The Impact of City Connects

Progress Report 2022

cityconnects

Mary E. Walsh
Center for Thriving Children
BOSTON COLLEGE

INTRODUCTION FROM THE EXECUTIVE DIRECTOR

City Connects is pleased to present its 2022 Progress Report. Studies described in the report provide new evidence of positive outcomes resulting from the intervention. As we continue to expand our reach to serve a growing number of students and build our evidence base, we are encouraged by these findings and are more committed than ever to our work supporting children and families.

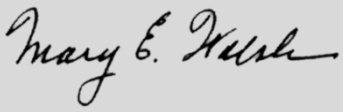
Again this year, our report is released in a time of ongoing challenge for schools, families, and communities across the country and around the world. Many of the disruptions of the Covid-19 pandemic continue. Our Coordinators and Program Managers have worked steadily with our partner schools and communities to deliver needed supports and services to children and families during this challenging time, while our Research and Evaluation team has continued to study the City Connects intervention, with a lens on the unique challenges and opportunities of the last two years.

We are grateful to the Coordinators and Program Managers who implement City Connects in their communities to support children and families. We are thankful for the support and partnership of the public, private, and charter schools in which we work in Boston, Springfield, Salem, and Southbridge, Massachusetts; Dayton and Springfield, Ohio; Minneapolis, Minnesota; Indianapolis, South Bend, Muncie, and Gary, Indiana; Poughkeepsie, New York; and Dublin, Ireland. In each of these cities, we are grateful to the superintendents, administrators, principals, teachers, student support professionals, school staff, data liaisons, and others who have helped to introduce and implement City Connects in their communities and supported this work their schools. We appreciate our university partners in implementation: Mary Immaculate College in Limerick, Ireland and the Center for Vibrant Schools at Marian University in Indianapolis, Indiana. We are extremely grateful to our ever-expanding network of community partners, who have collaborated with us to deliver their services to children and families in schools and in the community, despite the challenges and limitations of the ongoing pandemic. Their creativity and dedication to serving children and families inspire us.

We value and appreciate the steadfast support of Boston College and the Lynch School of Education and Human Development. We sincerely thank each of our generous foundations and donors for their support. Their continuing support of City Connects over more than twenty years has allowed us to serve students in our hometown of Boston and farther beyond than we could have imagined. We are deeply grateful to an anonymous donor, whose significant endowment gift to our newly renamed Center for Thriving Children ensures that our work will continue long into the future. The support for our mission from a broad base of funders – especially during this challenging time – has allowed us to continue our work while renewing our commitment to the children and families who have been disproportionately impacted by the ongoing pandemic and deep societal injustices.

City Connects makes a difference for children throughout their lives, from preschool through post-secondary education, improving their educational success and life chances. We are grateful to everyone who makes this work possible, and we look forward to continuing this work together.

With gratitude,



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North East Inner City Program Implementation Board, Dublin, Ireland

Center for Vibrant Schools, Marian University, Indianapolis, IN

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Introduction

In high-poverty urban schools, children face out-of-school challenges that can impede their success in the classroom and in life. Since the 1960's, researchers have concluded that socioeconomic background is a significant factor affecting students' academic achievement (Harrington, 1962; Coleman et al., 1966). Current research continues to confirm that contexts beyond the school are critical, accounting for up to two-thirds of the variance in student achievement (Phillips et al., 1998; Rothstein, 2010). The achievement gap between students living in poverty and their more well-off peers continues to grow (Duncan & Murnane, 2011; Reardon, 2013). As identified by Berliner in 2013, poverty is the *single most critical factor* to address in education reform.

This collective work points to a straightforward conclusion: schools cannot close the achievement gap without a systemic approach to addressing out-of-school disadvantage (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Walsh & Murphy, 2003). Though much research has been dedicated to documenting the consequences of inequality, less has focused on practical approaches to reduce inequality in educational outcomes (Carter & Reardon, 2014).

City Connects emerged in response to this need for a systemic approach to addressing out-of-school factors that can impede a student's ability to achieve and thrive (Walsh & Brabeck, 2006). Starting more than twenty years ago in a single Boston Public school, City Connects continues to grow. The partnership includes Boston College, schools and school districts, and a vast network of community agencies.

During this period of growth over the last several years, and particularly in the context of the ongoing Covid-19 pandemic, interest in this work has grown in the worlds of practice, research, and policy. Among practitioners, the work of addressing out-of-school factors that influence achievement and thriving in schools has come to be described as "Integrated Student Support" (ISS) (e.g., Moore et al. 2014, 2017). Especially now, as schools across the country – and around the world – confront the ongoing effects of the Covid-19 pandemic, Integrated Student Support programs like City Connects can offer schools a systematic way to meet students' out-of-school needs, unlocking their potential in the classroom and beyond.

There is growing support for this work at the federal level, as the Covid-19 pandemic vividly illuminated these out-of-school needs and the importance of addressing them. In its August 2021 handbook to guide school reopenings, the United States Department of Education highlighted City Connects as an example of an Integrated Student Support Services Model that can help schools to "leverage the school site and community-based resources to ensure students' social, emotional, physical, mental health, and academic needs are better met, improving outcomes for students and their families" (U.S. Department of Education, 2021).

Beyond the context of the Covid-19 pandemic, educators, researchers, and policy makers are increasingly looking to a broader array of approaches to offering comprehensive supports and services to children and families. In this approach, the school becomes a community hub, bringing together not only academics, but other services and programs from the community to help children and families thrive. This approach to schooling dovetails with the work of City Connects, which engages resources in the school and community to provide compressive support to all students.

Evidence demonstrates that being in a school that implements City Connects makes a difference for students. In elementary school, students in schools with City Connects significantly outperform their peers on report card scores in reading, writing, and math, and on statewide test scores in math and English Language Arts (Walsh et al., 2014; Lawson et al., under review). After leaving City Connects and moving on to middle school, students scored higher on statewide math and English language arts tests than comparison peers who were never enrolled in a school implementing City Connects (Walsh et al., 2014). Students previously enrolled in elementary schools with City Connects later demonstrated lower rates of chronic absenteeism and dropped out of high school at about half the rate of comparison students (City Connects, 2014; Lee-St. John et al., 2018).

What is City Connects?

City Connects was developed in response to the need for a systemic way to address the out-of-school factors that can impede a student's ability to succeed and thrive in school (Walsh & Brabeck, 2006). It is an evidence-based approach to helping students—academically, socially, emotionally, and physically—by connecting each and every child to a tailored set of prevention, intervention, and enrichment services in the school and community. When a school implements City Connects, effective student support becomes central to its mission and day-to-day operations. The array of services and enrichments in the community also become central to the school's role in supporting students and evidence becomes available for evaluating effectiveness.

Student support is not one-size-fits-all. The City Connects practice recognizes this and meets every student's individual needs by connecting each to a unique combination of enrichments and services – whether it includes a mentor, an afterschool sports program, a pair of eyeglasses, or an emergency mental health service. A school-based City Connects Coordinator is responsible for this work on the ground. Coordinators –master's-trained school counselors, social workers, or mental health professionals – meet with each classroom teacher and other school staff to discuss the strengths and needs of each and every child in the areas of academics, social/emotional/behavioral growth, health, and family. Emerging from this meeting is an individualized plan for each student. Coordinators then leverage the resources available in the school and community, and in consultation with the family, work to carry out the plan. Coordinators do this work effectively because they work to cultivate partnerships with community agencies, serving as a point of contact in schools. Through their ongoing collaborate with the school, families, and service providers, they help bridge the gap between a student's need and the right supports.

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Why City Connects?

Every student deserves the opportunity to learn and thrive in school, but for those living in poverty, out-of-school factors can be pervasive and severe. While schools and districts recognize the need to address these factors, they often lack a systematic way of doing so.

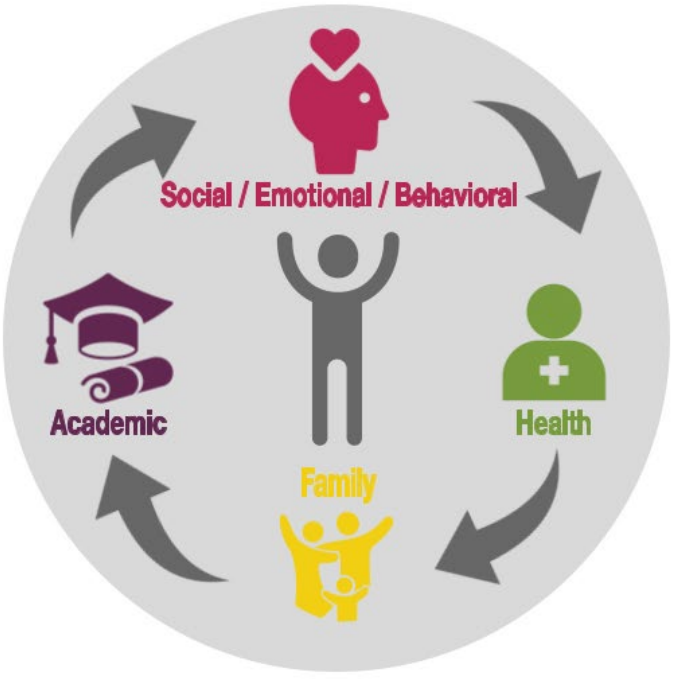
City Connects can meet this need. It offers an approach, grounded in developmental science, to addressing these out-of-school factors. There are **four core principles** of effective practice emerging from the developmental sciences that have informed the development of City Connects and continue to guide the work of addressing the out-of-school factors that impact achievement. Effective practice is **comprehensive**, **customized**, **coordinated**, and **continuous**. City Connects operationalizes these principles and puts them into practice.

COMPREHENSIVE

Children develop across biological, psychological, and social domains (Bronfrenbrenner & Morris, 2006; Ford & Lerner, 1992). Each domain is simultaneously impacting each of the other domains (Rutter, 2007). For this reason, student support must take different developmental domains into account. At the same time, children's needs span a continuum of intensity, from mild to severe. Therefore, student support must be offered at various levels of intensity: prevention, early intervention, and intensive/crisis intervention (Adelman & Taylor, 2006).

As a **comprehensive** approach, City Connects considers the overlapping impact of four developmental domains on children's readiness to learn and thrive in school. This comprehensive approach makes it possible to seek the underlying cause behind an apparent challenge and respond appropriately. For example, what surfaces as an academic need may have social-emotional roots. See Figure 1.

FIGURE 1. The interaction of children's developmental domains



Supports and services are identified in all of these areas at the levels of prevention/enrichment, early intervention, or intensive intervention.

CUSTOMIZED

Child development is dynamic and complex, and each child experiences a unique interaction between personal characteristics and their environment (Cicchetti & Sroufe, 2000). As a result, no two children's experiences or developmental trajectories are identical (Sameroff, 2009). Moreover, developmental science points to the value of addressing children's strengths in addition to their needs, creating conditions for resilience (Masten & Tellgen, 2012). Thus, to be effective, student support practices must tailor approaches in ways that consider the individual strengths and needs of every student in a school.

The City Connects practice considers both strengths and needs of every student in a school across these domains, and connects each to services at appropriate levels of intensity in a **customized** way. The practice ensures that each and every child in a school is considered individually to find the unique combination of supports and services that will help that child thrive. Customization makes it possible to respond to an identified root cause behind a challenge observed by teachers and others in the school. For example, if the comprehensive review of a student's strengths and needs reveals a possible social-emotional cause for an academic struggle, then offering a social-emotional support—for example, a leadership opportunity or a social skills group—may lead to academic improvement.

Customization also occurs at the level of the school. Research indicates that the climate and overall social conditions of schools have consequences for academic development (Berkowitz et al., 2017; Thapa et al., 2013). To widen opportunities for enrichment, for prevention purposes, and also in cases when a need becomes evident within or across entire grade levels, supports are brought into the school to serve large numbers of students.

COORDINATED

Developmental science points out the mutually influential relationships among a child and his or her home, school, and neighborhood (Bronfenbrenner & Morris, 2006). Aligning efforts across these contexts is especially important for children at economic disadvantage (Dearing et al., 2016; Garcia Coll et al., 1996). For example, given the critical role of families in children's development, it is important that student support plans be coordinated with family collaboration. Also, effective student support involves an assessment of strengths and needs with teacher input. To provide the full array of supports students need, schools should leverage the work of providers and resources from the community (Brabeck & Walsh, 2003; D'Agostino, 2013). Coordination requires communication and systems for aligning the efforts of these people and groups.

City Connects is **coordinated**, structurally linking districts and schools with community partners to make available the full array of supports and services students may need.

This partnership includes structures to enable coordination. For example, core processes ensure teacher input in a review of strengths and needs of every child, close collaboration with families in developing and carrying out individual support plans, and regular communication with community agencies providing services.

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CONTINUOUS

Developmental science suggests that continuity of care in a safe, predictable, and stable environment positively impacts development (Waters, Weinfield, & Hamilton, 2000). Implementation of student support should promote this continuity and stability. Further, connecting students to the supports that best match their evolving strengths and needs is an iterative process because development is dynamic and changes over time. For example, early childhood experiences affect what happens in elementary school and beyond (National Research Council and Institute of Medicine, 2000). As a result, children may need varying levels of support across the continuum of their development. Developmental science makes clear that, given appropriate attention to contexts, the course of a child's development can be altered and enhanced.

To ensure that student support is **continuous**, City Connects developed a practice in which the individual strengths and needs of every student are reviewed every year, and in which a secure, proprietary database makes it easy to follow up on each student's service referrals and progress throughout the school year and across years. While it isn't possible to predict what events might take place in a student's life, it is possible to respond with consistency and care.

What distinguishes City Connects?

Although City Connects shares the goal of providing comprehensive, integrated student support with other programs and models, several features of City Connects are distinct:

Grounding in developmental science. As described in detail above, several decades of theoretical and empirical research on the nature of child development have informed both the development of City Connects and its continuous improvement. This grounding helps ensure that the model is sensitive to, and responds to, the reality of how children grow and how they can best be supported.

Attention to four developmental domains to understand root causes. City Connects seeks to understand individual children's strengths and areas of challenge in academics, social/emotional/behavioral, health, and family domains. In seeking this understanding, City Connects builds on its grounding in developmental science to determine not just the surface issues, but the underlying reasons for any challenges.

Awareness of both strengths and needs of each child. Developmental science also supports City Connects' focus not only on individual needs but also on a child's strengths and interests as a key strategy to promote positive development.

Belief in schools as the epicenter of support. Based on a deep and ever-evolving awareness of how schools work, City Connects offers a way to enhance and transform roles and structures that are already present in a school, making them more effective and efficient in their support for students.

Highly-trained coordinator of student support. In every school implementing City Connects, a master's-trained school counselor, social worker, or related professional, holding state licensure in his or her field, serves as a City Connects Coordinator. These requirements ensure that the Coordinator has the professional skills needed to identify root causes that can reveal which supports will most benefit a student.

For each student, a tailored support plan that reflects the teacher's input. Through a defined and documented process that is supported by a proprietary software system, every year, each student in the school receives a customized support plan. The City Connects Coordinator meets with each teacher individually to discuss every student in the class. In light of each student's unique strengths, needs, and interests, a support plan of services and enrichment opportunities is drafted.

For students at significant risk, an in-depth review and goals. When the teacher – or anyone – in a school implementing City Connects has significant concerns about a student, the Coordinator initiates a structured process for an in-depth review. This meeting involves school staff representing multiple professions, such as teachers, student support staff, and school administration.

Defined paths of collaboration with families and community agencies. Cultivating and maintaining community partnerships is a key aspect of the Coordinator role. The City Connects practice and its software make it possible to identify appropriate school- and community-based supports for students and to collaborate with families in decisions about services, referrals, and delivery.

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Fidelity monitoring system. Through the proprietary software system, information can be automatically compiled to show the degree to which City Connects is being delivered in any location and network-wide. Developed with reference to research in implementation science, the system supports scaling and sustainability.

Positive outcomes for students, schools, and communities. Strong evidence points to City Connects' effectiveness in supporting positive outcomes for children and youth, both in academic achievement and indicators of life chances. With the addition of a study involving random assignment to City Connects schools, this research is among the strongest support available for the effectiveness of ISS. Annual anonymous surveys show high levels of satisfaction among principals, teachers, and community agencies.

A robust body of research demonstrating the effectiveness of the intervention. Over more than 20 years, City Connects has continued to amass a growing body of evidence demonstrating that being in a school that implements City Connects makes a difference for students. The consistency of these findings across methods, samples, and sites argues that City Connects is not merely associated with, but causes, these benefits for students.

- In **elementary school**, students who attend schools implementing City Connects significantly outperform their peers on report card scores in reading, writing, and math (Walsh et al., 2014). A 2020 study showed that students randomly assigned to schools implementing City Connects via a school choice lottery demonstrated significantly higher statewide test scores by grade 5 than peers who were not randomly assigned to City Connects (City Connects, 2020).

- After leaving City Connects and moving on to **middle school**, students scored higher on statewide math and English language arts tests than comparison peers who were never enrolled in a school implementing City Connects (Walsh et al., 2014). Students previously enrolled in elementary schools with City Connects later demonstrated lower rates of chronic absenteeism and dropped out of **high school** at about half the rate of comparison students (City Connects, 2014).

- More recent studies have expanded the range of evidence that City Connects matters for children and youth. **Preschool** students who later enrolled in schools implementing City Connects significantly outperformed former preschool students who never received City Connects in academic achievement in elementary school (City Connects, 2020). Moreover, **after leaving high school**, students previously enrolled in schools with City Connects significantly surpassed comparison peers in both enrollment and degree completion at two- and four-year colleges. Together, these recent findings support the claim that rigorous integrated student support can sustain the benefits of other supports (such as preschool) and yield long-lasting enhancements to students' life chances.

The story of our growth

Since its inception in the 1990s, City Connects has grown from a local collaboration to a nationally and internationally implemented model of integrated student support. As an intervention that values evidence, City Connects has continued to collect and analyze data on its effectiveness, with a consistent set of findings that shows City Connects makes a difference for students.

START UP

The partnership that led to City Connects began when researchers, school leaders, and community agencies jointly recognized that out-of-school factors have a significant influence on students' experiences in school. Traditionally, efforts to address these factors in school could be unsystematic, uncoordinated, and lacking structure. Community agencies that could provide the needed supports and resources lacked connections to schools, and therefore, to the students who could benefit. Research pointed to growing evidence from the developmental sciences that could inform an effective approach.

Together, stakeholders from the schools, the community, and the university worked to develop a system to address these out-of-school factors in order to better support students and to define a practice that systematized the work traditionally done in schools by school counselors, nurses, psychologists, community partners, and others. The result was City Connects. It was designed to permit data collection and measurement of outcomes, and was initially implemented in one Boston school in the fall of 2000.

REPLICATE

Since then, City Connects has gradually expanded and has proved to be replicable. In 2007-08, City Connects launched in additional schools in a new geographic area of the city of Boston. In fall of 2008, implementation began in several urban Catholic schools in Boston and to City Connects' first "distant site" in Dayton, OH. Two years later, City Connects' success led to the program's launch in several "Turnaround" (consistently low-performing) schools in Boston Public Schools, as well as to public schools in Springfield, MA.

During this replication phase, City Connects' evidence base grew dramatically, demonstrating that students in City Connects schools outperform their peers in measures of academic achievement and thriving in elementary school, with benefits persisting into middle school, high school, and beyond.

SCALE

As City Connects' evidence base has continued to expand, interest in City Connects as a comprehensive approach to supporting all students has grown nationally and internationally.

In 2020, in a partnership initiated by one of Ireland's leading teacher preparation institutions, Mary Immaculate College in Limerick, City Connects leadership began collaborating with civic leaders in the North East Inner City (NEIC) neighborhood of Dublin, Ireland. The Irish Department of Education and Department of Children, Equality, Disability, Integration, and Youth, together with the NEIC community, led an effort to launch City Connects in ten Dublin primary schools in fall 2020.

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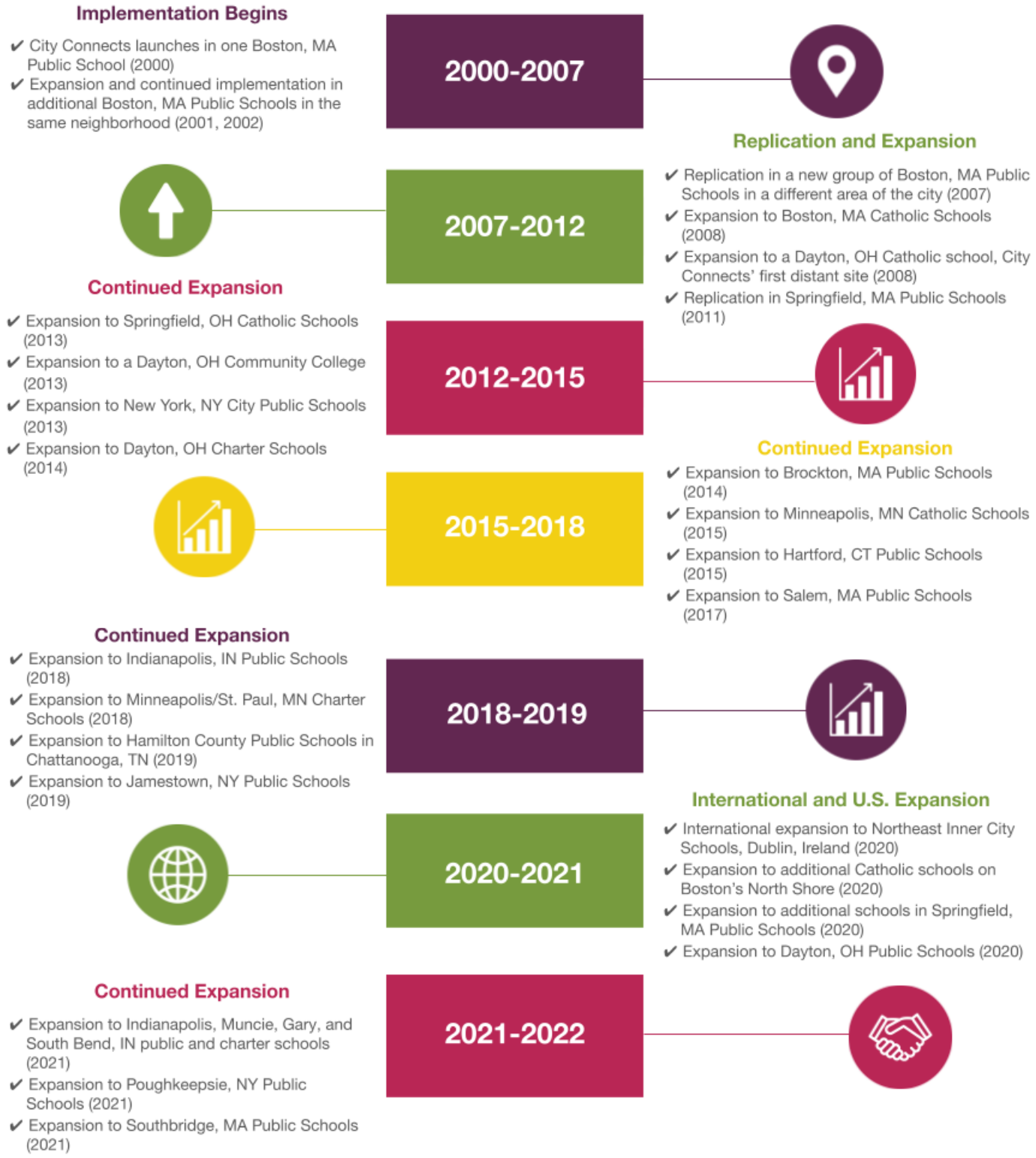
In 2021, through a partnership with the Center for Vibrant Schools at Marian University, City Connects launched its first U.S. Technical Assistance Center. The TA Center serves as a cornerstone of implementation in the Midwest region of the United States. Through this collaboration, City Connects will reach students across Indiana – in Indianapolis, Gary, South Bend, and Muncie. The TA Center will also provide coaching, supervision, and oversight to City Connects' well-established Catholic, charter, and public school sites in Dayton and Springfield, OH.

City Connects is now recognized widely as a comprehensive approach to student support that can be delivered at low cost and that yields significant, positive outcomes for children's achievement and life chances. It is currently implemented in over 130 public, charter, and Catholic schools across five states and in ten schools in Dublin. In the 2020-21 school year, over 26,000 students were served, a number which in 2021-22 grew to more than 40,000 following a significant expansion.

City Connects expanded at a managed and intentional pace. This gradual expansion allowed the implementation of City Connects to grow in alignment with – rather than ahead of – evaluation. This also allowed for continuous improvement. Figure 2 illustrates the growth and development of City Connects.

FIGURE 2. Timeline of City Connects' expansion



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Model and implementation

Model

The City Connects model is grounded in the literature on implementation science informing sustainable interventions (Foley et al., 2015). Before City Connects begins implementation, a steering committee is formed, typically in the spring, with representation from both City Connects and the school or district. This committee engages in several stages of planning. First, City Connects works with the district to conduct a needs assessment, seeking the input of principals, teachers, families, students, and community agencies to understand current strengths and needs in the area of student support. An environmental scan identifies a range of agencies and resources in the community. Next, City Connects reports findings to the district and, if the district decides to move forward with implementation, provides infrastructure and supports, including recommendations for recruiting and hiring, and an orientation process for principals. This process enables a shared vision for success and alignment of priorities. Following this planning process, implementation is launched, typically at the start of an academic year.

THE CITY CONNECTS COORDINATOR

At the core of the intervention is a City Connects Coordinator in each school, trained as a licensed 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 Coordinator follows standardized practices codified in the City Connects Practice Manual, as shown in Figure 3 and detailed in the components below.

In some districts, the Coordinator is a new position created in the school, and in others, an existing position, such as a school counselor role, is redefined to include responsibility for implementing the City Connects model. Depending on the size of the school, two Coordinators may be hired. Typically, there is one Coordinator for every 400 students in the school.

The Coordinator is central to several core components of the City Connects model. Through these practice elements, the Coordinator collaborates with classroom teachers and other student support professionals in the school to develop a tailored individual support plan for each student in the school.

WHOLE CLASS REVIEW

The Coordinator works with each classroom teacher to review each and 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):

- Identifying the strengths and needs of each student across four domains (academic, social/emotional/behavioral, health, and family)
- Developing an individual student support plan for each student that leads to identifying and locating appropriate school- and/or community-based services and enrichments targeting the student's strengths, needs, and interests

- Establishing the connection between these service providers and individual children and their families
- Documenting and tracking the delivery of services and prevention and enrichment opportunities
- Following up to ensure appropriateness of fit

As they conduct the WCR, at the most general level, the teacher and Coordinator group the students in a class into tiers. The process of tiering helps Coordinators and teachers to identify the unique strengths and needs of each and every child to ensure the right combination of services is delivered. Tiers include: strengths and minimal risk (Tier 1); strengths and mild (Tier 2a) to moderate (Tier 2b) risk; or strengths and severe risk (Tier 3).

INDIVIDUAL STUDENT REVIEW

Students identified as having intensive needs, at any point during the school year, receive a further in-depth conversation called an Individual Student Review (ISR). A wider team of professionals discusses and develops specific measurable goals and strategies for the student. The ISR is conducted by a student support team—an existing school structure that can include school psychologists, teachers, principals, nurses, and occasionally community agency staff members—that is typically led by the Coordinator. The Coordinator communicates with the family before and after the ISR. Typically, 8% to 10% of the students in a school receive an ISR in a given year.

COMMUNITY AGENCY PARTNERSHIPS

A critical aspect of the Coordinator's role is developing and maintaining partnerships with community agencies and institutions. Coordinators conduct research and outreach to identify appropriate partners in their communities and work to foster relationships with local agencies. These relationships are vital to providing all students with the supports and enrichments they need to thrive. In 2020-21, over 226,000 services were delivered by more than 750 different community partners.

CONNECTING STUDENTS TO SERVICES, TRACKING, AND FOLLOWING UP

During and after these conversations with teachers, school staff, and community agency representatives, City Connects Coordinators connect each student to the particular enrichments, supports, and services that will best meet his or her strengths and needs. Coordinators work closely with families as students are referred and connected to enrichments and services.

To aid with the process, and to permit streamlined tracking and follow-up, City Connects has developed a proprietary web-based student support information system, called MyConnects. The system 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. The database systematizes the work of referring students to services, contributing to efficiency and allowing one Coordinator to serve 400 students effectively. MyConnects data are used for three purposes: 1) tracking and 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.

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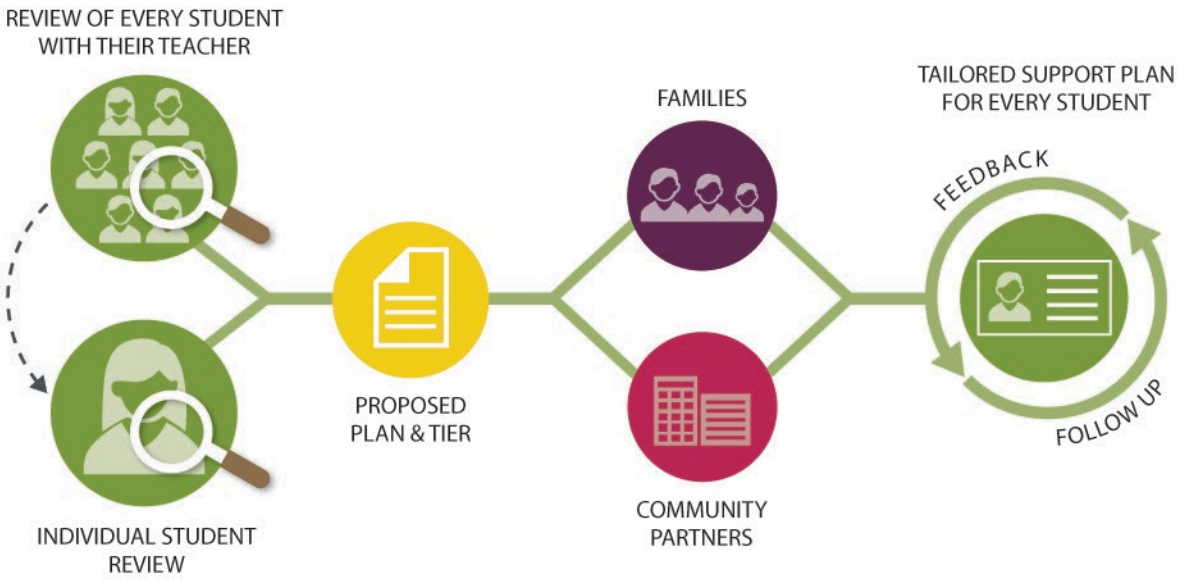
Services can be classified into three broad categories: prevention and enrichment, early intervention, and intensive/crisis intervention. Each category includes services of different types. The tailoring of services is accomplished through different combinations of quantity and type of services from these three broad categories, resulting in a unique set of services for each student.

Figure 3 provides a visual overview of the core work of the City Connects Coordinator within the context of the school and community.

FIGURE 3. The City Connects core practice



THE PROGRAM MANAGER

The work of the Coordinator is guided by a local Program Manager, who typically oversees the practice in a district's schools. Program Managers are responsible for the recruitment, development, supervision, and evaluation of City Connects Coordinators. They deliver group professional development to their teams every other week, drawing on a City Connects-provided library of resources. Program Managers also offer coaching and support through regular one-to-one meetings with Coordinators, observation of core practice elements, and formative feedback. They are ambassadors of the City Connects program, working collaboratively with school leadership and administration to build a strong partnership and support implementation in the school. Moreover, they help cultivate and maintain partnerships with community agencies.

Program Managers participate in regular professional development offered by City Connects at Boston College. They receive support for their work assisting Coordinators to navigate specific school contexts as they implement the City Connects model. Program Managers across City Connects sites come together regularly as a learning community though meetings and professional development opportunities to share insights and solve problems. They also provide key communication to the City Connects organization about local context, practice, and implementation of the model.

Moreover, Program Managers support data collection to facilitate program evaluation and fidelity monitoring. They utilize data in MyConnects to ensure that the City Connects intervention is being implemented with fidelity across all sites, as described in the section that follows.

IMPLEMENTING WITH FIDELITY

City Connects uses a fidelity monitoring system to ensure consistent delivery of the practice across all sites. Reports from the fidelity monitoring system support the work of the Program Managers – and in turn, Coordinators – by quantifying implementation itself to highlight areas of strength and areas for potential improvement. Grounded in research on implementation science, the system was designed to provide a snapshot of fidelity across core components of the practice, including Whole Class Review, Individual Student Review, Community Partnerships, and Family Partnerships. The fidelity system utilizes information gathered during the course of regular work in the practice in MyConnects. Reports offer both an overall picture of fidelity and component-by-component information. Program Managers can see at a glance which components of the practice are being implemented successfully, and can also identify areas that could benefit from further coaching and support. Program Managers can view fidelity data across a district and at the individual school level. Furthermore, the fidelity monitoring system allows City Connects leadership and central staff to consult with Program Managers, improving practice and supporting scaling and sustainability.

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Context of implementation

City Connects was implemented in 92 schools (totaling 26,791 students) in the 2020-21 school year. Schools served students ranging from pre-kindergarten through grade 12 in public, charter, and Catholic schools, with a majority of schools serving students in kindergarten through eighth grades. Table 1 presents a summary of pre-kindergarten through grade 12 student characteristics for each school district as well as an average across all schools in the City Connects network.

TABLE 1. City Connects student demographic characteristics from the 2020-21 school year, grades PK-12

	Boston, MA Public	Springfield, MA Public	Salem, MA Public	Dayton, OH Public	Minneapolis, MN Charter	Dayton, OH Charter	Boston, MA Catholic	Minneapolis, MN Catholic	Dayton and Springfield, OH Catholic	North Shore, MA Catholic	City Connects
# of Schools	12	40	8	1	3	2	10	9	4	3	92
# of Students	3,649	11,598	2,843	339	823	919	2,776	1,725	1,382	737	26,791
Female %	44%	48%	49%	45%	53%	51%	53%	51%	52%	54%	49%
Race/ Ethnicity %											
African American/ Black	48%*	18%*	8%*	87%*	41%*	96%~	40%	28%	27%~	15%	37.2%
Asian	2%*	2%*	2%*	<1%*	11%*	<1%~	5%	9%	2%~	4%	<3.9%
Hispanic	39%*	68%*	42%*	2%*	41%*	<1%~	27%	35%	16%~	33%	<30.4%
Multi-racial and other	4%*	3%*	4%*	4%*	2%*	3%~	24%	10%	11%~	29%	8.5%
White	8%*	9%*	43%*	5%*	4%*	1%~	31%	18%	61%~	52%	23.2%
Economically Disadvantaged %	64%*	83%*	56%*	80%*	78%*	NA	30%	63%	NA	NA	NA
Students with Disabilities %	22%*	25%*	23%*	17%*	16%*	14%~	3%	5%	22%~	89%~	23.6%
English Language Learners %	29%*	16%*	14%*	11%*	32%*	1%~	2%~	36%	42%~	66%~	24.9%

Source: City Connects database unless otherwise indicated by * (~indicates some missing data. Data collection in 2020-21 was unique due to continuing challenges related to the pandemic's impact on schools. In some cases, race/ethnicity percentages add up to more than 100% because different types of schools might have used different reporting standards for identifying racial or ethnic groups.)

* State education department websites (profiles.doe.mass.edu; education.ohio.gov; education.mn.gov/mde/data)

The information on student demographics presented in Table 1 highlights the significant academic and financial needs that students in City Connects schools experience. In these schools, overall, more than three quarters of the population are students of color. More than 23% of students in City Connects schools are students with disabilities, and roughly a quarter are English Language Learners. The differences across districts highlight the varied contexts in which City Connects is implemented.

Reviews and services

During the Whole Class Review process, as described above, the City Connects Coordinator and teacher group students 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 percentages of students in each tier across all districts.

TABLE 2. Number and percentage of students placed in each tier across all City Connects sites, 2020-21

	Number	Percentage
Tier 1 (minimal risk)	9,590	36%
Tier 2a (mild risk)	8,157	31%
Tier 2b (moderate risk)	5,455	21%
Tier 3 (intensive risk)	3,160	12%
TOTAL	**26,362**	**100%**

Data Source: MyConnects database, 2020-21. Student counts differ from those in other tables because students without a tier assigned are excluded.

Students identified as having strengths and severe risks (Tier 3) are considered for an Individual Student Review. In some cases, students experiencing significant risks are already receiving targeted supports and follow-up.

Others are reviewed by a team of professionals that assesses the strengths and needs of the individual student and develops a plan with specific, measurable goals and strategies. The Individual Student Review process is described in more detail above. In 2020-21, across all districts, 9% of students received this intensive review.

Across all districts, Coordinators work to build and maintain relationships with local community agencies that provide services to their students. These services range in intensity from prevention and enrichment services, such as arts, sports, or youth development, to intensive or crisis interventions, like mental health counseling or violence intervention. In 2020-21, City Connects worked with more than 750 community partners to deliver more than 226,000 services to students.

Table 3 shows the numbers and percentages of services delivered across categories.

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TABLE 3. Total number of services delivered to students, by service category, 2020-21

	Service N	Category %	Total % of Services
CATEGORY 1 (Prevention & Enrichment)			
Academic Skills and Interests	9,470	16%	
Arts-based Services	4,929	8%	
Classroom Support	11,676	20%	
High School, College, and Career Assistance	5,254	9%	
Screening - Hearing	1,766	3%	
Screening - Postural/Scoliosis	92	<1%	
Screening - Vision	2,494	4%	
Sports or Physical Activity	2,299	4%	
Youth Development	20,178	35%	
Category Total	**58,158**		**26%**
CATEGORY 2 (Early Intervention)			
Behavioral Support	15,808	12%	
Donations	15,311	12%	
Language Services for Students and Families	540	<1%	
Family Assistance and Support	31,208	24%	
Family Conference/Meeting	3,174	2%	
Family Engagement	12,135	9%	
Health Programming	5,357	4%	
Literacy Support	13,267	10%	
Math Support	10,803	8%	
Mentoring	728	<1%	
Psychosocial Group	1,320	1%	
Social Skills	15,268	1%	
Transition Assistance	3,325	3%	
Tutoring	2,102	2%	
Category Total	**130,346**		**58%**
CATEGORY 3 (Intensive / Crisis Intervention)			
Accommodations and Adaptations	15,728	42%	
Attendance Support	11,863	32%	
Counseling	2,982	8%	
Crisis Intervention	484	1%	
Health/Medical Intervention	3,538	9%	
Occupational/Physical Therapy	454	1%	
Special Education Evaluation	302	1%	
Speech and Language	1,774	5%	
Violence Intervention	536	1%	
Category Total	**37,661**		**17%**
GRAND TOTAL	**226,165**		

Source: MyConnects database, 2020-21.

Tables 4 and 5 and Figure 5 illustrate the distribution by tier of students receiving different services.

TABLE 4. Mean number of services and percent of services by student tier, 202-21.

	# of Students	Mean # of Services (Std. Deviation)	1-2 Services	3-4 Services	5+ Services
Tier 1 (minimal risk)	9,404	8.2 (6.7)	12.2%	21.8%	66%
Tier 2a (mild risk)	8,052	8.5 (6.1)	7.8%	17.8%	74.3%
Tier 2b (moderate risk)	5,410	9.2 (6.1)	5.3%	14.8%	79.9%
Tier 3 (intensive risk)	3,144	9.8 (6.1)	4.9%	9.8%	85.3%
TOTAL	**26,010**	**8.7 (6.3)**	**8.5%**	**17.7%**	**73.8%**

Source: MyConnects database, 2020-21. Student counts differ from those in other tables because students without a tier assigned or students without a service delivered are excluded.

Table 4 shows that the mean number of services per student is smallest in Tier 1 (8.2) and largest in Tier 3 (9.8). Additionally, the percentage of students receiving 1-2 services is highest for Tier 1 and lowest for Tier 3. The corresponding proportions for 5+ services are the highest in Tier 3 and lowest in Tier 1. In other words, on average, students experiencing higher risk receive more services. Students in the lowest risk level (Tier 1) are more likely than their counterparts in higher risk levels to receive 1-2 services (as opposed to 3-4 or 5+ services). However, it should be noted that in all tiers, at least two thirds of students receive 5 or more services.

Table 5 presents the mean number of services per category for each student tier. Category 1 services are classified as prevention and enrichment services, such as sports programs and arts academic enrichment. Category 2 services are considered early intervention services, including tutoring and behavioral support. Category 3 services are intensive or crisis intervention services, such as occupational/physical therapy and violence intervention.

TABLE 5. Mean number of services by category, for each student tier, 2020-21.

		Mean Number of Services per Student (Std. Deviation)		
	# of Students	Category 1: Prevention and Enrichment Services	Category 2: Early Intervention Services	Category 3: Intensive or Crisis Intervention Services
Tier 1 (minimal risk)	9,404	3.2 (2.8)	4.7 (3.9)	2.1 (1.5)
Tier 2a (mild risk)	8,052	2.9 (2.5)	5.0 (3.6)	2.3 (1.6)
Tier 2b (moderate risk)	5,410	2.7 (2.3)	5.6 (3.7)	2.3 (1.5)
Tier 3 (intensive risk)	3,144	2.5 (2.1)	6.1 (3.9)	2.5 (1.7)

Source: MyConnects database, 2020-21.

Figure 4 presents a breakdown of the proportion of services from each category (1, 2, and 3) for all tiers of risk (1, 2a, 2b, and 3). Students at all tiers, on average, received most of their services from category 2, and relatively fewer from categories 1 and 3.

When comparing results to prior years, it is interesting to note that the distribution of service intensity has shifted – across all tiers – from patterns previously observed. Students at all tier levels receive 55% or more of their services from category 2, early intervention. This is distinct from patterns in prior years, when students in all tiers received most of their services from category 1 (prevention & enrichment). This shift may reflect an increase in intensity of need in the context of the Covid-19 pandemic.

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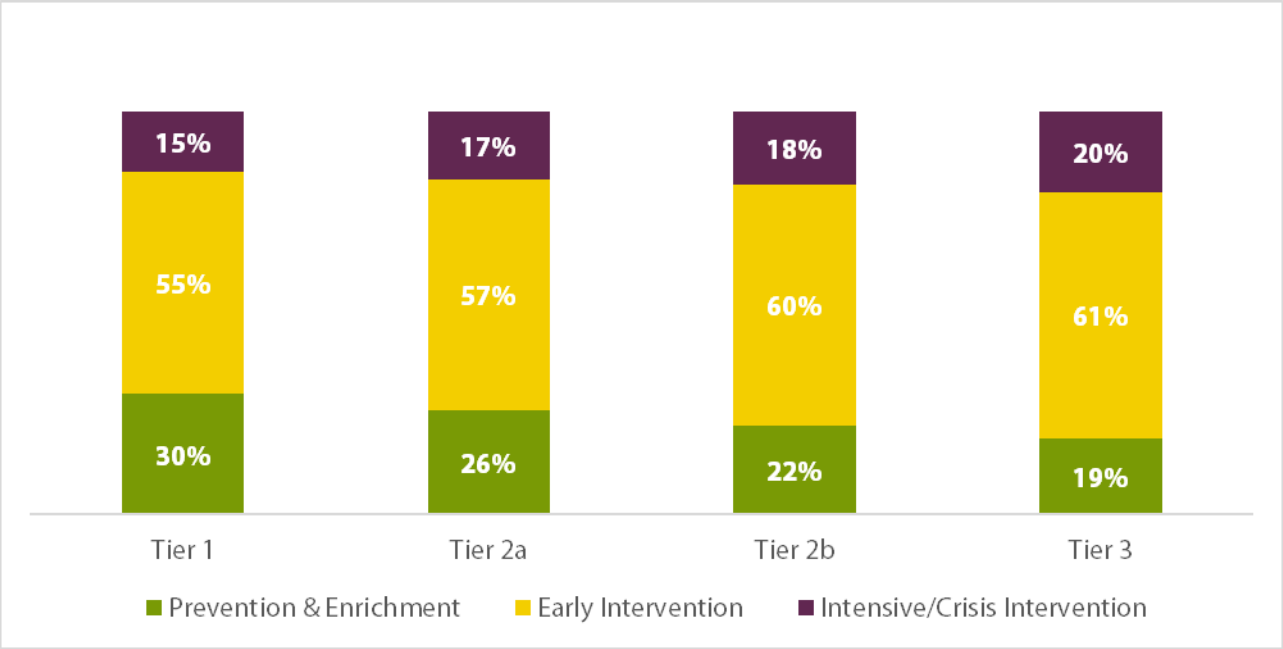
FIGURE 4. Proportion of services by category, for each student tier, 2020-21.



Source: MyConnects database, 2020-21.

CITY CONNECTS ON THE GROUND

As shown in the tables and figure above, students in schools implementing City Connects, regardless of the tier to which their unique profile of strengths and needs is assigned, receive multiple services. The following vignettes illustrate the array of services a school and an individual student may receive. While the vignettes are based on real data, all names of people and organizations have been changed, along with other details, to protect confidentiality.

THE SCHOOL

The students described in these vignettes are enrolled in the same public elementary school. The school serves over 350 students in pre-kindergarten through grade 5. It is located in an urban neighborhood in a large city in the eastern U.S. In the school district overall, roughly 85% of students are people of color, nearly one third are English language learners, and more than 70% are economically disadvantaged (as defined by their participation in state-administered programs). This single school has partnerships with about 25 community agencies. In addition to services provided by these partnering agencies, students may receive services through the district or the school itself. Some services are offered to all students in the school, or all students in a special grouping, (e.g., grade level and/or gender) others are provided to smaller numbers of students based on individual strengths and needs. As part of the City Connects approach, the Coordinator identified and contacted partners able to provide these services. The Coordinator determined the best partners to serve the school and its students based on ongoing monitoring of school and student needs. Throughout the course of the year, for each student described below, services were added or adjusted based on student progress.

ANA'S STORY

Ana is a female student in grade 3. Through the City Connects Whole Class Review Process, the Coordinator and Ana's teacher observed strengths and mild educational risk (Tier 2a). With respect to academics, math and writing were areas of strength for Ana at the start of the school year. Reading was identified as an area of need, and at times, Ana demonstrated low frustration tolerance in class when she was confronted with an academic challenge.

Ana made friends easily and consistently met behavioral expectations in school. She was very enthusiastic about being part of the school community and forming connections with school staff. At the same time, because she appeared to crave attention from others, she occasionally exhibited difficulty navigating interpersonal boundaries.

Ana's City Connects Coordinator initially referred her to a mentoring program, but the waitlist was extensive after the start of the pandemic. As an alternative, she was referred to a virtual after-school tutoring program, which could simultaneously support Ana's academic needs and foster appropriate social connections with peers and adults. Over time, it became clear that the tutoring program successfully served this dual purpose for Ana. She formed positive relationships with the tutors and reliably participated in the program four days per week for several months. Aware of this successful tutoring experience, Ana's classroom teacher fostered a positive connection with her while further supporting her academic growth. By intentionally selecting several books featuring characters who shared Ana's cultural background, the teacher helped to encourage an interest in reading, which in turn helped Ana to progress academically.

By the end of the school year, Ana's academic performance had improved across subject areas and she was taking a great deal of pride in her school work. She is now eager to talk about her strong grades with school staff as well as her after-school tutors – and she is receiving positive attention as a result. Ana is also eager to embrace academic challenges rather than becoming frustrated.

In addition to participation in the tutoring program, Ana regularly met with her City Connects Coordinator – either virtually or in person, depending on school opening status – for individual check-ins throughout the school year. These check-ins provided another opportunity to practice interpersonal skills related to boundaries and relationships.

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JULIAN'S STORY

Julian is a male student in grade 4. Through the City Connects Whole Class Review process, the Coordinator and Julian's teacher observed strengths as well as some needs that together indicated moderate risk (Tier 2b).

A major area of strength for Julian was academics, especially math. Family engagement was another area of strength; Julian's mother was very involved in his education and communicated with school staff regularly.

At the same time, Julian experienced significant difficulty with behavioral regulation in the classroom. He frequently disrupted lessons and activities, which not only impacted Julian's ability to learn, but presented a challenge for his teacher and his peers.

Julian's City Connects Coordinator referred him to targeted supports and services. He began participating in a small social skills group, led by the Coordinator, with same-age peers who were navigating similar behavior regulation challenges. This intervention supported Julian's development of behavior regulation skills and helped him foster stronger peer connections. It also enabled conversations between Julian and his City Connects Coordinator about common interests, including music, which helped Julian feel more comfortable seeking support from her individually to address his behavioral challenges. Later in the academic year, Julian was tasked with a special errand in the school's main office each morning, which strengthened his relationships with school staff and connection to the school community overall.

To address family financial needs that were exacerbated by the Covid-19 pandemic, Julian's family was referred for support to access food on an ongoing basis, as well as a local internet provider's voucher program to enable internet access in the home. This further enhanced the connection Julian's mother had with school staff, as she said that she felt her family's needs were immediately addressed.

As the school year progressed, Julian's behavioral challenges decreased notably. It was clear that strengthening interpersonal relationships with peers and school staff was a key component to Julian's progress. This was mirrored in the relationships Julian's mother had with school staff, which were also strengthened by the support offered in response to pandemic-driven financial stressors.

Outcomes for students

Ongoing evaluation of City Connects has produced a consistent set of findings that demonstrate the long-lasting impact of City Connects. The evidence that City Connects benefits students has converged across various methods, different samples, and multiple sites. Across these methodologies and samples, studies show that attending a school that implements City Connects makes a difference for students through each stage of their development. Beginning in elementary school, after leaving City Connects and moving on to middle and high schools, and into their postsecondary years, City Connects students outperform comparison peers on measures of academic achievement, other measures of success, and enhanced life chances and opportunities.

At the elementary level, students enrolled in City Connects schools experience better academic outcomes than their peers not who never experienced City Connects. These outcomes include stronger academic effort, higher report card scores, better attendance, and improved performance on statewide tests, and they persist as students move beyond elementary school.

Stronger academic effort

- City Connects students significantly outperform comparison students in academic effort in grades 3 through 5, as reflected in teacher ratings (City Connects, 2010; Khanani et al., 2021).

Higher report card scores

- Despite starting with lower report card scores in first grade, students in City Connects schools demonstrated significantly higher scores than those in comparison schools in reading, writing, and math by the end of fifth grade. The magnitude of these positive effects was as large as the negative effects of poverty (City Connects, 2010).
- English language learners (ELL) experienced significantly larger treatment benefits on literacy outcomes than non-ELL students. By third grade, ELL students in City Connects schools demonstrated similar reading report card scores to those proficient in English in comparison schools, thereby eliminating the achievement gap in reading between ELL and non-ELL students (City Connects, 2010).
- A study applying a difference-in-differences analysis found that City Connects students who had significantly lower report card scores in reading and math at the beginning of implementation demonstrated significantly greater improvement in those scores, catching up to comparison peers in reading by grade 5 and math by grade 4, and outperforming comparison students in math by the end of grade 5 (City Connects, 2016).
- Experiencing City Connects in sixth grade led to significant gains in middle school academic achievement (beyond the positive effects of attending a City Connects middle school) when school characteristics were taken into account (City Connects, 2016).

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Higher attendance

- City Connects students were found to have a significantly lower total number of days absent than students from the comparison group beginning in grade 4 and continuing through grade 12 (City Connects, 2014).

Higher performance on statewide tests

- Students who experienced City Connects in elementary school significantly outperformed comparison peers on measures of academic achievement (statewide test scores in English and mathematics and grade point averages) in grades 6, 7, and 8 (Walsh et al., 2014). The beneficial effects were not only statistically significant but also practically significant, with effect sizes ranging from 0.29 to 0.67 (An, 2015).

- A study drawing on a natural experiment taking advantage of the cutoff for kindergarten enrollment demonstrated that students experiencing an additional year of City Connects performed significantly better on statewide tests of English language arts in grade 3 and math in grades 3 and 5 than students who did not have that year of City Connects (City Connects, 2016).

- Immigrant students who experienced City Connects significantly outperformed immigrant students who never experienced the intervention on both reading and math achievement test scores. City Connects also narrowed achievement gaps between immigrant students and their English-proficient peers (Dearing et al., 2016).

- Positive findings related to performance on state tests were replicated in Boston with students enrolled in schools with "Turnaround" (consistently low-performing) designation. After just one year of implementation of City Connects, gaps in student performance between Turnaround schools and comparison schools were narrowed to insignificant levels for grade 3 English and grades 3, 4, and 5 math. After two years, gaps narrowed to insignificant levels for grade 4 and 5 English (City Connects, 2016).

- Positive findings seen in Boston Public Schools replicated in Springfield, MA schools designated as "Transformation" schools, a reform model for consistently low-performing schools. After three years of implementation of City Connects, gaps in student performance between Transformation schools and comparison schools narrowed to insignificant levels for statewide test scores in both English and math at grades 3, 4, and 5. For grade 3 math, grade 4 English and math, and grade 5 English, these gap reductions exceeded What Works Clearinghouse standards for substantively important effect sizes (City Connects, 2016).

- Findings also replicated in Catholic schools in Boston. For example, for math, scores in sixth grade were significantly higher for students in City Connects Catholic schools than for those in comparison schools after controlling for demographics. Also, lower-income students in schools implementing City Connects started out with slightly lower language scores in third grade than lower-income students in comparison schools, but surpassed them by sixth grade (Shields et al., 2016).

- In a large-scale study, students who were randomly assigned to City Connects schools in kindergarten scored significantly higher than their peers randomly assigned to comparison schools on fifth grade statewide ELA and mathematics tests. These findings suggest that City Connects causes improvements in academic performance for elementary school students (City Connects, 2020).
- Positive findings related to the complementary nature between City Connects and preschool programs suggest that City Connects sustains positive effects of preschool on elementary school math performance. On average, students who received both preschool and City Connects had significantly higher math report card scores in third and fourth grade than preschool-only students. Moreover, on average, students who received both preschool and City Connects had significantly higher math report card scores (first through third grades) and reading report card scores (first and third grades) than City Connects-only students. Students who received both preschool and City Connects also scored significantly higher on a fourth grade standardized test of ELA than students who received City Connects-only. These findings suggest that preschool and City Connects programs complement each other to support student performance in elementary school, and may do so differently across grades, subject areas, and measures (City Connects, 2020).

As they move into middle and high school, students who experience City Connects in elementary school outperform comparison peers on indicators of educational success and life chances. City Connects makes a positive impact on retention in grade, chronic absenteeism, and high school dropout.

Less likely to repeat a grade

- City Connects students at greatest educational risk demonstrated lower rates of retention (being held back in grade) than comparable students never enrolled in City Connects (City Connects, 2012).

Less likely to be chronically absent

- Students enrolled in City Connects elementary schools demonstrated lower rates of chronic absenteeism in middle and high school (defined as being absent from school 10% of days or more) than students in comparison schools (City Connects, 2014).

Less likely to drop out of high school

- Once they reached high school, students previously enrolled in a City Connects school from kindergarten through grade 5 dropped out of school at about half the rate of students enrolled in schools without City Connects at the same time (Walsh et al., 2017).

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As they graduate from high school, students who experienced City Connects in elementary school are more likely to enroll in, and graduate from, postsecondary institutions.

- There is evidence that City Connects has a long-term, positive effect on students' academic achievement from elementary school through college. On average, students who received City Connects in elementary school had a significantly higher probability of enrolling in postsecondary education than comparison peers. Among students who enrolled in postsecondary education, students who received City Connects in elementary school had a significantly higher probability of graduating than comparison peers, on average (City Connects, 2020).

Recent studies have built on and extended this set of findings. The first study presented below presents evidence that positive findings on students' academic achievement replicate in another setting: Springfield, MA. A second study demonstrates that students attending schools implementing City Connects experience improved non-cognitive outcomes such as behavior and effort.

City Connects academic achievement findings replicate in Springfield, MA

A consistent set of findings has provided evidence of positive effects of City Connects on academic achievement from elementary school through post-secondary years. Much of this research has focused on the Boston Public Schools district. Through the use of different statistical methods and, recently, by exploiting the random element in school assignment to simulate a randomized controlled trial, this research has addressed many threats to internal validity, building the case that City Connects is not merely associated with, but in fact causes, these positive outcomes.

To date, this research has not directly addressed, via study design, questions of external validity. To learn how outcomes might generalize across wider populations, a new study investigated whether findings on the effectiveness of City Connects would replicate in another geographic area. The study addressed the staggered nature of the intervention's implementation in the Springfield, MA Public Schools district throughout the last decade to answer the following research question:

> To what extent does average mathematics and English Language Arts achievement change for Springfield schools following the implementation of City Connects?

The study analyzed statewide assessment results in math and English Language Arts (ELA). Because school assignment was not random, researchers sought a quasi-experimental approach that would help build the case for causality. Because school adoption was staggered, it was possible to compare changes in test scores for schools that were and were not implementing City Connects in a given academic year, across a range of years. Together, these features led to the use of difference-in-differences models with multiple periods and variation in treatment timing in this study.

Schools included in the analysis

The analyses used publicly available Massachusetts Comprehensive Assessment System (MCAS) data at the elementary and K-8 school level from the Massachusetts Department of Elementary and Secondary Education (DESE) spanning the 2006-07 and 2018-19 school years.

In the study years, 30 schools in Springfield implemented City Connects for at least one school year in at least one grade level. Within Springfield, a set of potential comparison schools could not be identified because many schools in Springfield were classified as "Turnaround" at the same time they began implementing City Connects. Turnaround schools are defined as consistently underperforming schools—that is, there is a gap in statewide test score performance between Turnaround schools and others in the district. Turnaround schools are required to engage in various kinds of structural reform to improve achievement, such as replacing teaching and administrative staff, expanding learning opportunities, implementing data-driven strategies to improve instruction, and providing nonacademic structural supports through interventions like City Connects. To address this challenge in identifying a comparison set, schools from the entire state of Massachusetts were included as part of the analyses. Including schools from across the state as part of the study sample allowed for the treatment effect of City Connects to be isolated from the "Turnaround effect."

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The statewide sample was restricted to schools that served at least one grade between grades 3 and 8 (the grades when state standardized tests are administered). Other districts where City Connects was operating (e.g., Boston, Salem) were excluded.

In addition to achievement scores, the data include school-level demographic characteristics. The statewide assessments in math and ELA used in this study were standardized within grade, subject, and year. The level of observation is grade-level instead of school-level because in some cases, not every grade in a school with City Connects received the intervention.

Analytic methods

Difference-in-differences models were used to compare how the achievement trajectory for schools implementing City Connects changed upon the introduction of the intervention relative to what was expected given trends in comparison schools. Using an approach from the econometrics literature, treatment and comparison schools were "matched" on school demographic characteristics and an indicator of when/if schools received Turnaround (Callaway & Sant'Anna, 2021).

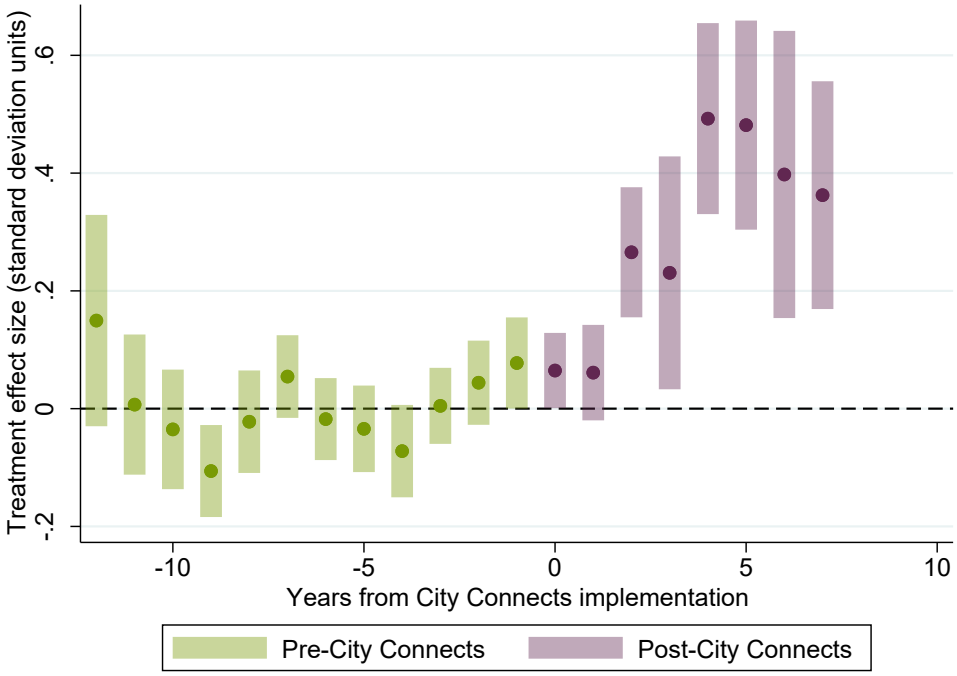
Such an analysis is robust to preexisting differences in schools and requires only that the treatment and comparison schools demonstrated similar (i.e., parallel) trends in the outcome measure in the pretreatment period. Parallel trends support the notion that comparison schools offer an adequate counterfactual for what would have occurred in treatment schools in the posttreatment period had they not received City Connects.

The analytic model calculated the average change in achievement for schools implementing City Connects for each pretreatment and posttreatment period. The pretreatment period estimates test the parallel trends assumption, demonstrating whether or not schools implementing City Connects were trending in a particular direction distinct from comparison schools before receiving the intervention. This is important to test not only because this comparison is needed for the "matching" approach described above, but also because if schools were already trending upwardly before City Connects began, then it would be difficult to attribute potential increases in achievement after implementation to the intervention. Posttreatment effects up to eight years after the introduction of City Connects are presented.

Results

As depicted in Figure 5, math assessment scores increased significantly (in both a statistical and a practical sense) following the implementation of City Connects in Springfield. Prior to the introduction of City Connects, math test scores in treatment schools (shown by the green dots) were not statistically significantly deviating from expected trends (reflected in the horizontal dotted line). By the third year of implementation, however, as shown by the purple dots, scores increased by 0.23 standard deviations more than expected. This effect increased to nearly 0.5 standard deviations by the following year.

FIGURE 5. Changes in math statewide assessment results (effect size units) over time for schools implementing City Connects in Springfield



Source: Massachusetts Department of Elementary and Secondary Education data, 2006-07 through 2018-19

Note: Model estimates are based upon the tool proposed in Callaway and Sant'Anna (2021). Treatment effects, in standard deviation units, are indicated by the circles, and rectangles show the 95% confidence intervals. The reference category for all pretreatment period coefficients is the immediately preceding year. For example, the reference category for pre-2 is pre-3. In the posttreatment period, the reference category is the year prior to City Connects implementation. Baseline covariates include racial composition of school (percent Black, White, and Hispanic), and proportion of low-income, English Language Learners (ELL), and special education students.

As shown in Figure 6, ELA achievement also increased significantly (in both a statistical and a practical sense) for schools implementing City Connects following the introduction of the intervention. Prior to receiving treatment, these schools were already trending slightly upwardly in ELA test scores by about 0.10 standard deviations, which was statistically significant. While this may suggest that the improvement in ELA test scores in post-treatment years is simply a continuation of this prior trend, the observed effects by the fifth year of implementation are over 0.40 standard deviations. Accordingly, it is less likely that these pretreatment trends contributed greatly to the observed changes in ELA achievement.

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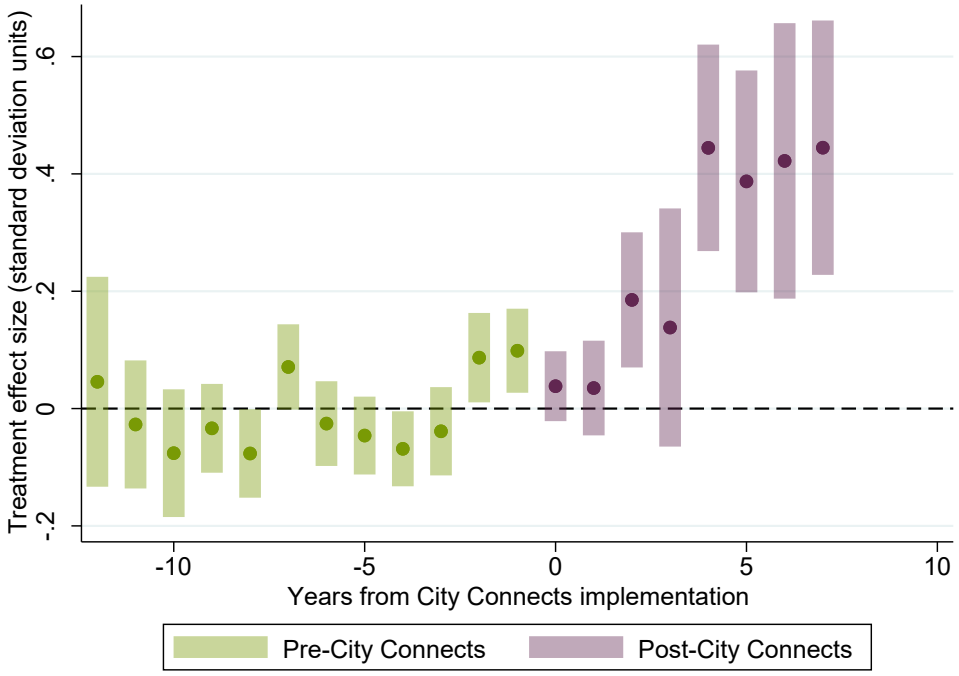
FIGURE 6. Changes in English Language Arts statewide assessment results (effect size units) over time for schools implementing City Connects in Springfield



Source: Massachusetts Department of Elementary and Secondary Education data, 2006-07 through 2018-19

Note: Model estimates are based upon the tool proposed by Callaway and Sant'Anna (2021). Treatment effects, in standard deviation units, are indicated by the circles, and rectangles show the 95% confidence intervals. The reference category for all pre-treatment period coefficients is the immediately preceding year. For example, the reference category for pre-2 is pre-3. In the post-treatment period, the reference category is the year prior to City Connects implementation. Baseline covariates include racial composition of school (percent Black, White, and Hispanic), and proportion of low-income, ELL, and special education students.

- Math and ELA achievement in Springfield schools that adopted City Connects improved by approximately 0.40 standard deviations by the time schools were in their fifth year of implementation.
- Findings are robust to a number of sensitivity tests, suggesting a causal relationship between the implementation of City Connects and improved academic achievement measured by MCAS results in math and ELA.
- These findings support the replicability of City Connects in new geographic areas.

Improved non-cognitive outcomes for students

In past work, researchers used a randomized design to study effects of City Connects on academic achievement outcomes. The prior study found significant positive effects on statewide assessment results in math and English Language Arts (ELA) for students who received a random lottery offer, through the Boston Public Schools kindergarten enrollment process, to attend a school implementing City Connects. Building on this work, researchers sought to use the same methodology to estimate the effect of implementing City Connects on student non-cognitive outcomes.

The guiding research question for this study was:

> To what extent does participating City Connects as a result of a random lottery assignment at kindergarten affect students' chronic absenteeism and teacher-reported measures of work habits, behavior, and effort?

To answer this question, researchers compared chronic absenteeism rates and these teacher-reported non-cognitive measures in elementary school for two groups of students in Boston Public Schools: those who received a random offer to attend a school with City Connects and those who received a random offer via the same lottery to attend a school that had never implemented City Connects. This study was possible because the school assignment process in Boston includes a random component. Given that many non-random factors determine where students attend school, students attending schools with City Connects may differ systematically from those attending schools without City Connects on a number of observable and unobservable characteristics. These differences can then make it difficult to ascertain the causal impact of attending schools with the City Connects intervention on student outcomes. A random-assignment process enables researchers to isolate this causal impact.

Students included in the analysis

The analytic sample was drawn from 8,211 students applying to attend kindergarten and participating in the Boston Public School enrollment lottery for academic years 2006-07 through 2010-11. In this district, at the time, students applied to schools via a centralized assignment system, wherein families could provide up to 10 choices for a school they would like their kindergarten student to attend. These school preferences, along with "priority" variables, such as having a sibling already attending the school and proximity of the school to the student's home, were used to assign students to schools. In cases where applicants outnumbered available spots in a particular school, and where some applicants were "tied" on the priority variables (e.g., neither had a sibling already in the school), randomly generated numbers were used to break ties and determine school placement. The final analytic sample consisted of students for whom school assignment was determined via randomly generated number. Of the total sample, 2,342 students had a random chance of being assigned to a school implementing City Connects.

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Analytic methods and results

Using the district's algorithm and student data on school preferences and assignment, researchers calculated deferred acceptance propensity scores, which indicate the probability a student will be assigned to schools implementing City Connects. [1]

Next, deferred acceptance propensity scores along with the random lottery offer to attend a school implementing City Connects were used to estimate the treatment effect on the outcomes of interest using two distinct but complementary analyses: an intention-to-treat (ITT) regression model and an instrumental variable (IV) regression model. The ITT regression specification is valuable because it provides information about the potential impact of attending a school with City Connects based on a student's school assignment, regardless of whether they actually attended that school or not. The IV model provides an estimate of effects for students who actually attended schools with City Connects. From a research perspective, this difference is important because people do not always comply with random offers. ITT results show how the two random assignment groups performed regardless of whether or not they complied with their school assignment; IV results show performance differences based on actual attendance.

The ITT analysis demonstrated that students who were randomly assigned to schools implementing City Connects in kindergarten were reported by teachers as having higher effort and better behavior across all grades than those assigned to schools not implementing the practice (see Table 6). These observed results, while not statistically significant due to low power, are practically significant, as reflected in the effect sizes reported in Table 6. No practical differences in work habits or the probability of being chronically absent were found.

TABLE 6. Impact of assignment to a school implementing City Connects on elementary school non-cognitive outcomes (Intention to Treat estimates, effect sizes)

Grade	Effort	Work Habits	Behavior	Chronically Absent
Third	0.1	0.06	0.07	-0.02
Fourth	0.1	0.06	0.13	0.01
Fifth	0.18	0.04	0.14	-0.01

Standard errors are clustered by school.
Source: Boston Public Schools data, 2006-07 through 2010-11

[1] Deferred acceptance (DA) propensity scores represent a student's "risk" of assignment to a particular school in the school lottery assignment process. Analysts selected only those groups of students for whom the DA propensity score was the same but school assignment varied by lottery offer. This helped ensure that any variability in school assignment between students is solely the result of the randomly generated lottery number. In other words, given the DA propensity score, lottery offers are random and thus independent of all observed and unobserved covariates (Abdulkadiroglu et al.,2017).

Results from the IV analysis – shown in Table 7 – were similar; students who attended schools implementing City Connects upon random assignment were reported by teachers to have better effort and behavior than non-treatment peers. Despite low power, these effects were statistically significant for effort at third grade and behavior at fourth grade. The effects for effort and behavior across all grades are also meaningful in a practical sense given current benchmarks for effect size interpretation that consider such features as cost (Kraft, 2020; for information on City Connects costs, see Bowden et al. 2015, 2017, 2018).

TABLE 7. Impact of attending a school implementing City Connects on elementary school non-cognitive outcomes (Instrumental Variable estimates of Local Average Treatment Effects, effect sizes)

Grade	Effort	Work Habits	Behavior	Chronically Absent
Third	0.07*	0.04	0.05	-0.01
Fourth	0.08	0.05	0.11*	0.01
Fifth	0.18	0.04	0.14	-0.01

* $p < 0.10$; **$p < 0.05$
Standard errors are clustered by school.
Source: Boston Public Schools data, 2006-07 through 2010-11

- Students who were randomly assigned to City Connects schools in kindergarten were reported by teachers in elementary school to have better effort and behavior than their peers randomly assigned to comparison schools.
- Students who were randomly assigned to City Connects schools in kindergarten did not have better teacher-reported work habit scores and were no less likely to be chronically absent in elementary school than their peers randomly assigned to comparison schools.
- These findings suggest that City Connects causes improvements in student behavior and effort in elementary school.

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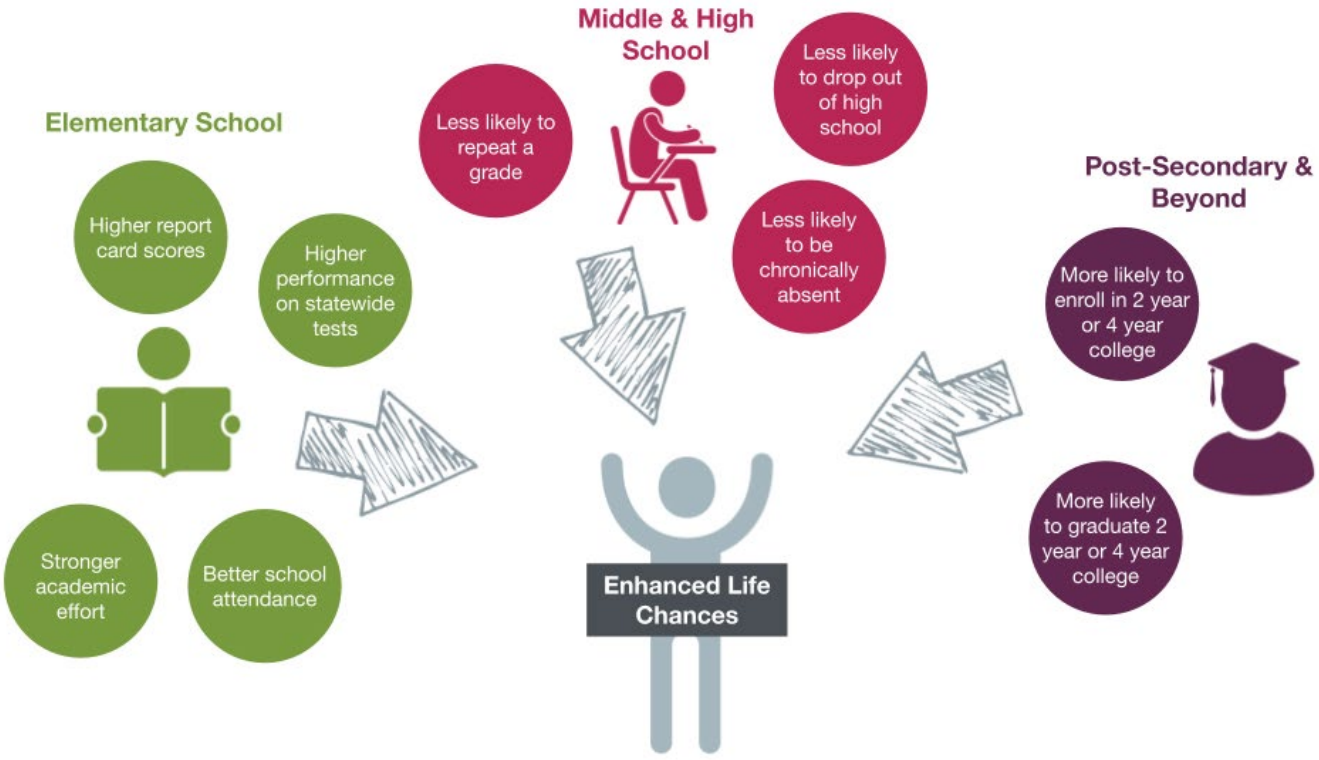
Summary of converging findings

Ongoing evaluation of City Connects continues to produce a consistent set of findings demonstrating that attending a school with City Connects makes a difference for students. City Connects students outperform comparison peers on measures of academic achievement, measures of success and thriving, and enhanced life chances and opportunities through each stage of their development. The figure below illustrates City Connects' impact on students, from the time they are enrolled in City Connects elementary schools, through middle and high school, and into their post-secondary years and beyond.

FIGURE 7. The lifetime impact of City Connects



The results of prior and more recent evaluation studies demonstrate the positive effects of City Connects over many years, across methodological approaches, sites, and samples. Consistently, studies show that City Connects students significantly outperform comparison peers on a variety of measures of academic achievement and thriving. The accumulation of evidence now permits an argument that City Connects causes these benefits for students.

Outcomes for schools

City Connects recognizes that what happens outside of the classroom profoundly affects learning (Rothstein, 2010). By design, the City Connects model invites adults in a school to think about students holistically, including factors related to their family, health, and socio-emotional wellbeing. The Covid-19 pandemic has foregrounded and exacerbated needs stemming from long-standing inequities and lack of systemic access to resources, such as food and housing insecurity, (Bauer, 2020; Aurand et al., 2020) making it more critical than ever for schools to identify and respond to children's unique strengths and needs across both academic and non-academic domains.

Exploring the impact of teachers' knowledge of the "whole child" on personalized learning

In light of this heightened need, a study was conducted to assess the impact of teachers' knowledge of the "whole child" on personalized learning, with the additional goal of enhancing understanding of the process of personalization. Teachers have always implicitly identified and responded to whole child needs in the classroom (Roeser & Midgley, 1997; Ford & Nikopita, 2000). A core component of the City Connects model, the Whole Class Review (WCR), provides a unique opportunity for teachers to deepen their whole child knowledge through a structured conversation with another professional. This enables teachers to explicitly and concretely consider their students' academic and non-academic strengths and needs across developmental domains. As a result, teachers are better equipped to apply whole child knowledge in the classroom in order to individualize their instructional practice and thereby personalize student learning.

The overarching research question for the study was:

> How do teachers in City Connects schools use knowledge of the whole child to personalize learning?

Analytic methods and results

A mixed methods approach was used to investigate the research question through several interrelated analyses. The first analysis examined data from the teacher feedback surveys to characterize the extent to which, and how, teachers use knowledge of the whole child to accomplish personalization. The second analysis used student data, aggregated at the school level, to examine the relationship between teacher personalization strategies and student characteristics. The third analysis drew on qualitative data from a series of case studies, seeking a deeper understanding of the relationship between knowledge of the whole child and teachers' instructional practice in the classroom.

Teachers who participated in the WCR were asked to read a set of related statements about the potential benefits of the WCR (for example, increased empathy or improved behavior management) and respond with the degree to which they agreed or disagreed with each statement on a Likert scale (strongly agree, somewhat agree, somewhat disagree, strongly disagree). An examination of four years of data (2017-18 through 2020-21) on teachers' responses to each of these questions suggests that the majority of City Connects teachers strongly or somewhat agree that they use knowledge of the whole child to make decisions about how they interact with students (with agreement ranging from 74% to 97% across statements and years). Findings hold true when accounting for relevant demographic

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variables (years of teaching experience and grade level taught), indicating that teachers value and use whole-child knowledge, regardless of the grade levels they taught or the years of teaching experience they had.

To uncover the specific ways in which teachers apply this whole-child knowledge in the classroom, in spring 2021, an open-ended question was added to the teacher feedback surveys that asked, "How has knowing more about the non-academic aspects of a student's life enhanced your ability to personalize learning? Please list one example." Researchers utilized thematic analysis to organize the data into categories and code teachers' responses to this question. Several themes were identified in the analysis and the two main themes are presented below.

Among the 274 responses, 37% (N=102) related to using whole child knowledge to directly address students' non-academic needs in the classroom. Sub-themes emerging in these responses included:

- Increased empathy and patience (N=28)
- Provided socioemotional support (N=25)
- Developed deeper relationships with students (N=18)
- Improved behavior management (N=17)
- Offered a flexible learning environment (e.g., movement breaks, preferential seating options) (N=14)

Further, 33% of teachers' responses related to using whole child knowledge to modify curriculum and/or instructional practice. Sub-themes included:

- Increased engagement by incorporating students' individual background/interests (e.g., novel choice) (N=27)
- Provided accommodations (e.g., deadline extensions) (N=24)
- General reference to modifying curriculum and/or instructional practice (N=23)
- Offered additional interventions (e.g., extra help after school) (N=12)
- Altered instructional approach (e.g., utilized more inclusive language) (N=5)

Thus, results from the qualitative analysis of open-ended survey data cohered with the quantitative finding that the majority of teachers who participate in the WCR use knowledge of the whole child to make decisions in the classroom.

Another analysis gathered and analyzed qualitative data on personalization of instruction. A series of case studies was conducted in three different schools. Data for each case study included: a) observation of a WCR with the teacher and Coordinator and; b) follow-up interviews with the teacher and Coordinator c) contextual information about the teacher and Coordinator (e.g., years of experience, years with City Connects; d) implementation history of City Connects in the school and district; and e) school-level and district-level information about student characteristics (e.g., test scores, attendance rates). Observation and interview data were coded using thematic analysis and consensual qualitative coding methods (Braun & Clark, 2006; Saldaña, 2013). Contextual and demographic information were analyzed descriptively. Findings from these analyses were triangulated, and several key themes emerged. Importantly, all teachers, regardless of experience level or the particular characteristics of students in their school, view the WCR as an opportunity to think aloud about students as individuals and gain

whole child knowledge. Further, the WCR helps the teacher better understand what students bring to the classroom and why they may struggle to meet academic or behavioral expectations. The teacher then applies information from WCR to personalize learning for each student.

In the words of a Coordinator speaking about the Whole Class Review,

> "It's an opportunity for someone to listen to them. Because for years, teachers have sat with this knowledge in the classroom with no one to act upon it. And now here comes another adult in the building that wants to know about your kids. I want to know what you see as strengths. I want to know what you are concerned about. And I'm writing it down. So if I'm writing it down, it must be important, right? And it might be something I can follow up with. Teacher are feeling like, 'Someone's listening to me and someone's going to help my students.' Because teachers are passionate about what they do. They care."

Taken together, findings provide evidence that when there are practices in place within the school to make consideration of the whole child explicit for teachers (via the City Connects WCR process), it helps teachers better personalize learning and support students' holistic development.

- While teachers have always implicitly identified and responded to whole-child needs in the classroom, the City Connects WCR provides an opportunity to expand and deepen whole child knowledge, thereby making explicit what was once implicit and abstract.
- As a result, teachers are better able to apply whole child knowledge in the classroom to personalize their instructional practice in response to students' unique strengths and needs across developmental domains.
- Teachers in schools implementing City Connects find value in having a structured, scheduled time to review their students' holistic strengths and needs with a student support professional.
- Irrespective of teacher-level (such as grade level taught or years of experience) or school-level characteristics (like rates of chronic absenteeism), City Connects teachers are universally applying whole child knowledge from the City Connects WCR process to make decisions about how they support students in the classroom
- Whole child knowledge impacts how teachers interact with their students, address students' non-academic needs, and modify their curriculum/instructional practices.

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School and community stakeholder feedback

Each spring, City Connects conducts confidential surveys of principals, teachers, and community partners who work with City Connects. The surveys are designed to assess participants' satisfaction with City Connects and to identify both strengths and opportunities for improvement. The survey is administered electronically using the Qualtrics survey tool. All principals are surveyed annually. Teachers and community partners are surveyed every year during the first three years of implementation of City Connects in their district, and every other year after that.

In the spring of 2021, City Connects surveyed principals from Boston public and Catholic schools; Springfield and Salem, MA public schools; Dayton and Springfield, Ohio public and Catholic schools; and Minneapolis, MN public and Catholic schools. Teachers in public and Catholic schools in Boston, Minneapolis, and Dayton and Springfield, Ohio were invited to participate. Community partners – who may work with both public and Catholic schools in their communities – were surveyed in Boston and Springfield, Massachusetts; Minneapolis, Minnesota; and Dayton and Springfield, Ohio.

The findings below are presented in aggregate across all districts. In this section, we report on principal, teacher, and community partner feedback.

Principal feedback

Principals and administrators at all sites were invited to participate in City Connects annual feedback survey.[2] Across all districts, 99% of principals reported satisfaction with City Connects *and* would recommend City Connects to another principal. Overall, 72% of principals report having more time for their core work, and 94% reported that student support had improved in their schools as a result of City Connects. In the words of a Boston principal,

> "City Connects has supported our commitment to the whole child, ensured we take a comprehensive, data-driven approach to reviewing the strengths and needs of all students and match resources to support them strategically. They have also supported with resource distribution, family advocacy and behavior/crisis response, as well as direct social-skill development supports. ALL of these contribute to the success and wellness of our students."

Principals reported that Coordinators' work to communicate with and support families was a particular area of strength for the intervention: 96% of principals report that the Coordinator plays an important role engaging families, and 97% report being satisfied with the supports that the Coordinator provides for families. When asked to identify ways the City Connects Coordinator works with families in the school, a majority of principals reported that Coordinators served as a point of contact for families in the school (89%), reached out to families on behalf of the school (92%), supported teachers in having difficult or sensitive conversations with families (91%), connected families to services (92%), and supported families with transitions (81%).

[2] The survey was sent to 120 principals and assistant principals across districts, and 81 (68%) participated. Not every principal responded to every question. Therefore, item-level Ns may vary.

In the words of a Springfield, Massachusetts principal,

> "[Coordinator] has an incredible way of connecting with parents and families and she also is organized and communicates progress and benchmarks so everyone is clear as to what has been reviewed and the plan moving forward. This is such an incredible skill set and support for our school and staff."

In addition to being satisfied with City Connects' work with families, principals also reported satisfaction on a range of Coordinator-provided supports. See Table 8.

TABLE 8. Percentage of principals satisfied with the Coordinator-provided supports in each area

I am satisfied with the support City Connects provides to:	N=78
Students (e.g., securing services, providing individual support, running lunch groups)	95%
Teachers (e.g., conducting Whole Class Reviews and assisting with behavior challenges in the classroom)	94%
Families (e.g., family outreach, following up with families, assisting with parent meetings)	97%
Principals/Administrators (e.g., coordinating Student Support Team, supporting administrative activities)	96%
The School (e.g., their presence on the playground, bus and lunch duty)	88%
Community Partnerships (e.g. maintaining communication with agencies, following up to secure services, coordinating agency work in the school)	94%

Source: City Connects 2021 principal survey

Principals also reported on how helpful they found various aspects of City Connects in their schools. As shown in Table 9, a large majority of principals (89% or more for all items) found each aspect of the program helpful, with facilitation of the student support team and coordination of Whole Class Reviews being the highest-rated program aspects at 99% satisfaction each.

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TABLE 9. Percentage of principals rating specific program aspects as (somewhat/very) helpful

The following aspects of City Connects have been somewhat/very helpful in my school:	N=80
Facilitation of the Student Support Team	99%
Coordination of Whole Class Reviews	99%
Students being connected to services	98%
Individual and small group student support	98%
Behavior management support	89%
Teacher support	94%
Family support	98%
Focus on health	92%
Having the extra staff member in the building	96%
Management of relationships with community agencies	96%
Administrative support	92%
Student support data (e.g., Mid-year report, End-of-year report)	96%

Source: City Connects 2021 principal survey

Principals also reported on the impact of City Connects on other dimensions of education and the school environment. Table 10 below presents the findings.

TABLE 10. Percentage of principals rating City Connects as (somewhat/very) helpful at impacting the following

City Connects has been somewhat/very helpful in impacting the following:	N=80
Student learning/academic achievement (i.e., grades)	94%
Student classroom behavior	94%
Student health and wellbeing	98%
Teacher ability to focus on instruction	91%
Teacher ability to support students in the classroom	96%
The appropriateness of Special Education referrals	94%
The number of community-based service providers in the school	98%
The quality of supports and enrichments provide to students in the school	95%
School climate	94%

Source: City Connects 2021 principal survey

As seen in the table above, 91% or more of all principals found City Connects to be helpful at impacting these items, with health and wellbeing and the number of community-based service providers supporting the school as particular areas of strength.

In the words of an Ohio public principal,

> "City Connects has been extremely helpful with connecting families with resources and ensuring that students' needs are met on every level."

Teacher feedback

Public and Catholic school teachers in Boston; Dayton and Springfield, Ohio; and Minneapolis, Minnesota were invited to take part in a survey in spring 2021[3]. Like principals, teachers reported high levels of satisfaction: 90% of teachers report that they are satisfied with City Connects *and* would recommend the intervention to a colleague. 88% are satisfied with the supports City Connects provides to the school, 87% are satisfied with the supports provided to students, and 84% are satisfied with the supports they receive as teachers.

Teachers were also asked about the Whole Class Review process, in which the teacher and Coordinator review the strengths and needs of each individual student across academic, social/emotional/behavioral, health, and family domains. As shown in Table 11, teachers report that this process influences various aspects of their work with students.

TABLE 11. Percentage of teachers who agree with each statement about the Whole Class Review

I agree that:	N=344
The Whole Class/Grade Review process enhanced my awareness of the dynamics of my class as a whole.	88%
The Whole Class/Grade Review process enhanced my awareness of my students as individuals.	89%
The Whole Class/Grade Review supported my ability to identify new options for working with my students.	79%
The Whole Class/Grade Review was helpful to me.	84%
My instructional practices were enhanced as a result of the Whole Class/Grade Review.	75%
The Whole Class/Grade Review process added to my knowledge of the non-academic aspects of my students' lives (e.g., neighborhood and family context).	81%
The Whole Class/Grade Review process increased my empathy for students.	85%

Source: City Connects 2021 teacher survey

[3] The survey was sent to 773 teachers, and 425 (55%) participated. Not every teacher answered every question. Therefore, item-level Ns may vary.

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As seen in Table 11, the Whole Class Review process may lead to a shift in teachers' perspectives on individual students. In the words of a Minnesota teacher,

> "There are so many factors and experiences that my students have each and every day before entering the classroom. It puts things into perspective for me and feel I am more willing and understanding as I adjust and modify learning activities for students to meet their needs on all levels."

Teachers who participated in the Whole Class Review process report that knowing more about the non-academic aspects of their students' lives influences their teaching practice. For example, 94% or more of teachers reported that they:

- Provided more differentiated instruction to meet the various learning styles of their students (e.g., small group work, visuals, and movement);
- Applied effective strategies to support students with specific academic needs;
- Were patient with their students because they better understood the non-academic issues that contributed to students' struggles in the classroom; and
- Thought about the factors influencing student behavior before reacting to the behavior.

In the words of a Boston teacher,

> "I can really get a pulse on my scholars and their families by completing the Whole Class Review. This makes me accountable for making sure I understand and know my scholars in school, but more importantly as little humans at home."

In addition to the Whole Class Review process, teachers were also asked to respond to a set of questions regarding the Individual Student Review, which 60% of teachers reported participating in. In an Individual Student Review (or ISR), the Coordinator brings a team together to discuss strengths, needs, and specific goals for students experiencing intensive risk. In addition to the Coordinator and teacher, the team may include a principal or assistant principal, a school nurse or other support staff member, community agency representatives, and/or family members. Teachers who participated had positive feedback about the process: 91% agreed that students who would benefit from an Individual Student Review received one, and 92% felt that the goals and objectives set for students were on target. Furthermore, 84% of teachers agreed that having a tailored plan in place for the student(s) who received an Individual Student Review made a difference to them as teachers. A majority of teachers were satisfied with the follow-up after the review *and* the quality of services their students received as a result of it (83%). In the words of an Ohio teacher,

> "The most important benefit of City Connects is providing the ISR meetings with students and families. Having a keen sense of awareness of what are the best community supports for students and [having] an in-depth knowledge of each family."

Teachers also responded to a set of questions regarding the specific ways City Connects Coordinators supported their work. Coordinators' ability to serve as a source of knowledge about student support, to support teachers in their work with families, to obtain services for students, and to be someone to talk to and problem solve with were among teachers' top-rated supports.

A Minnesota teacher described their City Connects Coordinator in this way:

> "Having a full-time employee at our school that can focus on student behavior, relationships and teacher support greatly helps my overall classroom environment! She has built strong relationships with my students and she is another person they can go to with issues or questions."

According to a Boston teacher:

> "[The City Connects Coordinator] is amazing with all the students, teachers and families. She gives assistance, support, and guidance to everyone. She always makes time for anyone who needs it. The role she plays in our school is an extremely important one. [Coordinator] creates lessons for whole class, small social groups, as well as one on one time. The students have a wonderful connection with her.'

Teachers also reported on the helpfulness of City Connects in addressing other issues in the classroom. For example, 82% of teachers reported that City Connects helps them to follow through in securing non-academic supports for their students, and 76% found City Connects to be helpful in ensuring students came to class prepared to learn. Further, 74% agreed that City Connects helped them to address student behavior and connect with students' families; 73% of teachers reported that City Connects helped make their classrooms more conducive to learning. In addition, three quarters (75%) agreed that City Connects promotes their effectiveness as a teacher.

Collaborating with families is a critical piece of the City Connects Coordinators' role, and Coordinators can support teachers in this area of work. Overall, 72% of teachers reported that Coordinators serve as a point of contact for families in the school, and 75% report that the Coordinator is a source of support for families. Two thirds of teachers (67%) agreed that the Coordinator increased their awareness as teachers of the services available for families, such as translation, housing, and transportation. Overall, 63% of teachers agreed that Coordinators supported them in having difficult or sensitive conversations with families, and more than half (57%) reported that Coordinators contacted families on their behalf.

A Minnesota teacher reported,

> "I think the most important benefits [of City Connects] are (1) helping students and families navigate non-academic needs by equipping them with wisdom, confidence, and resources; and (2) serving as a go-between between students, families, and school employees."

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Community agency feedback

Community agency partners who work with public and Catholic schools in Boston and Springfield, Massachusetts; Minneapolis, Minnesota; and Dayton and Springfield, Ohio were invited to take part in a survey in the spring of 2021.[4] Like the principals and teachers who were surveyed, community partners reported high levels of satisfaction with City Connects. For example, 95% of community partners reported overall satisfaction with City Connects and 100% would recommend City Connects to another agency. Further, 98% felt that City Connects was effective at identifying the needs of the students they work with and 89% agree that City Connects is effective at matching students to services.

In the words of a Boston partner,

> "City Connects Coordinators provide an on-site person who has direct in-depth knowledge about students' academic and social-emotional needs, as well as their family needs. This enables the Coordinator to amass a variety of services that are important to serve students in a more meaningful and productive way. Coordinators are an intimate part of the school and its services."

According to a community partner in Springfield, Massachusetts,

> "City Connects staff are attuned to their student populations and know their families. They understand the dynamics in their school building and are phenomenal liaisons."

Community partners were also asked to indicate their level of satisfaction when working with schools with City Connects and schools without City Connects across specific aspects of school-related work, such as communication, referrals, and follow-up. Participants were first asked to respond to a set of survey questions pertaining to their work with schools implementing City Connects. They were then prompted to answer the same set of questions related to their work with other ("non-City Connects") schools.

Across each dimension of positive collaboration, community partners were more satisfied with City Connects schools than schools without City Connects. The results are shown in Table 12.

[4] The survey was sent to 371 community agency representatives who may have partnered with City Connects during the 2020-21 school year. Of those, 64 (17%) participated in the survey. Note that some survey recipients did not participate because they did not work with a school implementing City Connects. Not every community agency respondent answered every question. Therefore, item-level Ns may vary.

TABLE 12. Percentage of community partners who are satisfied (very/somewhat) with dimensions of partnership with City Connects and non-City Connects schools

I am satisfied with:	City Connects Schools N=42	Non-City Connects Schools N=42
Communication with primary contact	93%	88%
Referral process (e.g., identifying students that would benefit from your services)	83%	78%
Follow-up on service delivery (e.g., checking to ensure the student(s) received the service)	76%	66%
Effectiveness of your partnership in reaching goals	86%	71%
Providing you with feedback that would improve service delivery, when appropriate	76%	69%
Providing opportunities for you to provide feedback to the school	71%	68%
The cultural competence of your primary contact in the school	93%	85%

Source: City Connects 2021 community partner survey

As the table illustrates, across all dimensions, partners were more satisfied in their work with City Connects schools than with non-City Connects schools, particularly in the areas of follow-up on service delivery and effectiveness of the partnership in reaching goals.

According to a Minnesota partner,

> "[Coordinator] really effectively bridges the school to [organization's] resources in a way that makes it really easy (on my end) rather than tracking down individual teachers who may be over-taxed. I'm guessing it works well on the school's end, too, to have someone who understands their precise community helping to seek out the right fit in how [our organization] delivers services."

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Conclusions

More than twenty years ago, a diverse group came together to design a school-based practice that would support children and families. The collaborators included researchers from Boston College; principals, teachers, staff, families, and students from Boston Public schools; and representatives from Boston-area community agencies and civic organizations. They approached this work holistically, believing that by considering students' strengths and needs, schools could connect each student to the customized set of prevention, intervention, and enrichment services that would best support their learning and healthy development. Since launching in a single Boston Public school in 2000, City Connects has expanded to over 140 public, Catholic, and charter schools and one community college across five states and in Dublin, Ireland. Throughout this period of growth, and particularly in the past several years, interest in interventions like City Connects has increased among practitioners, researchers, and policy makers. Addressing out-of-school factors in a comprehensive way for every student in a school is at the core of the City Connects practice.

City Connects is distinct from other approaches to student support in several significant ways. It is grounded in developmental science: decades of theoretical and empirical research on child development has informed City Connects' practice and continuous improvement. City Connects considers four developmental domains – academic, social/emotional/behavioral, health, and family – to uncover and address not just the surface issues, but the underlying reasons for any challenges. Most critically, City Connects builds a system of student support across the school and across a school district.

City Connects believes that schools are the epicenter of support for children and families. Schools implementing City Connects can transform their pre-existing structures and roles, making them more systematic and systemic in supporting students. By having a highly-trained coordinator of student support in each school, City Connects can ensure that a tailored support plan is developed for all students. Additionally, for students at significant risk, an in-depth, structured review is held. The City Connects practice also includes defined paths of collaboration with families and community agencies. Both are key partners in student success.

Moreover, City Connects is unique in its ability to monitor and evaluate its implementation and its effectiveness. A fidelity monitoring system uses a proprietary software to automatically compile information showing the degree to which City Connects is being delivered in each and every location across the network. More than twenty years of evaluation suggests positive outcomes for students, schools, and communities, including both academic achievement and improved life chances. At the elementary level, students enrolled in schools implementing City Connects experience better academic outcomes than their peers, including improved effort, better grades, better attendance, and improved performance on state tests. In middle and high school, students who previously experienced City Connects in elementary school outperform comparison peers on indicators of educational success and life chances, including positive impact on retention in grade, chronic absenteeism, and high school dropout. Once City Connects students graduate from high school, they have higher rates of enrollment in, and graduation from, post-secondary institutions. Annual surveys consistently find high levels of satisfaction among principals, teachers, and community agencies who partner with City Connects. The research on City Connects demonstrates that City Connects makes a difference for students over the course of their lives.

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