Bridging Achievement Gaps: Evidence from State Longitudinal Data on Integrated Student Support Interventions

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Abstract

Persistent achievement gaps in U.S. K–12 education have widened during the COVID-19 pandemic, with long-term implications for equity and economic mobility. This study uses longitudinal student-level administrative data from a Midwestern state to examine how the academic performance of marginalized students changed relative to their peers during the pandemic and to assess the impact of an integrated student support (ISS) intervention on narrowing these gaps. We track achievement trajectories for student cohorts and compare marginalized subgroups with their peers, revealing nuanced patterns in the evolution of achievement gaps. To evaluate the ISS intervention, which has been gradually implemented in 84 schools since 2021, we exploit its staggered rollout and apply a student-level difference-in-differences design. Findings indicate that family income disparities are a major driver of achievement gaps, with low-income African American students particularly vulnerable. English learners also face compounded barriers that limit progress. The ISS intervention shows significant positive effects on student performance, with treated students demonstrating meaningful gains in math and ELA achievement. To provide contextual understanding of the barriers underlying these disparities, we triangulate results with evidence from a statewide principal survey. Overall, the study underscores the importance of addressing non-academic barriers through integrated school- and community-based supports and demonstrates how ISS interventions implemented through pandemic recovery funding can play a critical role in advancing educational equity post pandemic.

1. Introduction

In the U.S. K–12 education system, disparities in academic achievement between marginalized students and their more advantaged peers have persisted for decades (Reardon, 2011). Students from low-income families, English learners, and racial minority students face intersecting barriers, including limited access to educational resources at home and in their communities (Coleman et al., 1966; Putnam, 2015) and enrollment in under-resourced schools (Owens et al., 2016). The COVID-19 pandemic exacerbated these long-standing opportunity gaps, further widening achievement disparities (Kuhfeld et al., 2022; García & Weiss, 2020).

The consequences of these disparities extend beyond education. Students who fall behind are less likely to graduate, pursue postsecondary study, or enter the workforce with competitive skills, with implications for long-term economic growth and community well-being (Hanushek et al., 2020). In response, many states and districts have prioritized narrowing achievement gaps for low-income students, English learners, and African American students as they recover from the pandemic. In order for policymakers and district leaders to make informed decisions in allocating recovery resources, it is essential to have a nuanced monitoring and understanding of the evolution of the achievement gap throughout the pandemic. In addition, many of the obstacles marginalized students face originate outside the classroom, and traditional schools often lack the resources or capacity to address them directly. Therefore, addressing this issue requires coordinated efforts to integrate resources within the school and the communities.

Integrated student support (ISS) strategies like City Connects offer an evidence-based way to address not only academic needs but also the health, socioemotional, and family factors that influence learning. Recognizing the importance of ISS in promoting student success, many states and districts in the US have allocated funding to help schools implement such interventions as part of the pandemic recovery strategy. These initiatives include Community Schools, City Connects, and similar interventions. As the focus of this study, a Midwest state funded schools to implement the City Connects ISS intervention on a large scale across the state. Beginning with the initial rollout in 2021–22, 84 schools in the state have implemented City Connects as of the 2023–24 school year.[1]

This study aims to understand how the pandemic affected the learning trajectories of the marginalized students relative to their majority peers and to quantitatively assess the impact of City Connects on student achievement. Specifically, this study answers the following research questions:

a. *To what extent have the academic achievement of marginalized students in this Midwest state changed since the disruption of the COVID-19 pandemic? Specifically, has progress in achievement differed for marginalized students relative to their peers?*
b. *How does City Connects, a comprehensive student support approach, help close academic achievement gaps for marginalized students of this Midwest state recovering from the COVID-19 pandemic?*

We leverage the rich data from the statewide longitudinal data system to first examine the evolution of the achievement gaps in the wake of the pandemic. We then examine the extent to which academic achievement changes for students from historically marginalized groups—such as students from low-income families, English learners, and Black students—attending schools that implement City Connects, compared to similar students in non-participating schools.

This study is part of the Institute of Education Sciences' Statewide Longitudinal Data Systems (SLDS) grant. This study provides a preliminary evaluation of City Connects' large-scale implementation in this Midwest state, a context different from the site where the intervention was first developed and accumulated most robust evidence in its effectiveness — Massachusetts. By doing so, it contributes to the broader evidence base on ISS interventions and their role in promoting educational recovery in the post-pandemic era.

[1] Two schools from this state implemented City Connects before the pandemic. However, because these schools fall outside the primary period of interest of this study, they are not included in the current analysis as treated schools.

2. Achievement Gaps in a Midwest State

Our analysis begins by documenting trends in math and ELA performance for historically marginalized student groups relative to their peers. A thorough understanding of how achievement gaps evolved in the wake of the COVID-19 pandemic is essential for evaluating interventions during this special time period, as it provides critical context for interpreting their effectiveness.

2.1 Method

We use student-level longitudinal data acquired from the state Department of Education, which includes the statewide standardized exam scores and student demographic information. We use the school years between 2018-19 and 2023-24, which span before and after the COVID-19 pandemic. We begin by examining achievement gaps between marginalized student subgroups and their peers, focusing on Black students, students eligible for FRL, and English learners. To contextualize subgroup performance, we incorporate the state's proficiency standards, which classify students as "Approaching Proficiency," "At Proficiency," or "Above Proficiency." These cut scores establish consistent growth targets across grade levels and provide a common benchmark for evaluating student outcomes. In our visualizations, we use the "At Proficiency" threshold as the primary reference point to assess how well students in different subgroups are meeting grade-level expectations in math and ELA. We focus on math and ELA, as statewide standardized assessments of these subjects are administered annually in grades 3–8, providing a continuous record of student progress.

In order to understand how achievement gaps evolve over time as students go through the school levels. We focus on certain student cohorts and follow them as they progress to higher grade levels. Table 1 outlines the cohorts included in our analysis and the corresponding grades they attended during each school year. For example, Cohort 1—the youngest group included in this study—began Grade 1 in the 2018–19 school year and took their first standardized exam in 2021, when they reached Grade 3. Cohort 2 did not have their Grade 3 exam due to the disruption of the pandemic and had their first exam in 2021 in Grade 4. Cohort 3 started Grade 3 in the 2018–19 school year and had their first exam in Grade 3 pre-pandemic. Due to the cancellation of assessments in the 2019–20 school year (Grade 4), their progress data resumed in Grade 5. Similarly, Cohort 4 started Grade 4 in the 2018-19 school year with four assessment records that can be used for the analysis. Cohort 5 started Grade 5 in the 2018-19 school year with three assessment data points available. Other cohorts with less than three assessment records are not included in the analysis.

Table 1. Cohorts Indicators Show the Grade Level in Different Years

	2019	2020	2021	2022	2023	2024

Cohort 1	*Grade 1*	*Grade 2*	Grade 3	Grade 4	Grade 5	Grade 6
Cohort 2	*Grade 2*	*Grade 3*	Grade 4	Grade 5	Grade 6	Grade 7
Cohort 3	Grade 3	*Grade 4*	Grade 5	Grade 6	Grade 7	Grade 8
Cohort 4	Grade 4	*Grade 5*	Grade 6	Grade 7	Grade 8	*Grade 9*
Cohort 5	Grade 5	*Grade 6*	Grade 7	Grade 8	*Grade 9*	*Grade 10*

Notes: The grade numbers with *gray and italic* font indicate no assessment records available either because the exam were not applicable for the grade or canceled due to the pandemic.

Focusing on specific cohorts defined above and using graphical representations, we illustrate the academic progress of certain cohorts in math and ELA, with a particular focus on differences between marginalized student subgroups (Black students, students eligible for FRL, and ELLs) and their peers (White students, students not eligible for FRL, and non-ELLs). These visuals allow us to observe how achievement gaps evolve over time and across grade levels, providing important insights into where disparities emerge, persist, or narrow. This cohort-based approach not only highlights the trajectories of individual groups but also offers a broader understanding of at what point challenges start to have their impact and interventions may influence educational outcomes.

2.2 Findings

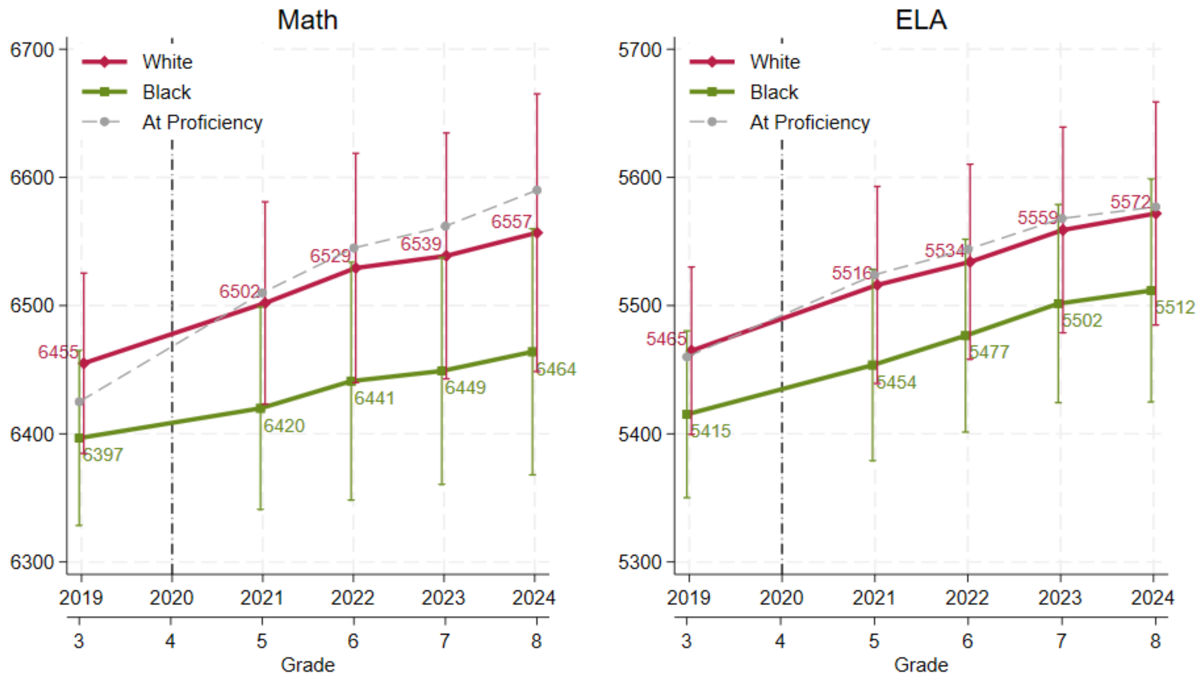
We focus on the "Cohort 3" that began Grade 3 in the 2018–19 school year, for which we have the most comprehensive assessment data. We summarize the main findings, using Cohort 3 as an illustrative example. Other cohorts exhibit similar patterns as described in this section. We include the graphs for Cohort 4 as examples in the Appendix.

2.2.1 Achievement Gaps Widened Right After the COVID-19 Pandemic

By tracking Cohort 3 over time, we observe that achievement gaps between racial groups, different family income groups, and language proficiency groups widened significantly following the COVID-19 pandemic. The widening of the achievement gaps was more pronounced in Math than in ELA.

Figure 1 compares the performance of White and Black students. In Grade 3, the Math achievement gap between these groups was 59 scale score points, equivalent to 0.78 standard deviations. By Grade 5, this gap had increased to 82 scale score points or 0.95 standard deviations. In ELA, the gap widened from 50 scale score points (0.72 SD) in Grade 3 to 63 scale score points (0.77 SD) in Grade 5. Average scores for both subgroups fell below proficiency levels in 2021.

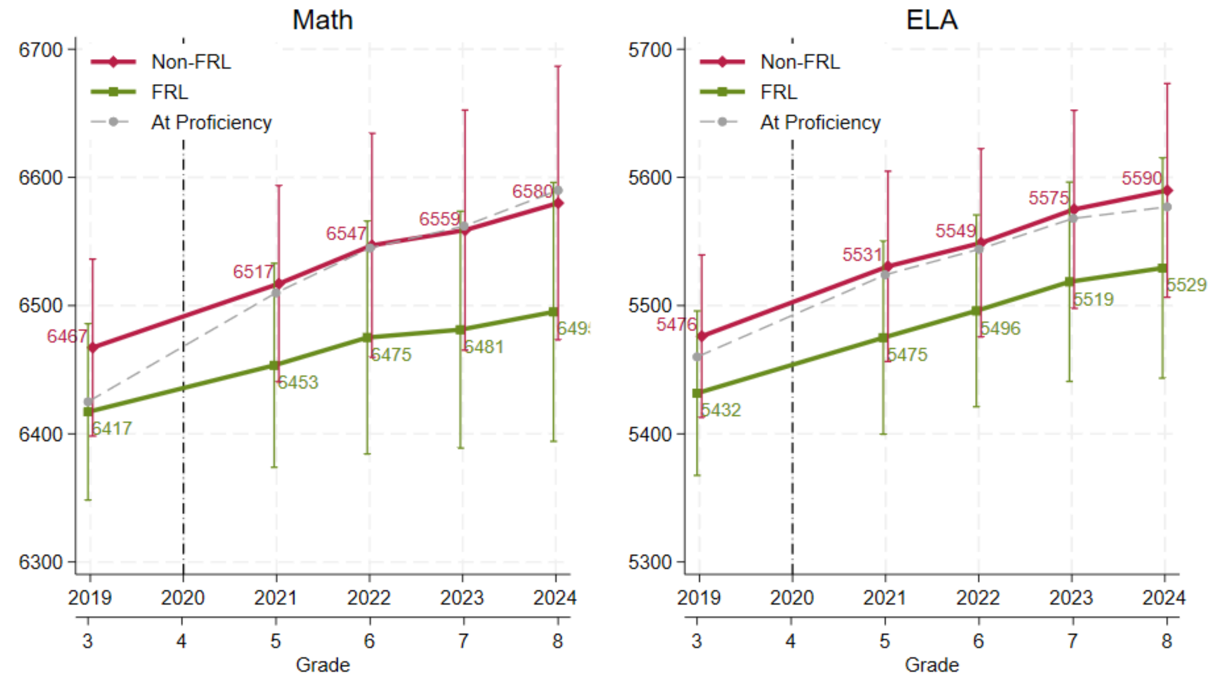
Figure 1. Math and ELA for White and Black, Cohort 3



Notes: The graphs show the mean scale scores for Math and ELA by focusing on the same cohort with the constant sample definition. The capped bars going through the dots represent one standard deviation specific for a school year.

Figure 2 presents a comparison between students eligible for FRL and those not eligible (non-FRL). In Math, the gap between non-FRL and FRL students increased from 50 scale score points (0.67 SD) in 2019 to 64 scale score points (0.74 SD) in 2021. In ELA, the gap grew from 45 scale score points (0.65 SD) to 56 scale score points (0.69 SD) over the same period.

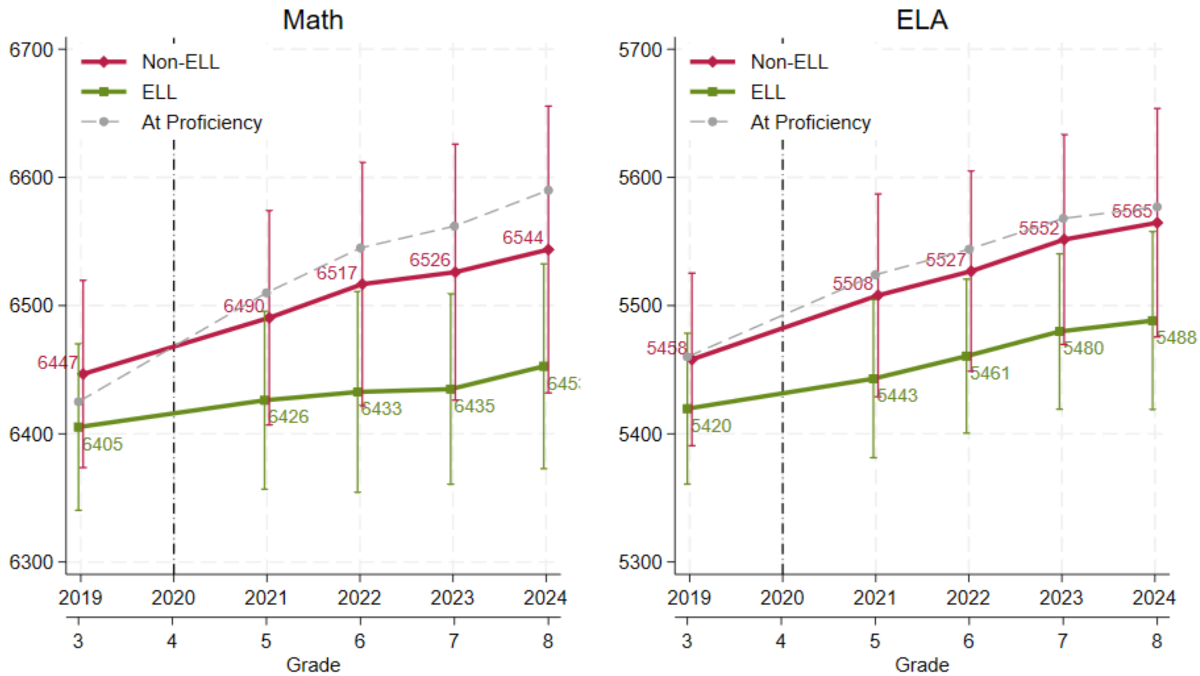
Figure 2. Math and ELA for Non-FRL and FRL, Cohort 3



Notes: The graphs show the mean scale scores for Math and ELA by focusing on the same cohort with the constant sample definition. The capped bars going through the dots represent one standard deviation specific for a school year.

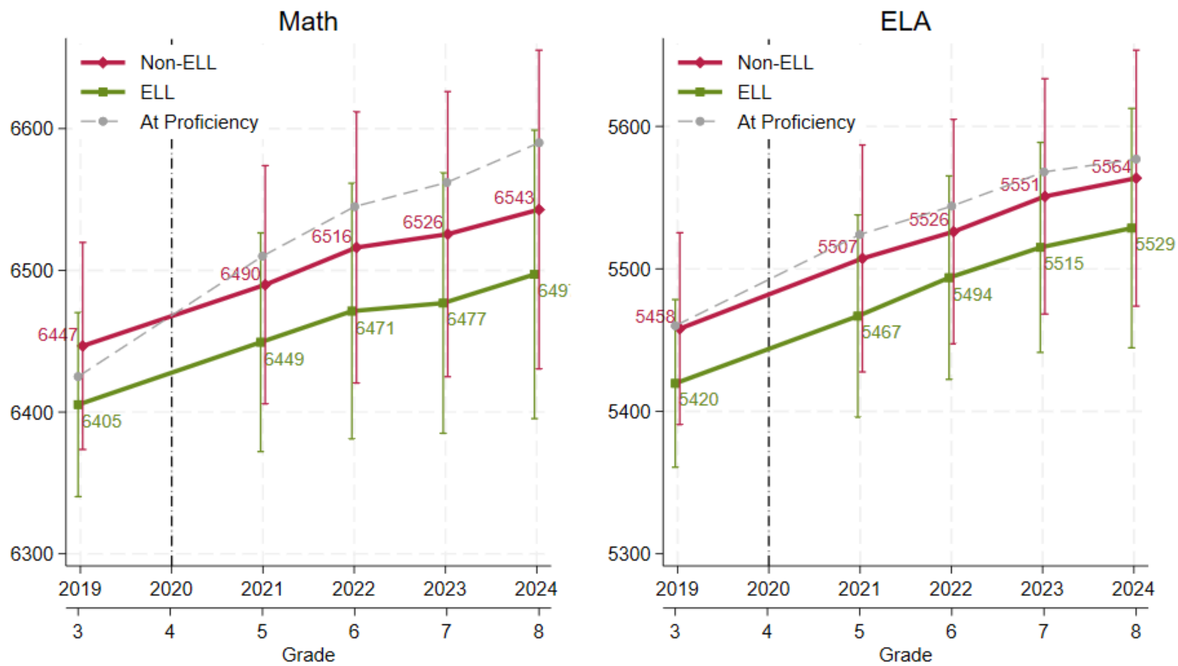
Next, we make comparisons based on ELL status. ELL status is dynamic as students exit the ELL program and classification once they are assessed as proficient in English. As a result, we adopt two alternative approaches to define the analytical sample. First, we use students' current ELL status in each school year to compare ELL and non-ELL performance. Figure 3 illustrates achievement gaps between ELL and non-ELL students based on this definition. These comparisons reveal large and widening gaps in both Math and ELA after the pandemic. However, because the composition of the two groups changes each year, using current ELL status can lead to misleading conclusions. To address this issue, we implement a second approach: we define ever-ELL status based on students' ELL enrollment during the 2018-19 school year**,** for example, their Grade 3 ELL status for the Cohort 3, and follow the two groups of students (ELLs and non-ELLs defined in Grade 3) over time. Figure 4 presents achievement based on this fixed and consistent sample classification. Using this classification, we find that students identified as ELLs in grade 3 did not fall further behind in subsequent years. Instead, their performance in Math and ELA progressed in parallel with that of their non-ELL peers. The larger and widening achievement gaps shown in Figure 3 can therefore be attributed to selection effects, namely, higher-performing students exiting the ELL program upon meeting the English proficiency and lower-performing ELL students remaining in the program over time.

Figure 3. Math and ELA for Non-ELLs and ELLs, Cohort 3



Notes: The graphs show the mean scale scores for Math and ELA by focusing on the same cohort with the constant sample definition. The capped bars going through the dots represent one standard deviation specific for a school year.

Figure 4. Math and ELA for Non-ELLs and ELLs, Cohort 3 (based on G3 ELL status)



Notes: The graphs show the mean scale scores for Math and ELA by focusing on the same cohort with the constant sample definition. The capped bars going through the dots represent one standard deviation specific for a school year.

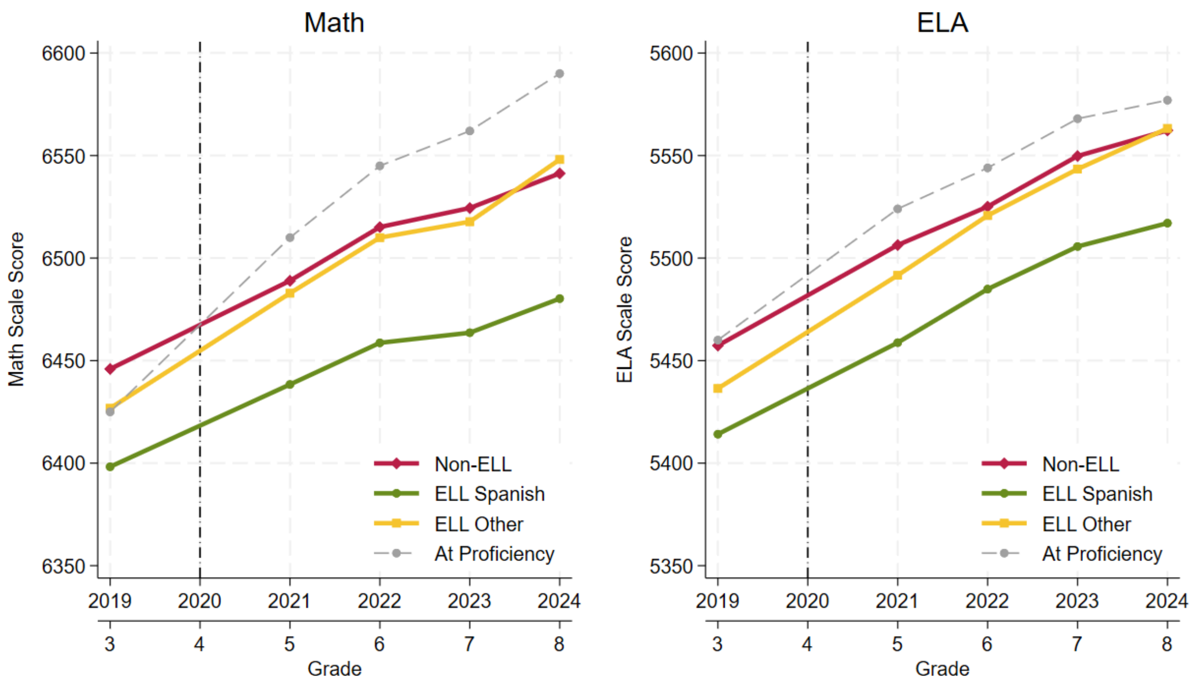
While we present graphs for Cohort 3 as an example, similar patterns are evident across other cohorts for which we have both pre- and post-pandemic assessment data. Across these cohorts, achievement gaps between historically marginalized students and their peers consistently widened as students advanced to higher grades right after the pandemic.

2.2.2 Spanish-speaking ELL Subgroups Face Greater Challenges

As discussed above, ELL status is dynamic, with students exiting the classification as they reach language proficiency. In addition, ELL students represent a diverse population with varying linguistic and cultural backgrounds. While the administrative data offer limited insight into these differences, they do provide information on what languages students speak at home. Using this information, we disaggregate the ELL population by home language to explore variation within the group. Spanish-speaking students comprise the majority of ELLs in the state (75%), so we divide ELL students into two groups based on whether or not Spanish is the primary language spoken at home. Although home language does not capture all aspects of students' lived experiences, it can serve as a proxy for understanding subgroup trends within the ELL population.

Figure 5 presents a comparison of ELL subgroups relative to non-ELL students. The ELL status is also based on grade 3 ever-ELL status, rather than the changing status in each school year to allow fair comparison based on stable subsample definition. The results reveal notable disparities: the gaps between Spanish-speaking ELL and non-ELL widened over time, both in Math and ELA assessments. In contrast, non-Spanish-speaking ELL students show a much smaller gap relative to non-ELLs—one that nearly disappears by Grade 5 in Math and by Grade 6 in ELA. At grade 8, non-Spanish-speaking ever-ELL students exceeded never-ELL students in both math and ELA.

Figure 5. Math and ELA for non-ELL, ELL speaking Spanish, and ELL speaking other languages Cohort 3



These findings suggest that the persistent underperformance among Spanish-speaking ELL students is driving much of the overall gap between ELLs and non-ELLs. This has important implications for policy and practice in identifying the subgroup of students the schools should pay attention to within a marginalized student population. If Spanish-speaking ELL students do not achieve sufficient English language proficiency by the time they reach upper elementary grades, they will struggle to access increasingly complex academic content in later years. This can result in widening achievement gaps that persist into secondary and postsecondary education.

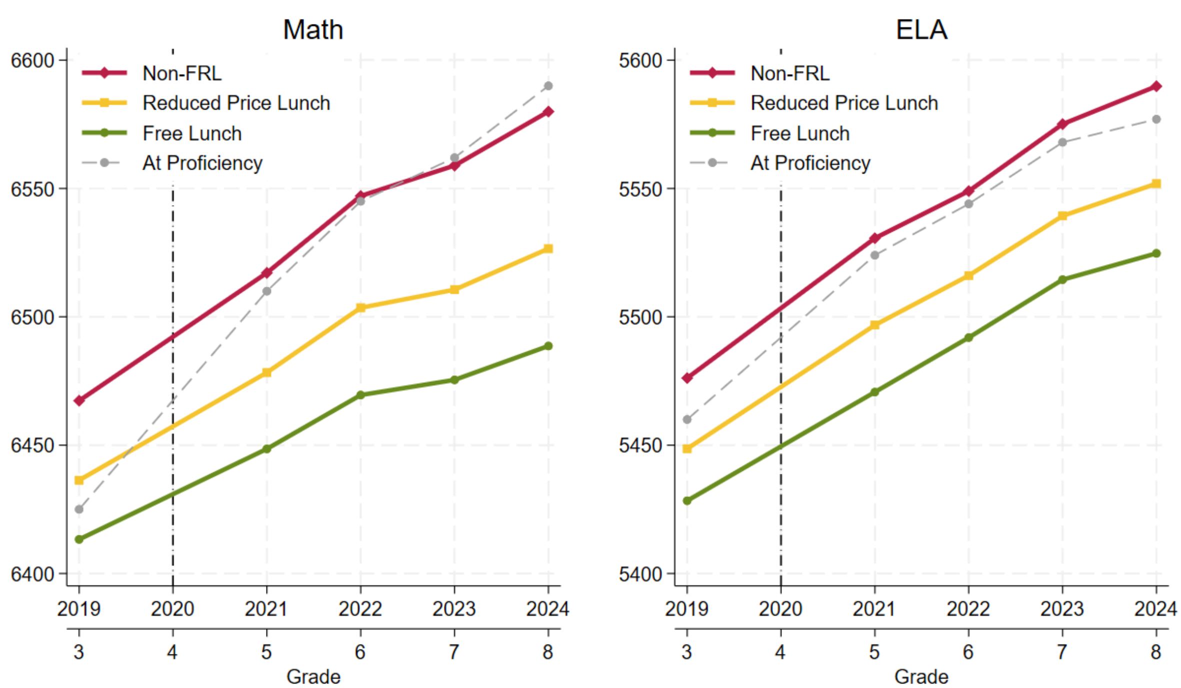
By disaggregating the ELL population, we uncover critical within-group variation that points to the need for more tailored support or interventions. Specifically, Spanish-speaking ELL students may benefit from more intensive or differentiated language and academic support to close the achievement gap and promote long-term educational success. More studies are needed to further understand the nuanced differences in the challenges faced by Spanish-speaking ELL student subgroups.

2.2.3 Poverty Is an Important Factor Associated with Achievement Gaps

Continuing to focus on the cohort that began Grade 3 in the 2018–19 school year, we further examine achievement gaps by disaggregating the data based on students' eligibility for FRL, a common proxy for family income. We further divide the sample based on whether they are eligible for reduced price lunch or free lunch. Students are eligible for reduced-price lunch if their family income is between 130% and 185% of the federal poverty level (FPL), and eligible for free lunch if their family income is below 130% of the FPL. Using this extra information within FRL allows us to explore the correlation between family income and student achievement when there is a lack of income information in the administrative data.

Figure 6 demonstrates a clear association between family income and academic performance in both Math and ELA. Students eligible for free lunch consistently perform at the lowest levels, and the achievement gap widens as they progress through higher grade levels—especially in Math. This pattern highlights the association between poverty and student achievement.

Figure 6. Math and ELA by sub-categories of the FRL Status, Cohort 3

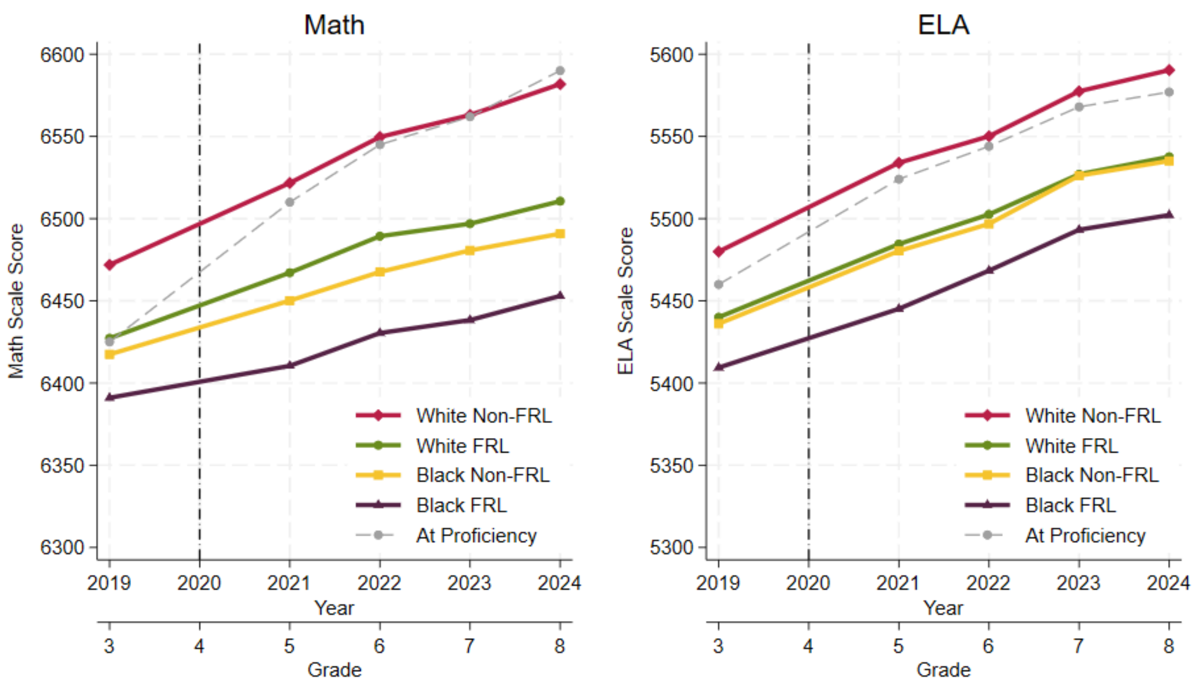


To better understand how family income and race intersect, we further disaggregate the data by FRL status and race. As shown in Figure 7, among White students, those not eligible for FRL generally meet or exceed proficiency standards in both Math and ELA. White students who are eligible for FRL start at the proficiency level in Grade 3 but experience a notable decline in performance following the pandemic, falling well below proficiency in subsequent years. This indicates a widening within-group gap among White students based on income status.

Black students who are eligible for FRL consistently perform at the lowest level across all subjects and in all grade levels. Notably, the gap between FRL and non-FRL students is larger within the White student group than within the Black student group. Nevertheless, Black students who are also economically disadvantaged face compounded barriers to academic achievement.

These findings suggest that poverty is a significant driver of achievement gaps. However, the intersection of race and poverty exposes deeper, systemic inequities that affect Black students, particularly those from low-income backgrounds. This also underscores the need for targeted, multi-dimensional support strategies that address both economic disadvantage and the broader social and institutional factors that contribute to unequal educational outcomes.

Figure 7. Math and ELA for White and Black Students by FRL Status, Cohort 3



2.2.4 Recovering from the Pandemic, Racial Achievement Gap Narrowed, however, Income-related Achievement Gap Persists

As highlighted in the previous sections, achievement gaps between marginalized subgroups and their peers widened significantly in the immediate aftermath of the COVID-19 pandemic. Schools across the US and this Midwest state received extensive support through federal and state initiatives aimed at mitigating the impact of disrupted learning. As these efforts took effect, there were signs of recovery. The achievement gaps measured with the absolute scale score shown above remain wider than pre-pandemic levels. However, when measured in terms of standard deviation, recent data show some sign of the gaps gradually being narrowed.

Figure 8 displays the achievement gap between White and Black students, measured in standard deviations. The gap in Math peaked in the 2021 test cycle and gradually declined over the next two years. A similar pattern is seen in ELA, where the gap also peaked in 2021 but narrowed steadily in subsequent years. By 2023, the ELA gap had fallen below its pre-pandemic level, although it is important to note that standard deviations tend to increase in higher grade levels, potentially influencing this trend.

Figure 8. Achievement gap between White and Black Students, Cohort 3

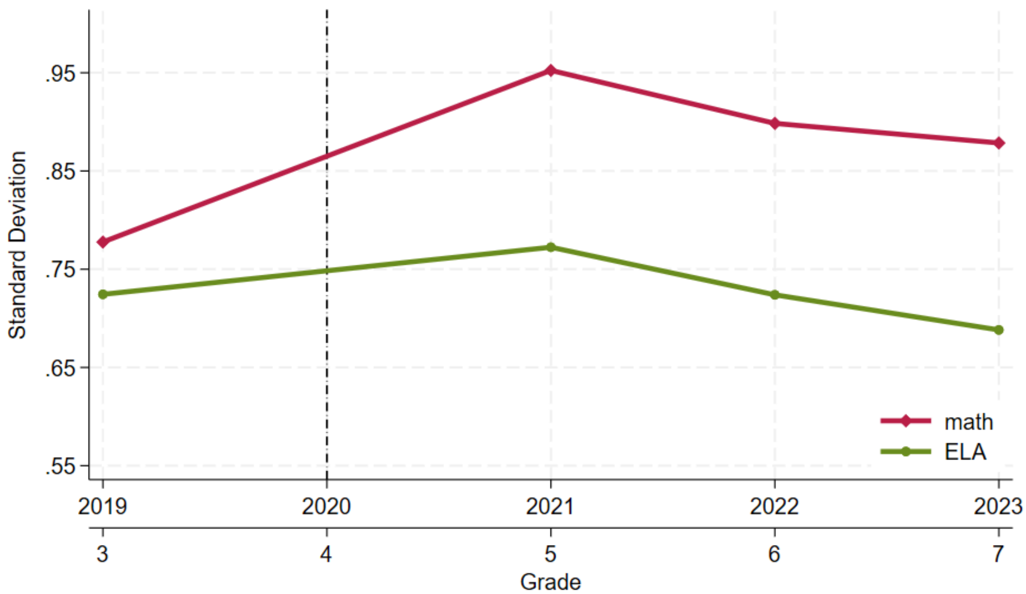
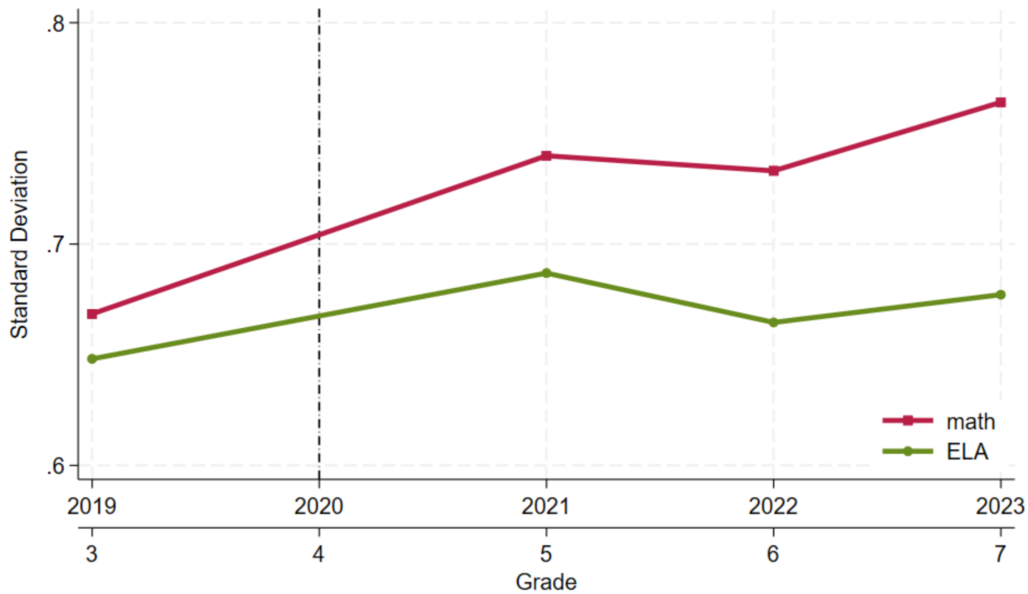


Figure 9 illustrates the achievement gap between non-FRL and FRL students. This gap followed a more complex trajectory. After widening in 2021, it narrowed in 2022 but widened again in 2023—particularly in Math. As discussed in the previous section, family income is closely tied to academic achievement, and these fluctuations in the gap may reflect broader socio-economic shifts. The proportion of FRL-eligible students declined from 50% pre-pandemic to below 45% in 2022. This decline may be partly explained by government assistance programs implemented during the pandemic, which likely helped lift some families above the FRL eligibility threshold. However, as pandemic-related financial support phased out, FRL eligibility rose again, reaching 48% in 2023. This rebound in economic hardship may help explain the corresponding uptick in achievement gaps between income groups, particularly in Math. These findings underscore the importance of continued support for economically disadvantaged students and suggest that changes in household income can have immediate implications for academic equity.

While progress is being made in narrowing achievement gaps—especially compared to the peak pandemic years—ongoing attention and sustained investment are critical to ensuring that recovery continues and that all students have opportunities to succeed.

Figure 9. Achievement gap between Non-FRL and FRL Students, Cohort 3



Through the graphs, we show the impact of the COVID-19 pandemic on students' academic trajectories. Students varied widely in how they responded to the disruptions, with some demonstrating resilience, while others—particularly those from socioeconomically disadvantaged backgrounds—experienced pronounced setbacks. These differences highlight how pre-existing inequalities were exacerbated by the pandemic and underscore the urgency of targeted educational recovery efforts.

2.3 summary

Findings from this analysis reveal nuanced patterns in achievement gaps across student subgroups, developmental stages, and baseline achievement levels. Our longitudinal approach highlights substantial variation within demographic groups, suggesting that broad categories such as race, FRL eligibility, or ELL status may mask important differences in students' needs and experiences. These patterns underscore the urgent need for evidence-based, targeted interventions that respond to the diverse circumstances of students. By identifying where gaps are most pronounced and which students are most affected, the analysis guides the design and implementation of targeted supports to promote equitable educational outcomes.

The findings from the achievement gaps analysis provide valuable policy implications for a focused, data-driven policy agenda to accelerate recovery from pandemic-related learning disruptions and advance long-term educational equity. The state can base on the findings to identify student subgroups with the most significant learning losses and direct resources, technical assistance, and capacity-building efforts to schools serving these students. Recovery efforts should targeted supports for students disproportionately affected by the pandemic, including English learners, African Americans, and low-income students, using disaggregated and cross-cutting data to address intersecting challenges; District and school leaders should promote coordinated approaches that integrate academic recovery with student well-being supports, such as mental health and family engagement. All of these initiatives should be implemented with robust progress monitoring through longitudinal data systems to track recovery over time, analyze variation within student groups, and inform resource allocation based on emerging trends.

To complement the longitudinal analysis, the research team conducted a statewide principal survey to provide contextual insight into the barriers and strengths schools face in supporting marginalized students. The survey captured principals' perspectives on school, family, and community factors that shape academic outcomes, offering an on-the-ground view of the challenges and resources that accompany the quantitative trends. A detailed description of the survey design, analytic approach, and key findings is provided in Appendix A.

By connecting the patterns of achievement gaps to actionable supports, this analysis sets the stage for evaluating whether City Connects and similar integrated student support interventions can help close these gaps and promote equitable post-pandemic learning outcomes.

3. City Connects and Its Implementation in this Midwest State

3.1 The City Connects Intervention

City Connects, as an integrated student support intervention, was developed in response to the recognition that social and behavioral factors in the context of academic learning may seriously impede students' ability to benefit from academic instruction (Walsh and Backe, 2013). City Connects provides a system for identifying, documenting, and addressing each student's holistic strengths and needs. It connects each student with a customized set of prevention and enrichment opportunities, as well as early intervention and intensive services (Walsh et al., 2014). Initiated in 2001 as a research and practice partnership between Boston College and the surrounding community, City Connects has served more than 300 public, charter, and Catholic schools across nine states in the U.S. and the Republic of Ireland.

As a hub of student support, the school counselor or social worker (referred to as City Connects Coordinators) develops a tailored plan of support for every student. With the teacher, the Coordinator assesses the strength and needs of the students and facilitates the connection of students with services (e.g., health care, eyeglasses, etc) and enrichment opportunities (e.g., art classes, music, sports) available in the school and wider community. These plans encompass the academic, social-emotional-behavioral, physical health, and family domains of child development. City Connects leverages school and community resources to mitigate the impact of out-of-school risk factors on student academic achievement. This core component of City Connects' practice aligns with the recommendations for student support initiatives from researchers, practitioners, and the federal government in the past few years (Moore and Emig, 2014; Moore et al., 2017; Garc´ıa and Weiss, 2017; US Department of Education, 2021).

3.2 Previous Studies about City Connects

Research on City Connects has shown positive impacts across various student outcomes and domains. Multiple studies have highlighted the model's effectiveness in promoting student learning and achievement in elementary and middle school settings (Walsh et al., 2014; An, 2015; Walsh et al., 2015; O'Dwyer et al., 2016; Jiang et al., 2023). Dearing et al. (2016) find that immigrant students participating in the City Connects intervention achieve higher ELA scores than their peers in comparison schools. Similarly, Akbayin (2017) shows that City Connects accelerates the language proficiency of migrant children and reduces the time they spend in the ELL program. Studies on the long-term impact of the City Connects intervention reveal that students exposed to the intervention during elementary grades exhibit lower dropout rates in high school (Lee-St. John et al., 2018). Pollack et al. (2023) further show that students who received the City Connects intervention during elementary grades exhibit a higher estimated probability of postsecondary enrollment and degree completion. Moreover, Jiang et al. (2023) find that the City Connects intervention leads to improvement in both academic and behavioral performance among middle school students during the transition period of the school year. Evidence also shows that the economic benefits of City Connects outweigh the costs (Bowden et al., 2015, 2017).

Though a rich literature has demonstrated the effectiveness of the City Connects intervention, it is still not clear if the intervention is effective when it was implemented on a large scale in a state context that differs in many dimensions from the site where it first developed and accumulated the most evidence – Massachusetts. It is also not clear to what extent the intervention played a role during the COVID-19 recovery era.

City Connects is implemented predominantly in urban schools, where most students come from families with limited resources and higher needs, including a significant proportion of students of color and immigrants. Compared to their more advantaged peers, students in these schools require additional support, but often their families lack awareness of the full set of available resources in their schools and communities. City Connects coordinators, armed with knowledge of school and community resources, a deep understanding of student developmental issues, and the necessary skills to provide support, can play a crucial role in bridging the gap and supporting students with high needs, especially when the COVID-19 pandemic disrupted the normal operation of schools and the service delivery of many organizations in the community.

3.3 The Implementation of City Connects in This Midwest State

Since its rollout in this Midwest state, City Connects has helped schools mobilize significant resources to deliver services directly to students. MyConnects is a secure, proprietary information system designed to monitor students' needs, interests, and strengths, along with their service plans, referrals, and service delivery. Throughout the school year, coordinators use MyConnects to document and manage student support information. Figure 10 shows the total number of services of different types over the time period of 2022-23 to 2024-25 school years. The number of services has been increasing over time, especially in the prevention and enrichment category. According to MyConnects, 14,956 students in this Midwest state received 131,118 services and enrichment opportunities in the 2024–25 school year. The supports varied in intensity, with 91,668 prevention and enrichment services, such as after-school programs, academic and arts enrichments, sports, and youth development programs; 30,552 early intervention services, such as behavioral supports, health and social skills interventions, mentoring, tutoring, and parent/family supports; and 8,878 intensive or crisis intervention services, including attendance support, counseling, health/medical services, therapeutic mentoring, and psychiatric care.

The increase of the number of services does not just reflect the number of students receiving the service; it also reflects the intensity of the support that has been growing over time, as coordinators extend the connection with local partners and identify more opportunities for students. Figure 11 shows the number and presentation of students who received more than three services per year. This number has grown from 73% in the 2022-23 school year to 89% in the 2024-25 school year. Also in the 2024-25 school year, nearly all participating students (98%) received at least one support.

Figure 10. Number of total services delivered to students by types and year

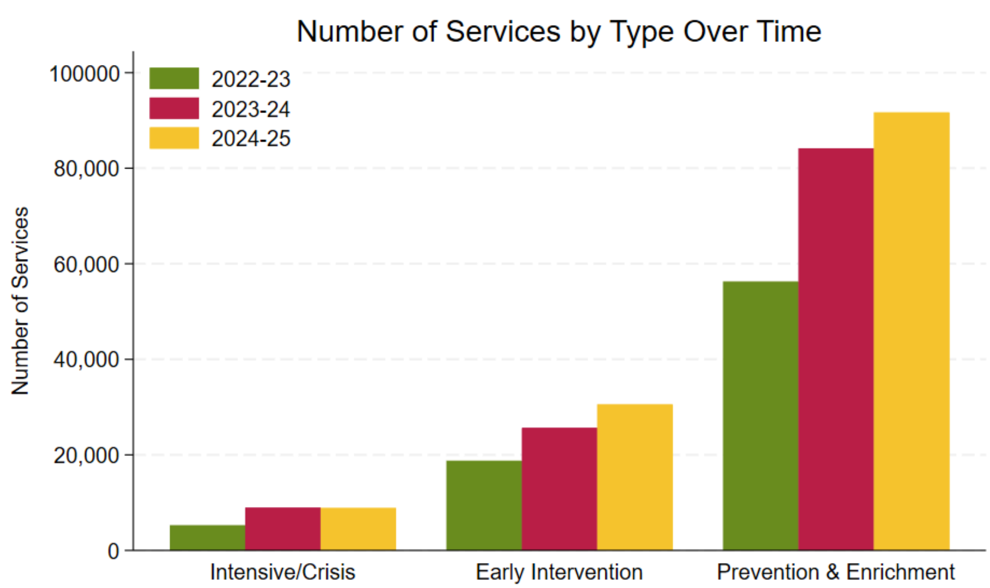
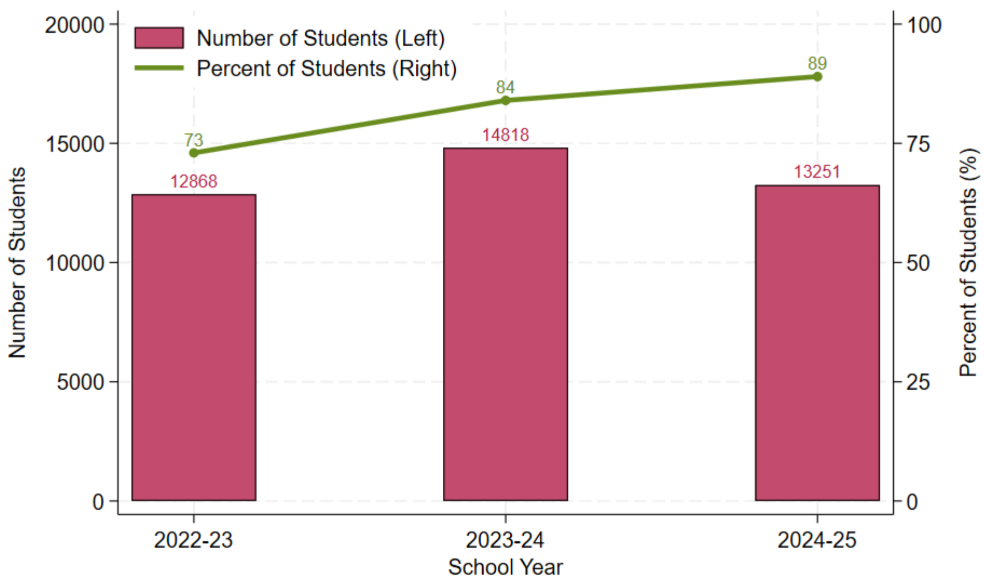


Figure 11. Number and Percentage of students who received three or more services a year



Feedback surveys and interviews are an important component of the intervention to guarantee the intervention is implemented with fidelity. Over the years, stakeholders consistently describe the positive impact of City Connects. School leaders from this state emphasized the personalized and systematic nature of support. One principal noted: *"The most valuable aspect of having City Connects in our school this year was the consistent, personalized support provided to students and families facing complex challenges."* Another principal highlighted the role of the coordinator in building trust and ensuring no student was overlooked: *"The coordinator's ability to build trust, coordinate services, and follow through created a stronger safety net, improved student readiness to learn, and brought a level of organization and care that elevated our entire school community."*

Teachers of this state also underscored the value of City Connects in supporting the whole child: *"The biggest benefit of City Connects is that it helps us support the whole child—not just academically, but socially, emotionally, and even with things going on at home. It connects students to the right services based on their individual needs, so we're not missing anything important. It really takes some of the pressure off us as teachers because we know there's a system in place to help students with challenges that might otherwise get in the way of learning."*

Support staff echoed these sentiments, pointing to the broader school culture: *"The most important benefit is having a knowledgeable professional to assist in the collective effort of guiding students as they grow academically, emotionally, and socially. Their ideas and efforts create an environment where students can strive for their personal best."*

Service delivery data and feedback of key stakeholders from this Midwest state show that City Connects is well integrated into the school context in the state and functioning as designed.

4. The Effect of City Connects on Achievement

4.1 Methodology

To estimate the effects of the City Connects intervention, we use a student-level difference-in-differences (DiD) design. Specifically, we compare outcomes before and after treatment among students who eventually received the intervention, using students who never received the intervention as a comparison group. This identification strategy relies on the parallel trends assumption—that in the absence of the intervention, the academic trajectories of treated and untreated students would have evolved similarly (following parallel trends). Any divergence in trends, after controlling for covariates and fixed effects, is interpreted as the estimated effect of City Connects.

We estimate the empirical model denoted as the following:

$$Y_{ist} = \beta_0 + \beta_1 CCNX_{ist} + X_{ist} + A_{st} + \zeta_i + \sigma_s + \tau_t + \epsilon_{ist}.$$

The outcome variables Y_{ist} are derived from students' performance on the statewide standardized assessments in mathematics and ELA, measured by scale scores. To enable comparability across years, grades, and subjects, we standardize these scores into Z-scores by subtracting the subject-grade-year-specific mean and dividing by the corresponding standard deviation. The resulting Z-scores have a mean of zero and a standard deviation of one, allowing for consistent longitudinal comparisons.

The key independent variable, $CCNX_{ist}$, is a binary treatment indicator defined at the student-year level: a value of one indicates that a student received the City Connects intervention in a given school year, and zero otherwise. Because students may switch schools over time, treatment status is determined based on each student's unique schooling history. The comparison group includes all Grade 3–8 students in the same state who did not receive the City Connects intervention during the analytic period.

Our regression models estimate the relationship between standardized math and ELA scores and the treatment variable, controlling for several time-varying student characteristics, where X_{ist}, includes FRL eligibility, ELL status, and special education status. We further control school-level time-variant variable denoted by A_{st}, as the total enrollment of the school to reflect factors related to the school size. We also include School year fixed effects denoted by τ_t, to control for statewide shocks or trends common to all schools and students in a given year; School fixed effects, denoted by σ_s, to account for time-invariant characteristics shared by students within the same school (it also helps capture the community factors to reflect the geographic diversity of the schools); and Student fixed effects, denoted by ζ_i to control for unobserved, time-invariant individual traits. This modeling approach allows us to isolate within-student changes over time while accounting for key sources of observed and unobserved confounding factors.

We try our best to address the confounding factors that can affect the identification of the effect of the intervention. However, it is important to note that the City Connects intervention was not assigned through a randomized controlled trial (RCT), which limits the strength of causal inference. Nonetheless, we believe there is a degree of natural randomness in the timing of the adoption and the selection of grade levels of participation: a student's likelihood of receiving the intervention depends in part on the school's implementation timeline and the grade levels served by City Connects Coordinators—factors partially independent of individual student characteristics. While this quasi-random variation strengthens the plausibility of causal interpretation, we acknowledge that causal interpretation should be made cautiously.

4.2 Data

We analyze three years of City Connects implementation during its phased rollout across this Midwest state, leveraging the longitudinal structure of student-level administrative data. This study focuses on the effect of City Connects on academic performance as reflected in statewide standardized assessments. The analysis is limited to schools serving students in Grades 3–8, the grades in which standardized assessments were administered. Table 2 summarizes the number of schools and students included in this analysis that have participated in City Connects during the first three years of implementation. In terms of how a school is counted as an implementing school, there is a systemic assessment by the implementation team based on the implementation of the core components in the school by the assigned coordinator. We adopt the definition and use the implementation record documented by the implementation team of City Connects.

In the 2021–22 school year, 18 schools serving Grades 3–8 adopted the intervention, reaching 3,455 students.[2] During the 2022–23 school year, 54 schools serving Grades 3-8 participated in City Connects, serving 9,817 students in these grades. During the 2023-24 school year, 54 schools serving Grades 3-8 implemented City Connects, with 8,888 students receiving the support. Of these, 13 schools and 1,597 students participated in City Connects in the first two school years, forming a subsample for evaluating the effects of the first two years of exposure to the intervention. Overall, the schools

[2] For City Connects schools, the number of students receiving the intervention is generally defined as the number of students enrolled in the school. However, in cases where the intervention is implemented only at specific grade levels, this number reflects only the students enrolled in the grades served by a City Connects Coordinator. Additionally, the number of students receiving City Connects in the analysis, as shown in table 1, is based on the administrative data received from the state Department of Education and after the initial cleaning to address duplicate records and missing values. Therefore, this number is not exactly the same as the number of students enrolled in the schools and grades who actually received the intervention.

implemented City Connects in this Midwest state cover a diverse range of localities, with many schools in urban areas but some also in rural areas.

Table 2. Number of Schools and Students That Received the City Connects Intervention (Grades 3-8)

	Number of Schools	Number of Students
2021-2022 SY	18	3,455
2022-2023 SY	54	9,817
2023-2024 SY	54	8,888

Notes: For City Connects schools, the number of students receiving the intervention is generally defined as the total school enrollment. However, in schools where the intervention is implemented only at specific grade levels, this number reflects enrollment in only those grades served by a City Connects Coordinator. The student counts shown in Table 1 are based on administrative data provided by the Department of Education of this Midwest state, following initial data cleaning to remove duplicate records and address missing values.

The analysis covers five school years: 2018–19, 2020–21, 2021–22, 2022–23, and 2023-24. The 2019–20 school year is excluded due to the cancellation of standardized assessments during the COVID-19 pandemic. This timeframe allows for the inclusion of two pre-implementation years (2018–19 and 2020–21) and at most three post-implementation years (2021–22, 2022–23, and 2023-24), depending on when a school began implementing City Connects.

Table 3 presents demographic and other student characteristics comparisons between the overall state population and students in schools that implemented City Connects in either the 2021–22 or 2022–23 school years. The data show that City Connects is primarily implemented in schools serving more marginalized student populations. Black students make up 47.83% of the population in City Connects schools, compared to 12.24% statewide. Hispanic students account for 20.56% in City Connects schools, versus 13.66% statewide. A significantly higher percentage of students in City Connects schools qualify for FRL (75.76%) than the state average (47.73%). ELL students represent 14.84% of students in City Connects schools—nearly double the statewide rate of 7.57%. The proportion of students receiving special education services is similar between City Connects schools and the state overall.

These demographic differences underscore that City Connects is being implemented in schools that serve a disproportionately high number of students from historically disadvantaged backgrounds and from those student subgroups prioritized by the state.

Table 3. Student Demographics: Race/Ethnicity, FRL, ELL, & Special Education Status (Grades 3-8)

	City Connects Schools	State Average
Race/Ethnicity		
White (%)	23.83	65.80
Black (%)	47.83	12.24
Hispanic (%)	20.56	13.66
FRL (%)	75.76	47.73
ELL (%)	15.19	7.31
Special Education (%)	15.92	15.88

Notes: Data are from the Department of Education of this Midwest state. This table reports the racial/ethnic composition of students, as well as the percentages of students eligible for free or reduced-price lunch, classified as English language learners, or enrolled in special education programs.

Because the City Connects intervention is implemented throughout the school year, we excluded students who made school changes in the middle of the school year as it is difficult to define whether they received the complete set of intervention before they transferred out of a school with the intervention or since they transferred into a new school with the intervention.

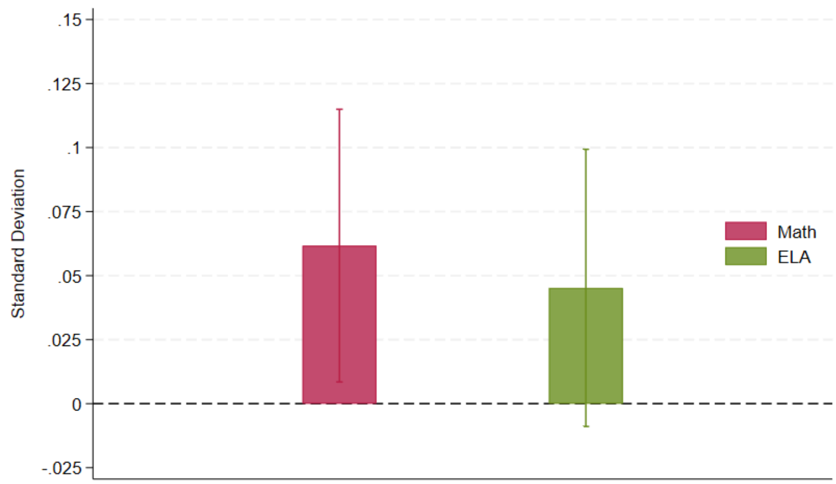
Appendix A4-A6 documents the timeline of the implementation in the state. These tables also show the grades in which the City Connects was implemented. This time and school-grade variation is the source of identification.

4.3 Results

4.3.1 City Connects Participation is Associated with Higher Math and ELA Scores

We first examined the overall effect of City Connects using the full sample of students who received the intervention during the 2021–22 or 2022–23 school years (or both). Figure 12 shows that students who participated in City Connects for at least one year demonstrated positive and statistically significant gains in both math (0.093 standard deviations, SE = 0.025) and ELA (0.050 standard deviations, SE = 0.028). These improvements suggest that even a short period of exposure to City Connects can support students' academic growth across subjects.

Figure 12. The effect of City Connects on Academic Achievement for All Students

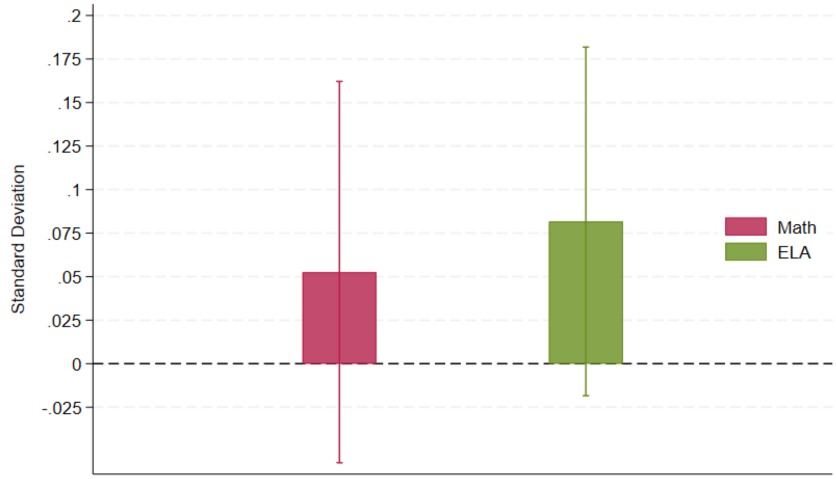


Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including FRL eligibility, ELL status, and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

4.3.2 Sustained Participation in City Connects Leads to Larger Gains

We constructed a subsample of students who received City Connects in the first two consecutive years (the 2021-22 and 2022-23 school years), and we analyzed this two-year subsample to see if extended participation had a greater impact. Figure 13 shows that students with two years of exposure experienced larger improvements: 0.053 standard deviations in math (SE = 0.056) and 0.082 standard deviations in ELA (SE = 0.051). Due to the relatively small sample size of the two-year sample, these results are not statistically significant. However, these results still provide suggestive evidence that sustained engagement with City Connects may amplify benefits, especially as schools move past initial implementation challenges.

Figure 13. The Effect of City Connects on Academic Achievement for Students Receiving Two Years of Intervention

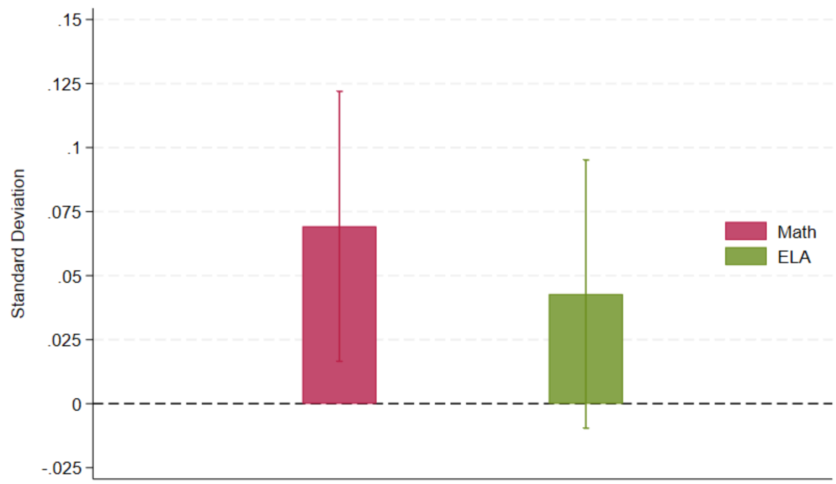


Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including FRL eligibility, ELL status, and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

4.2.3 Significant Improvements for Low-Income Students

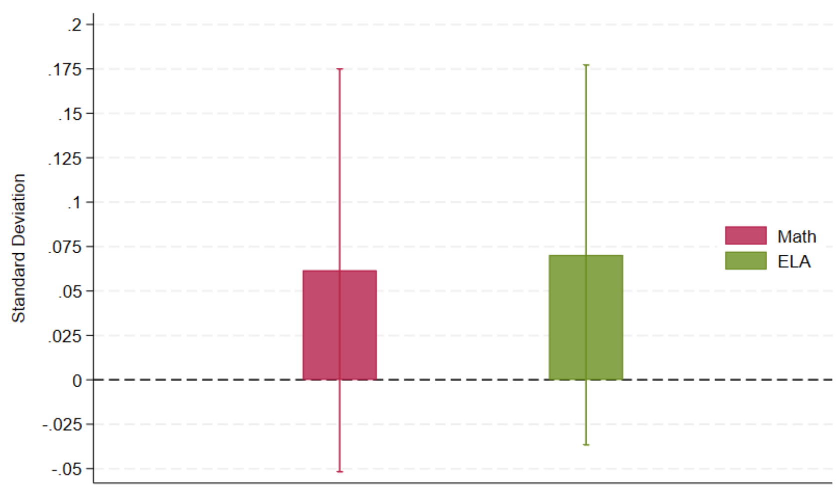
Students eligible for FRL also experienced significant improvement, with a 0.069 standard deviation gain in math (SE = 0.027) and a 0.043 standard deviation gain in ELA (SE = 0.027), both statistically significant (Figure 14). Continued participation in City Connects during the first two years of implementation further increased outcomes for this student subgroup, with math improving by 0.062 standard deviations (SE = 0.058) and ELA by 0.070 standard deviations (SE = 0.055), though not statistically significant due to restricted sample size (Figure 15). These results highlight the potential of City Connects to reduce achievement gaps for economically disadvantaged students.

Figure 14. The Effect of City Connects on Academic Achievement for Students Eligible for FRL



Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including ELL status and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

Figure 15. The Effect of City Connects on Academic Achievement for Students Eligible for FRL Receiving the Intervention for Two Years

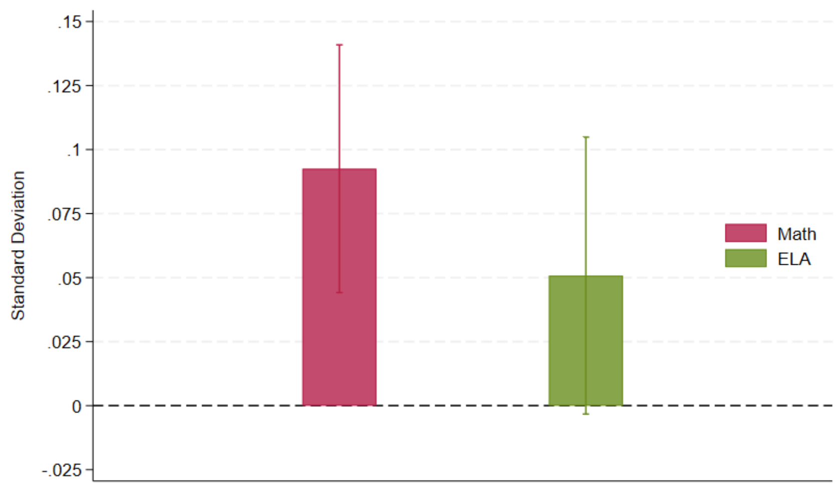


Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including ELL status and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

4.2.4 Greater Gains for Black Students

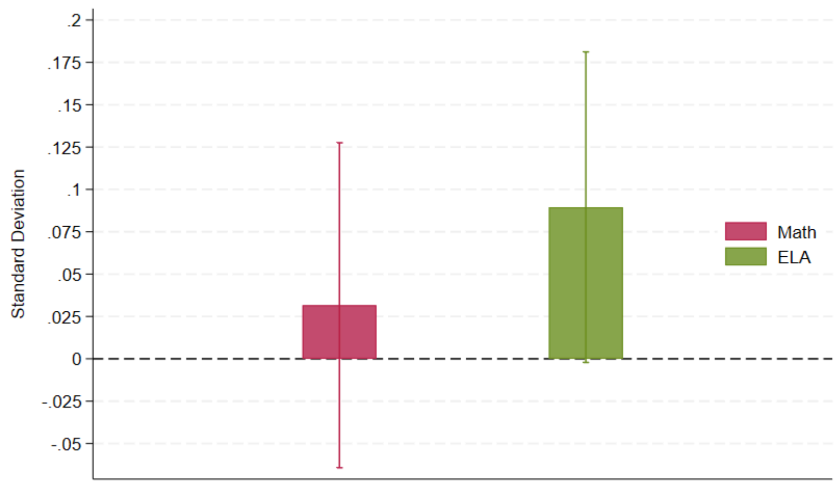
City Connects appears to have a stronger impact for Black students. Among Black students who received the intervention for at least one year, math scores increased by 0.058 standard deviations (SE = 0.026) and ELA scores by 0.068 standard deviations (SE = 0.025), both statistically significant (Figure 16). For Black students participated in the intervention continuously for the first two years, math scores improved by 0.032 standard deviations (SE = 0.049), but not statistically significant, while ELA scores increased by 0.089 standard deviations (SE = 0.047), statistically significant at the 10% level (Figure 17). White, Hispanic, and ELL students did not show statistically significant gains, likely reflecting much smaller sample sizes within City Connects participating schools.

Figure 16. The Effect of City Connects on Academic Achievement for Black Students



Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including FRL eligibility, ELL status, and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

Figure 17. The Effect of City Connects on Academic Achievement for Black Students Receiving the Intervention for Two Years

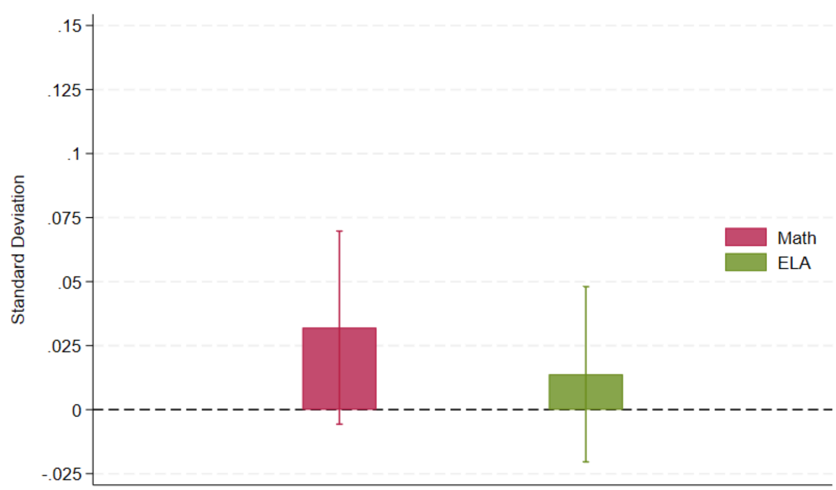


Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including FRL eligibility, ELL status, and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

4.3.5 Signs of Improvements for ELLs

ELLs who participated in City Connects also experienced some improvement, with a 0.032 standard deviation gain in math (SE = 0.019) and a 0.014 standard deviation gain in ELA (SE = 0.017) (Figure 18). Though the results are not statistically significant, the sign of the estimates is consistent with those of the overall results and other marginalized subgroups.

Figure 18. The Effect of City Connects on Academic Achievement for Students in ELL program



Notes: This figure displays the estimated effect of City Connects on student achievement in statewide standardized exams in math and ELA. Academic achievement measures are standardized by school year, grade, and subject. Bar heights represent effect sizes, and the capped lines indicate 95% confidence intervals. The estimation model controls for time-varying student characteristics, including FRL eligibility, ELL status, and special education enrollment, as well as school size. The model includes school, school year, and student fixed effects. The standard errors are clustered at the school level.

Overall, our findings suggest that City Connects supports academic achievement, with particularly strong effects for FRL-eligible students and Black students. We found suggestive signs that ELL students also benefit from the intervention, especially in math. Estimates for White and Hispanic students are less precise, given smaller treated samples; point estimates are directionally similar to the overall estimate. Evidence also points to the value of sustained participation: students who engage with City Connects continuously during the first two years tend to show larger improvements, especially in ELA. While estimates for some subgroups and for the two-year sample are relatively noisier due to a smaller sample size, the overall pattern reinforces the promise of City Connects as an effective and scalable intervention that can help close achievement gaps in post-pandemic schools.

5. Conclusion and Discussion

Our preliminary analysis provides early evidence that City Connects positively impacts student academic outcomes in this Midwest state. Students who received the intervention for at least one year showed significant improvements in mathematics and ELA with some student subgroups, particularly Black students and those eligible for FRL, experiencing the largest gains. The effects are practically significant and, in most cases, also statistically significant. Findings also suggest that longer participation enhances effectiveness.

With effect sizes of a 0.050 standard deviation gain in math and 0.053 in ELA for students receiving at least one year of City Connects, these gains represent impactful and important improvements when understood in context. Research indicates that one full year of instruction typically yields 0.22 to 0.56 standard deviations in math and 0.23 to 0.40 in reading (Lipsey et al., 2012). In this light, the beneficial effects of City Connects on achievement are equal in magnitude to roughly one-tenth to one-fourth of the learning gains from a full year of instruction in math and one-eighth to one-fourth in reading, demonstrating its potential as an effective, school-embedded intervention to support recovery from COVID-19 learning disruptions.

The finding that City Connects significantly promotes academic achievement, particularly for those eligible for FRL and Black students, carries important policy implications. First, it demonstrates that the state's investment in implementing City Connects to support school recovery and COVID-related learning recovery is already yielding positive outcomes, even within the first three years of implementation. The observed effect sizes suggest that the intervention is cost-effective, delivering sizable gains with the resources invested. The fact that impacts are stronger for FRL-eligible and Black students highlights the program's potential to help narrow longstanding achievement gaps, a key state priority. Moreover, these results provide compelling evidence that the City Connects model is generalizable to a context quite different from where it was originally developed, achieving meaningful outcomes at a relatively large scale in a short period. Collectively, this evidence underscores the value of sustaining and expanding integrated student support interventions like City Connects to promote COVID-related learning recovery and support the success of historically underserved students across this Midwest state.

These early results are promising, especially for students who have historically faced the greatest barriers to academic success. As City Connects continues in this Midwest state, and as more years of data become available, we will be able to assess longer-term outcomes and better understand how the program's comprehensive, relationship-based approach supports student learning and well-being.

Next steps include incorporating 2024–25 school year data to extend analyses to four years of implementation. This will allow more robust longitudinal modeling, deeper examination of subgroup impacts, and refined causal inference. By providing evidence on what works, for whom, and under what conditions, these findings can guide strategic investments in integrated student support systems that promote academic recovery and narrow achievement gaps across this Midwest state.

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Appendix

A. Principal landscape survey on barriers and strengths faced by their school community

As part of an IES-funded project, the research team conducted a landscape survey of school principals to understand perceived barriers and strengths in supporting students during the COVID-19 pandemic. A sample of principals from across the state was invited to complete an online survey in December 2023 and January 2024, yielding 295 responses. Each principal rated items on a 0–4 Likert scale regarding their school's strengths and assets (22 items), barriers (22 items), and supports available and needed for students (10 items). The strengths and barriers were organized across five domains: school, physical health and well-being, behavior and well-being, family, and community.

Our objective is to examine the relationship between principals' perceptions of school barriers and strengths and student achievement on statewide standardized exams. Specifically, we aim to identify which barriers or strengths are most strongly associated with student achievement and achievement gaps. Because standardized exams are administered in grades 3–8, we focus on schools serving these grades. Math and ELA assessment scores are aggregated at the school-grade level and standardized by grade and subject to allow for comparison. In total, 242 schools were matched to the survey data and included in the analysis. Given that the survey was conducted at the end of 2023, we use the 2023 assessments as our outcome measures.

Overall, we find that most perceived strengths are positively correlated with student achievement in both math and ELA, while most perceived barriers are negatively correlated with achievement.

To further investigate which barriers and strengths are most strongly associated with performance, we employ principal component analysis (PCA) on all 44 survey items (22 barriers and 22 strengths). The first 10 components with eigenvalues greater than one are retained and entered into regression models, where student achievement is regressed on these components (Table A1). The models also control for school-level demographic characteristics, including student racial composition, percentage of students eligible for free or reduced-price lunch (FRL), English language learners (ELL), and special education.

Table A1. Principal Components

Component	Eigenvalue	Proportion	Cumulative
Comp1	12.2704	0.2789	0.2789
Comp2	4.24631	0.0965	0.3754
Comp3	2.55656	0.0581	0.4335
Comp4	1.97169	0.0448	0.4783

Comp5	1.77527	0.0403	0.5186
Comp6	1.50689	0.0342	0.5529
Comp7	1.28664	0.0292	0.5821
Comp8	1.17709	0.0268	0.6089
Comp9	1.08265	0.0246	0.6335
comp10	1.0283	0.0234	0.6569

Table A2 presents the three components with statistically significant coefficients from the regression analysis: Components 2, 5, and 7. To further interpret these findings, we examine the survey items with the highest loadings on each of these components to understand how principals' perceived barriers and strengths relate to school-level academic performance.

Table A2. Components with statistically significant coefficients

ELA Achievement	Coefficients
Component 2	4.524*
Component 5	-4.129*
Component 7	-2.490*

* Statistically significant at the 5% level.

As shown in Table A3, family-related strengths load heavily on Component 2, suggesting that these factors are strong predictors of higher ELA achievement. For Component 5, combining the direction of correlations between the items and the component loadings, as well as the sign of the regression coefficient, it indicates that students showing respect toward peers and strong school–family communication are associated with higher academic achievement. Finally, for Component 7, the items with the highest loadings—unsafe neighborhoods and language barriers—are negatively associated with student achievement.

Findings from the PCA provide useful information for policymakers by highlighting the barriers and strengths, as perceived by principals, that help explain variation in schools' academic achievement. These results offer contextual evidence to guide the allocation of recovery resources and supports, ensuring that supports are targeted to the areas closely tied to student outcomes.

In particular, the strong association between family-related strengths and higher achievement underscores the importance of policies that strengthen school–family partnerships, such as initiatives to improve communication with parents, expand family resource centers, or provide training for educators in family engagement practices. Similarly, the positive role of respectful peer interactions and supportive school climate suggests that recovery should include investments in social–emotional learning, restorative practices, and professional development that fosters positive school environments.

At the same time, the negative association of unsafe neighborhoods and language barriers with academic achievement highlights the need for cross-sector collaboration. Policymakers may need to pair educational supports with community-based initiatives, such as improving neighborhood safety, expanding access to mental health services, or language and cultural-inclusive services for multilingual families. Addressing these broader structural barriers is essential to ensuring that all students can benefit from recovery efforts and reducing inequities in achievement.

Overall, the findings suggest that effective policy responses must integrate both school-based and community-based strategies. By incorporating key stakeholders' perspectives on local strengths and barriers, policymakers can more effectively tailor interventions to the specific needs of schools and communities, ultimately advancing educational recovery and equity.

B. Timeline and grade levels of the City Connects implementation in schools from the Midwest state

Table A3. Items with highest load to selected Components

Items	Component 2	Component 5	Component 7
Families help ensure their children are ready to learn.	.815		
Families support their children's learning outside of school (e.g., making sure homework is done).	.730		
Families have high expectations for their children.	.776		
Students are respectful of their peers.		-0.252	
The school does a good job of communicating with families.		-0.272	
Neighborhood violence			0.508

Language barriers between school and families	0.768

Table A4. Implementation time line and grade for public schools

Public Schools	2021-22	2022-23	2023-24
P1	K - 5	K - 5	K - 5
P2	K - 5	K - 5	K - 5
P3	K - 5	PK4 - 5	PK4 - 5
P4	PK4 - 5	PK4 - 5	1 - 3
P5		K - 5	
P6		K - 6	1 - 6
P7		5	5
P8		2 - 4	1 - 4
P9		2 - 4	1 - 5
P10		K - 6	
P11		2 - 5	2 - 5
P12		7	6
P13		PK4 - 6	2 - 8
P14		K - 5	K - 5
P15		6 - 7	6 - 7
P16		PK4 - 6	
P17		PK4 - 6	PK4 - 6
P18		7 - 12	7 - 12
P19		6 - 7	5 - 8
P20		5 - 6	5 - 6
P21		9	9
P22			K - 6
P23			PK4 - 6
P24			K - 5
P25			5
P26			PK4 - 6

Table A5. Implementation time line and grade for charter schools

Charter Schools	2021-22	2022-23	2023-24
C1			K - 5
C2	K - 2	K - 2	K - 2
C3	3 - 6	3 - 5	3 - 5
C4	7 - 10	6 - 8	6 - 8
C5	11 - 12		9 - 10
C6	2 - 7		
C7	PK4-8		
C8	7 - 11	7 - 9	
C9	K - 8	K - 8	
C10	3, 5-6	K - 6	
C11	6, 9	6 - 8	6 - 8
C12	K - 5	K - 5	K - 5
C13	7-11		
C14	K, 5		
C15	K-6		
C16	1 - 3	K - 4	K - 4
C17	8	5 - 8	5 - 8
C18	K-1, 6	K - 8	K - 8
C19		3 - 6	
C20		K - 6	
C21		9 - 12	
C22		9 - 10	9 - 12
C23		7 - 8	7 - 8
C24		K - 6	2 - 6
C25		K - 6	K - 6
C26		K - 3	K - 4

Table A6. Implementation time line and grade for non-public schools

Non-Public Schools	2021-22	2022-23	2023-24
N1		1 - 8	

N2		9 - 12	
N3		K - 12	K - 12
N4		PK4 - 8	PK3 - 8
N5		PK4 - 8	
N6		K - 8	K - 8
N7		K - 6	K - 6
N8		PK4 - 12	PK3 - 3
N9		K - 8	
N10		K - 8	PK3 - 8
N11		9 - 12	9 - 12
N12		PK3 - 8	PK3 - 8
N13		PK4 - 8	PK4 - 8
N14		PK3 - 8	K - 8
N15		9 - 11	
N16		PK4 - 8	PK4 - 8
N17		PK4 - 8	
N18		K - 8	K - 8
N19		PK3 - 8	K - 8
N20		PK3 - 7	PK3 - 8
N21		9 - 12	9 - 12
N22		9 - 12	9 - 12
N23		PK3 - 8	PK4 - 8
N24			PK4 - 5
N25			4 - 6
N26			K - 3
N27			PK3 - 8
N28			PK4 - 8
N29			9 - 12