 765-783). Baltimore: MidAtlantic Books & Journals.

Walsh, M. E., & Murphy, J. (2003). *Children, health, and learning*. San Francisco: Jossey-Bass.

City Connects Staff • (2012-13)

Mary E. Walsh, Ph.D.

Executive Director, City Connects

*Kearns Professor, Department of Counseling, Developmental and
Education Psychology, Lynch School of Education, Boston College
Director of the Boston College Center for Optimized Student Support*

Claire Foley, Ph.D.

Associate Director and Director of Research Reports, City Connects

Visiting Professor in Linguistics, Boston College

Beverly Ross Denny, M.B.A.

Director of New Initiatives, City Connects

Leah Lindsay

Director of External Relations, City Connects

Jennifer Coyle, M.A.

Administrative Officer, City Connects

Mary Howard

Manager, Office Administration, Center for Optimized Student Support

Brian Ward, M.A.

Technology Consultant, City Connects

City Connects Research Staff • (2012-13)

George Madaus, Ed.D.

Director of Evaluation, City Connects

*Boisi Professor Emeritus, Department of Educational Research,
Measurement and Evaluation, Lynch School of Education,
Boston College*

*Founding Director, Boston College Center for Testing, Evaluation,
and Educational Policy*

Anastasia Raczek, M.Ed.

Associate Director of Evaluation, City Connects

Terrence Lee-St. John, M.Ed.

Research Associate

Consultants • (2009-present)

Henry Braun, Ph.D.

*Boisi Professor, Department of Educational Research,
Measurement and Evaluation, Lynch School of Education,
Boston College*

*Director, Boston College Center for Testing, Evaluation and
Educational Policy*

Eric Dearing, Ph.D.

*Associate Professor, Department of Counseling, Development, and
Educational Psychology, Lynch School of Education,
Boston College*

Norman Hursh, Sci.D.

Associate Professor of Counseling Psychology, Boston University

Maureen Kenny, Ph.D.

Professor, Department of Counseling, Development, and Educational Psychology, Lynch School of Education, Boston College

Julie Paquette MacEvoy, Ph.D.

Assistant Professor, Department of Counseling, Development, and Educational Psychology, Lynch School of Education, Boston College

Graduate Research Assistants • (2012-13)

Bercem Akbayin, M.Ed.

Shea Kelly

Chen An, M.Ed.

Rebecca Ledford

Sarah Backe, M.A.

Francesca Longo

Teresa Battaglia

Erin Sibley, Ed.M.

Jillian Boudreau

Evan Michel, MA.

Michael Capawana, M.A.

Amy Orecchia, M.A.

Kelly Collins

Stephanie Paulk, M.A.

Jaime Denelle

Katherine Shields, Ed.M.

Interns • (2012-13)

Katherine Fragapane

Kathryn Raskin

School Data Liaisons

Kamalkant Chavda, Ph.D., Boston Public Schools

Paul Foster & Chekesha Lockett, Springfield Public Schools

External Evaluators • (2009-present)

Albert Beaton, Ed.D.

Former Augustus Long Professor Education, Lynch School of Education, Boston College

Director of design, research, and data analysis for the National Assessment of Educational Progress (NAEP)

Chairman of IEA's Technical Advisory Committee (1989-1993)

Jennifer Hebert-Beirne, Ph.D.

Vice President of Research and Development, Women's Health Foundation, Chicago

Former policy planner and analyst, Chicago Department of Public Health

Thomas Kellaghan, Ph.D.

Director, Educational Research Centre, St. Patrick's College, Dublin

Fellow of the International Academy of Education

President, International Association for Educational Assessment (1997-2001)

Patrick McEwan, Ph.D.

Whitehead Associate Professor of Critical Thought, Department of Economics, Wellesley College

Paul Holland, Ph.D.

Professor Emeritus at the Graduate School of Education and Department of Statistics, University of California, Berkeley

Fellow of the American Educational Research Association

Elizabeth Reisner, M.Ed.

Founder and Manager, Policy Studies Associates, Inc., Washington D.C.

Implementation Team • (2012-13)

Patrice DiNatale, M.Ed.

Director of New Practice

Alison Stahl, M.S.W.

Director of Implementation

Audra Vernon, M.Ed.

Implementation Systems Coordinator

Program Managers • (2012-13)

Raisa Carrasco-Velez, M.P.A.

Group A Program Manager, Boston

Raghida Jeranian, M. Ed.

Group B Program Manager, Boston

Julie Donovan, M.S.W.

Group A Program Manager, Springfield

Boston School Site Coordinators • (2012-13)

Brendan Adams, M.Ed., Jackson Mann K-8 School

Pam Belford, M.S., Dever-McCormack K-8 School

April Bouzan, M.Ed., Edison K-8 School

Courtney Bruno, M.S., Mission Hill K-8 School

Elizabeth Centeio, M.Ed., Dudley Street Neighborhood School

Amy Cluff, M.S.W., Jackson Mann K-8 School

Emilie Cromer, M.S., Dever-McCormack K-8 School

Claire DeRosa, M.S., Elihu Greenwood Leadership Academy

Mark Griffin, M.A., Edison K-8 School
Lilly Guttenplan, M.S.W., John F. Kennedy Elementary School
Joseph King, M.Ed., Holland Elementary School
Ursula Lucas, M.S., Trotter Elementary School
Lauren Melone, M.A., Clap Innovation School
Nikki Robinson, M.A., Winship Elementary School
Milord Mirville, M.A., Mason Elementary School
Sarah O'Connor, M.S.W., Gardner Pilot Academy
Sara Pizzute, M.S.W., Eliot K-8 School
Adam Prisby, M.Ed., Holland Elementary School
Catherine Riede, M.Ed., Quincy Elementary School
Derronda Williams, M.A., Bates Elementary School
Nicole Young, M.S.W., Quincy Elementary School

Springfield School Site Coordinators • (2012-13)

Antonia Cardaropoli, M.A., Chestnut Accelerated Middle School
Caitlin Casey, M.S.W., Gerena Community School
Meagan Graham, M.S.W., Kiley Middle School
Jennifer Grant, M.S.W., Brightwood Elementary School
Stephanie Sanabria, M.A., Kennedy Middle School
Karen Schreiner, M.A., Zanetti Montessori Magnet School
Doris Schuh, M.Ed., Gerena Community School
Katie Singerman, M.Ed., White Street Elementary School
Lauren Zanotti, M.Ed., Brookings Elementary School

Coordinators Implementing the New Balance Foundation Health & Wellness Program • (2012-13)

Portia Abernathy, M.A., M.Ed., Mason Elementary School

Caitlin Kelly, M.Ed., Edison K-8 School

Consultant • (2012-13)

Michele Montavon, Ph.D.

Director of Health Education, Worcester Public Schools

Information Technology Support

Ronald Ko, M.S.

Barry Schaudt, Ph.D.

Artwork, Graphics, and Layout

Kevin Keane, Genius Pool



★ ★ ★

