# Research Brief: Results from a Study of City Year's Whole **School Whole Child Model**



Juliette Berg, Marie-Andrée Somers, and David Osher



# **Acknowledgments**

The authors wish to thank the following staff at AIR and MDRC who contributed to the data collection and analysis for the study: Daniel Hubbard, Max Pardo, Eric Isenberg, Rebecca Medway, Leah Brown, Dionisio Garcia-Piriz, Robert McMahon, Zeest Haider, Margaret Hennessy, and Madeline Price.

#### Introduction

Helping children and young adults develop their talents and strengths also helps them contribute to their communities in the future. But deeply rooted inequities affect students of color and students from low-income households much more than they affect other students. This means too many young people lack access to a learning environment where they can receive the supports they need. The COVID-19 pandemic worsened this situation (Dorn et al., 2021; Kuhfeld et al., 2022).

Intentional and targeted approaches to build relationships with students can reduce the effects of inequities among students. These approaches strengthen connection and engagement, support skill building, and counter the effects of life events that cause instability (Center for Promise, 2015; Christensen et al., 2020; Raposa et al., 2019; Roehlkepartain et al., 2017). Outside organizations that partner with schools to provide student services are a practical choice for schools that want to increase their ability to offer supports to more students. This kind of partnership is student centered, affirming, and culturally responsive.

City Year is an education and human development organization that partners with schools nationwide to support student success and address the root causes of inequitable educational outcomes. Every year, City Year recruits a diverse group of Student Success Coaches, ages 18 to 25, to deliver its holistic Whole School Whole Child (WSWC) model. City Year Student Success Coaches commit to serving in schools for one school year. During that time, they work with teachers, administrators, and other Student Success Coaches. Together, they plan and deliver holistic, personalized supports to students who need them the most. They also create a safe and supportive school climate where students feel they can achieve their academic and life goals.1

In 2017, the American Institutes for Research® (AIR®) and MDRC began a 5-year study of the WSWC model in 22 middle schools in five large urban school districts. The study focuses on middle school

<sup>&</sup>lt;sup>1</sup> For more information on success coaching, see https://www.partnershipstudentsuccess.org/success-coaching/.

because grades 6 to 8 are a time when students form their own identities. Students also learn the basic academic, social, and emotional skills they need to succeed in high school and beyond (Balfanz et al., 2007; Juvonen et al., 2004; Kidron & Osher, 2010; Kieffer & Marinell, 2012; Ryan et al., 2013). But many middle schools lack opportunities for students to make connections with adults and peers and to develop autonomy, or independence. This is because middle schools aren't always organized in ways that support adolescents' developmental needs (Eccles & Roeser, 2011). Building evidence on what works for this age group helps create a pathway to improve high school success. The AIR study team received a grant from the Institute of Education Sciences in the U.S. Department of Education.

The COVID-19 pandemic had a negative impact on the evaluation. School closures in March 2020 interrupted WSWC services and made it harder to collect data. The evaluation aimed to cover several school years, including the 2019–20 and 2020–21 school years. But now it focuses on the period leading up to March 2020. Even though the study timeline changed, the evaluation offers valuable insights about the benefits of school and community partnerships that provide holistic supports. It also draws attention to the chance to rethink the measures we use to understand student experience and growth.

#### What is the Whole School Whole Child model?

City Year's WSWC model is based on a youth development framework and research from the science of learning and development. This research shows how a rich learning environment can support students' cognitive, emotional, behavioral growth and well-being. This type of learning environment has several benefits. The school climate is positive, and students have opportunities to develop their social, emotional, and cognitive skills. Social and emotional learning, or SEL, is a key part of academic learning and schoolwide practices. Adults care about students and are committed to their success. And students receive holistic supports that meet their needs and foster their healthy development and academic progress (Benson et al., 2011; Farrington et al., 2012; Kidron & Osher, 2010; Lerner et al., 2015; Osher et al., 2018; Washor & Mojkowski, 2014).

The WSWC model reflects the lessons gained from this research. The model offers holistic and personalized academic, social, and emotional services that a team of Student Success Coaches delivers to students. City Year Student Success Coaches offer two tiers, or levels, of services (see Figure 1):

- Universal (Tier 1) services are provided to all students in the school. Tier 1 services focus on helping students learn and developing positive relationships. These include after-school programs and schoolwide events that celebrate positive behavior and student success. They also include classroom support for students in English language arts, or ELA, and math.
- Targeted (Tier 2) services are provided to students who appear to be at greater risk of not graduating. Schools determine this risk based on early warning indicators related to attendance, engagement and behavior, and course performance in ELA or math. Tier 2 services blend tutoring in ELA and math with social and emotional development and behavior supports. Student Success

Coaches also provide attendance coaching. Students receive these services one on one or in small groups during class time, pull-outs, or transition time.

Student Success Coaches are placed in schools where they work together as part of an on-site team to support students and each other. The goal of having Student Success Coaches in each school is to increase the number of adults available to support students. Another goal is to create more opportunities for Student Success Coaches to work with students inside and outside of classrooms.

Student Success Coaches meet regularly with their team to plan service delivery and help each other manage relationships with students and school staff. On-site teams have a Team Leader who is a Student Success Coach with more than one year of experience. An Impact Manager supervises the Team Leader and oversees implementation of the WSWC model in the school, works with school administrators to make sure City Year is meeting school needs, and supports the on-site team. The Student Success Coaches get training and professional development before and during their year of service. This education and training supports their service delivery and builds a spirit of teamwork and alignment with City Year's goals.

**Intervention Components Mediators Student Outcomes Student Success Coaches Student Success Coaches** Middle school: gain skills while providing Improved school **Training and Professional** interventions engagement and Development attendance School: ELA/math Positive near-peer Collaborative On-Site achievement relationships **Teams** Stronger classroom SEL/behavior development supports More discourse about Students success High school: Tier 1 services (all students) Improved school climate Graduation College and career Student: Tier 2 services (focus lists) readiness Positive near-peer relationships Personalized learning Contextual Factors: Teacher Turnover, Strength of School Partnership, Policy Conditions

Figure 1. Theory of Change of the Whole School Whole Child Model

Researchers did a quasi-experimental study in multiple states on the effects of the WSWC model, and they found promising results (Meredith & Anderson, 2015). State test scores were more likely to improve in schools that partnered with City Year than in similar schools. Another study found that more time with City Year Student Success Coaches is associated with better social and emotional, academic, and attendance outcomes (Balfanz & Byrnes, 2020).

## How was the WSWC model evaluated in this study?

The AIR and MDRC team conducted the evaluation of City Year's WSWC model in 22 middle schools in five large, urban school districts. The study included two impact studies (see Table 1 for a summary) and an implementation study. All three studies aimed to better understand the WSWC model for all students. They also aimed to understand how the model's core components may improve the outcomes of students who may benefit the most.

A study of the effects of the WSWC model for all students ("whole-school study"). The study team looked at the effects of the WSWC model for all students using a comparative interrupted time series (CITS) design. A CITS design is a type of research approach that tracks how well an intervention works over time using data from before and after the intervention. The design looks at data for two groups of study participants: a group that used the intervention (program group) and a group that did not use the intervention and that were chosen by the study team (comparison group). Researchers look at the data to see if a change happened in the group that used the intervention and if that change was bigger than for the comparison group.

The CITS analysis conducted by the study team involved two groups of schools. One group included the 22 middle schools that were partnering with City Year to implement the WSWC model ("City Year schools"). The second group had similar, matched schools in the same districts that did not implement the model ("comparison schools").

The study team looked at the outcomes of consecutive cohorts (entering classes) of sixth-grade students who enrolled in the study schools in the years before the WSWC model was implemented (pre-intervention cohorts) and during the model's implementation (intervention cohorts). The team compared trends over time in the City Year and comparison schools to determine how much the outcomes of students in the intervention cohorts "deviated" from the pre-intervention trend for their school ("deviation from trend").

The estimated net effect of the WSWC model is the difference between the average deviation from trend for the City Year schools and the average deviation from trend for the comparison schools. The study team examined the effects of the WSWC model for the first four cohorts of sixth-grade students that enrolled in the study schools. The team did this at the end of sixth grade (the first follow-up year) and at the end of the following year (seventh grade for most students). The comparison schools were also providing student supports, so the findings represent the effect of the WSWC model well beyond the effect of the services that the comparison schools provided.

The study team measured student outcomes using data from student records collected through the 2018–19 school year. The team used information from school and district websites to understand the types of services that the comparison schools provided to students. Due to the COVID-19 pandemic, student records from the 2019–20 school year were not available. Also, the study team administered a

principal survey in comparison schools in spring 2020 to collect data about student supports, but response rates were very low due to the pandemic.

A study of the effects of Tier 2 services for eligible students ("Tier 2 study"). The study team looked at the effects of WSWC Tier 2 services by using a student-level randomized controlled trial (RCT). An RCT is a type of research study where participants are assigned by chance to receive one treatment versus another.

In each of the 22 City Year schools, either City Year or the school identified sixth-grade students at higher risk of not graduating from high school. They determined which students were at risk based on early warning indicators such as attendance, behavior grades and office referrals, and performance in ELA or math. City Year and each school identified more students than the Student Success Coaches had the resources to serve. So, the study team used a lottery-like process to randomly choose which students would be offered Tier 2 services (the program group) and which students would not receive Tier 2 services (the control group).

The study team conducted random assignment in fall 2018. They assigned students separately by school, Student Success Coach, and combination of Tier 2 services the students needed. These services included ELA, math, behavior, or attendance. All students in the Tier 2 study continued to receive the Tier 1 services, so the findings represent the effect of Tier 2 services well beyond the effect of Tier 1 services. (A second cohort of sixth-grade students who were randomly assigned in fall 2019 was dropped from the study because they received less than a full year of services due to the COVID-19 pandemic. This led to a smaller-than-expected student sample for analysis.)

The study team measured student outcomes using student records data from the 2018–19 school year and the first half of the 2019–20 school year before schools closed due to the COVID-19 pandemic. (Because of the pandemic, state test scores were not available for school year 2019–20.) The study team administered a student survey in late winter of each school year to measure students' social and emotional skills.

**Table 1. Summary of the Two Impact Studies** 

Study Features	Whole-School Study	Tier 2 Study
Research questions	Do students enrolled in middle schools partnering with City Year have better outcomes, on average, than students enrolled in similar schools not providing WSWC services?	In schools partnering with City Year, do eligible students offered Tier 2 services have better outcomes, on average, than eligible students in the same schools who were not offered these services?
Study design	Comparative interrupted time series design	Student-level randomized controlled trial

Study Features	Whole-School Study	Tier 2 Study
Research groups	22 schools partnering with City Year ("City Year schools") and 29 matched-comparison schools	The study team randomly assigned eligible students to a program group that was offered Tier 2 services or to a control group that was not offered Tier 2 services.
Student sample	Eight consecutive cohorts of sixth- grade students enrolled in the City Year schools and comparison schools (four pre-intervention cohorts and four intervention cohorts)	One cohort of eligible sixth-grade students enrolled in the City Year schools in fall 2018 <sup>a</sup>
Follow-up period	Two school years (sixth and seventh grades)	1.5 school years (sixth and seventh grades) <sup>b</sup>
Counterfactual	"Business as usual" student supports	"Business as usual" Tier 2 supports
Student outcomes and data sources	English language arts and math state test scores, suspensions and expulsions, and attendance (student records)	English language arts and math state test scores, suspensions, and attendance (student records); self-awareness and self-management (student survey) <sup>c</sup>

<sup>&</sup>lt;sup>a</sup> A second cohort of sixth-grade students who were randomly selected in fall 2019 was later dropped from the study because they received less than a full year of services. As a result, power to detect effects was lower than expected.

Implementation study. To put the impact findings in context, the study includes an implementation study that focuses on the 2018–19 school year and the first half of the 2019–20 school year before schools closed. The study examines whether schools implemented the WSWC model components with fidelity in the 22 City Year schools. It also looks at the number and types of services that students received. The implementation study draws on City Year staff and teacher surveys plus program monitoring data. The study team also conducted visits to the summer training sessions in 2019 and visited selected schools in spring 2020. They spoke with staff members and observed Student Success Coaches as they provided services.

## **Key findings**

#### Were the components of the WSWC model implemented with fidelity?

All study schools implemented the WSWC model as intended, with either high or moderate fidelity. The study team measured implementation fidelity based on 22 indicators that represented the intended delivery of the WSWC model: Student Success Coach training and professional

<sup>&</sup>lt;sup>b</sup> The planned 2-year follow-up period for Cohort 1 was shortened due to the COVID-19 pandemic.

<sup>&</sup>lt;sup>c</sup>The student survey consisted of scales from the Social and Emotional Competency Assessment (SECA). In 2020, many schools fully administered the SECA right before school closures due to the pandemic. But some schools were not able to complete the SECA administration. For more information on the SECA, see Davidson et al. (2018).

development, how on-site teams worked together, Tier 1 services offered, and Tier 2 services offered.<sup>2</sup> None of the schools implemented the WSWC model with low fidelity. In school year 2018–19, most schools (86%) implemented the model with high overall fidelity; in school year 2019–20, 28% implemented the model with high fidelity.

The main barriers to high fidelity were related to staffing: finding replacements for Student Success Coaches who left and making sure a Student Success Coach served all ELA and math classrooms. This finding is consistent with the staffing challenges that other service delivery programs often face.

City Year identified about a quarter of students in the study schools as needing one or more Tier 2 services. At the time of the study, the target number of hours of tutoring in ELA and math was 15 hours per student in a school year. But there were some differences across districts.

Students chosen to receive ELA or math Tier 2 services had 13 hours of tutoring on average in school year 2018-19. Students chosen to receive SEL/behavior Tier 2 services got 2 hours of coaching on average. Students chosen to receive attendance Tier 2 services got 3 hours of coaching on average. Student Success Coaches were not required to log SEL/behavior and attendance service hours each day. So, the amount of coaching that students received may be underestimated.

### Did students in middle schools partnering with City Year have better outcomes on average than students in similar schools not providing WSWC services?

Proficiency rates on ELA and math state tests were higher than expected in schools partnering with City Year and in comparison schools. The study team looked at time trends based on the outcomes of consecutive cohorts of sixth-grade students enrolled in the study schools (four pre-intervention cohorts and four intervention cohorts). In the pre-intervention period, the share of students proficient on ELA and math state tests at the end of sixth grade declined in both groups of schools. Then, during the intervention period, proficiency rates stopped declining and were stable. So, proficiency rates on state tests were higher than expected in the intervention period compared to pre-intervention trends.

Figure 2 shows the positive deviations from trend. Deviations from trend were not statistically different across the two groups of schools. This pattern was also observed for proficiency rates at the end of seventh grade.

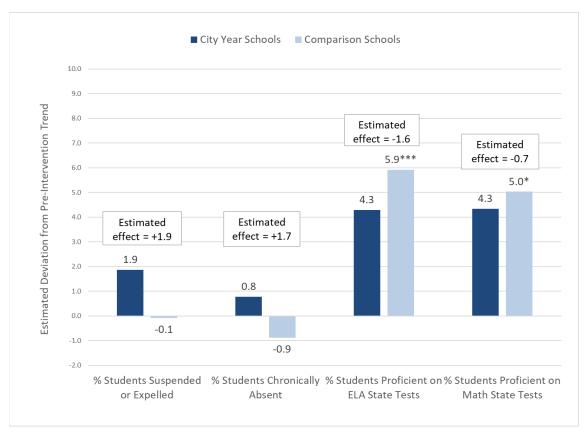
Trends in disciplinary outcomes and absenteeism were stable over time, with some improvements in seventh grade, in schools partnering with City Year and in comparison schools. The share of students who were suspended or expelled in sixth grade, and chronic absenteeism rates in sixth grade, were stable over time in both groups of schools during the pre-intervention period and also during the intervention period. Trends in these outcomes did not change during the intervention

<sup>&</sup>lt;sup>2</sup> Implementation fidelity to the Tier 2 services component was based on whether the expected number of students was served, rather than the hours of services that students received (dosage).

period. Figure 2 shows the small deviations from trend. The share of students who were suspended or expelled in seventh grade, and who were chronically absent, was lower than expected for some intervention cohorts compared to pre-intervention trends, in both groups of schools. Deviations from trend were not statistically different across the two groups of schools.

"Business as usual" in the comparison schools also included high levels of student supports. Seventy-eight percent of comparison schools were working with outside partners to provide student supports (academic, social and emotional, behavior, after-school). This high service level may explain why trends over time were similar in the City Year schools and the comparison schools for most student outcomes.

Figure 2. Estimated Deviations From Pre-intervention Trend for the Intervention Cohorts, Sixth-**Grade Outcomes** 



Notes. \*p < 0.10; \*\*p < 0.05; \*\*\*p < 0.01. The bars in this figure represent deviations from the pre-intervention trend, defined as the difference between the observed outcomes for the four intervention cohorts and the predicted outcomes for these cohorts based on the pre-intervention trend for their school, averaged across intervention cohorts. The estimated net effect of the WSWC model is the difference in deviations from trend for the City Year schools and the comparison schools. Estimated effects are not statistically significant for the four outcomes in this figure. Chronic absenteeism is defined as an average daily attendance rate of 90% or less.

#### Did eligible students offered Tier 2 services have better outcomes than eligible students in the same school who were not offered these services?

- Students offered SEL/behavior Tier 2 services reported higher self-awareness than students not offered SEL/behavior Tier 2 services in school year 2018-19. The estimated effect on selfawareness (effect size = 0.32, p-value = 0.21) was not statistically significant but is meaningful within the context of other whole-school SEL interventions (Goldberg et al., 2019). The effect was smaller in school year 2019-20. Students offered SEL/behavior Tier 2 services showed better selfmanagement than students not offered SEL/behavior Tier 2 services. Students offered SEL/behavior Tier 2 services were also more likely to have been suspended. But the effects were not significant in either year.
- Students offered Tier 2 services did not have statistically better ELA, math, or attendance outcomes than students not offered Tier 2 services. The effects for students who were offered ELA and math Tier 2 services were not significant for math and ELA test scores in school year 2018–19 and for course grades in either year. The effects for students who were offered attendance services were not significant for attendance or chronic absenteeism.

**Table 2. Effect Sizes by Outcome** 

Outcome	Effect size		
Academic Outcomes			
SY 18–19 Math Test Scores	0.01		
SY 18–19 ELA Test Scores	-0.01		
SY 18–19 Math Grades	-0.02		
SY 18–19 English Grades	0.01		
SY 19–20 Math Grades	0.11		
SY 19–20 English Grades	-0.06		
SEL Outcomes			
SY 18–19 Self-Awareness	0.32		
SY 18–19 Self-Management	0.15		
SY 19–20 Self-Awareness	0.13		
SY 19–20 Self-Management	0.15		
Attendance			
SY 18–19 Percentage of Days Absent	0.08		
SY 19–20 Percentage of Days Absent	-0.09		

*Note*. SY = school year.

# **Conclusions and implications for future studies**

Partnering with an outside organization like City Year is an option for schools that want to give their students a holistic set of academic and behavioral supports. City Year's holistic approach seeks to improve school climate and give students a wide range of supports to improve their well-being. This approach differs from a strategy that only focuses on high-dosage academic tutoring (one-on-one tutoring or tutoring in small groups a few times a week). City Year's holistic approach is consistent with the practice implications of the science of learning and development and research showing the benefits of pairing academic interventions in schools with strong conditions for learning (Darling-Hammond *et al.*, 2020). Student Success Coaches can create a rich environment for students that fosters their development and well-being.

All study schools implemented City Year's WSWC model as intended, with either high or moderate fidelity. Proficiency rates on ELA and math state tests were higher than expected in schools partnering with City Year and in matched-comparison schools. In schools partnering with City Year, students who were offered SEL/behavior Tier 2 services had higher self-awareness in the first year of the study than students who were not offered these services. Self-awareness is critical for developing important skills such as goal setting, interpersonal competencies, and executive function skills (Gestsdottir & Lerner, 2008; Nagaoka *et al.*, 2015; Zlotnik & Toglia, 2018). It also helps students cope with stress (Rith-Najarian *et al.*, 2014; Salovey *et al.*, 1995).

A key lesson from this evaluation is that it is hard to isolate and measure the effects of a holistic intervention like City Year's WSWC model. One challenge in this study is that students in the comparison groups also received services and supports. In the whole-school study, most comparison schools were partnering with an outside organization to provide student supports. This suggests that schools that chose to partner with City Year are in districts that were committed to offering some version of whole-child supports.

In the Tier 2 study, the aim, from a research viewpoint, was for students randomly assigned to the control group to *not* receive Tier 2 services. But Student Success Coaches worked with students in the control group when they asked for help. So, at some point the coaches interacted with both treatment and control students. All students were likely to benefit from this ethically and politically appropriate choice in the long run (Farmer *et al.*, 2011; Norwalk *et al.*, 2016).

Another challenge is that indicators for the outcomes that holistic models aim to improve, like school climate and student well-being, are less consistently available over time and across districts. These indicators are also harder to measure than academic outcomes, especially over a longer time period. Besides outcome measures, many other complexities are important to understand but hard to measure. Examples include interactions between Student Success Coaches and teachers and decisions that teachers and administrators make about students receiving Tier 2 services. Holistic interventions

like the WSWC model seek to change the whole school environment. This long-term process requires broad measures and more time to show effects.

Even with these challenges, it is important to keep studying holistic approaches. Many schools and communities seem to be moving in the direction of adopting holistic approaches. Lesson learned from these studies help us understand how to use such approaches to help students reach their full potential. So, a more useful pathway for future research may be to plan studies that seek to learn about individual experiences, the environment, and the processes schools go through to implement holistic models. The lessons gained would help strengthen the models' service delivery and design in different settings.

For example, case studies could explore different assets in school environments, such as student-adult relationships, coach—teacher relationships, student needs, school priorities, and school staff buy-in. The studies would explore these elements across different contexts and over time. Studies could also collect data that capture the unique experiences of students, teachers, and Student Success Coaches. Focus groups with students would help us understand their lived experiences and how they perceive the model. To make this data collection as relevant as possible, study sites and school leaders should be involved in research planning and design, and students and Student Success Coaches should be engaged in sensemaking about the research findings.

#### References

- Balfanz, R., & Byrnes, V. (2020). Connecting social and emotional development, academic achievement, and on-track outcomes: A multi-district study of grades 3 to 10 students supported by City Year AmeriCorps members. Every Student Graduates Center at the Johns Hopkins University.
- Balfanz, R., Herzog, L., & Mac Iver, D. J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle-grades schools: Early identification and effective interventions. Educational Psychologist, 42(4), 223–235.
- Benson, P. L., Scales, P. C., & Syvertsen, A. K. (2011). The contribution of the developmental assets framework to positive youth development theory and practice. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), Advances in child development and behavior (pp. 195–228). Academic Press.
- Center for Promise (2015). Don't quit on me: What young people who left school say about the power of relationships. America's Promise Alliance. https://files.eric.ed.gov/fulltext/ED563822.pdf
- Christensen, K. M., Hagler, M. A., Stams, G., Raposa, E. B., Burton, S., & Rhodes, J. E. (2020). Nonspecific versus targeted approaches to youth mentoring: A follow-up meta-analysis. Journal of Youth and Adolescence, 49, 959–972.

- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, *24*(2), 97–140. doi:10.1080/10888691.2018.1537791
- Davidson, L. A., Crowder, M. K., Gordon, R. A., Domitrovich, C. E., Brown, R. D., & Hayes, B. I. (2018). A continuous improvement approach to social and emotional competency measurement. *Journal of Applied Developmental Psychology*, *55*, pp. 93–106.
- Dorn, E., Hancock, B., Sarakatannis, J., & Viruleg, E. (2021). *COVID-19 and education: The lingering effects of unfinished learning*. McKinsey & Company.

  <a href="https://www.mckinsey.com/industries/education/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning">https://www.mckinsey.com/industries/education/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning</a>
- Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence*, 21(1), 225–241.
- Farrington, C. A., Roderick, M., Allensworth, E. A., Nagaoka, J., Johnson, D. W., Keyes, T. S., & Beechum, N. (2012). *Teaching adolescents to become learners: The role of noncognitive factors in academic performance—A critical literature review*. Consortium on Chicago School Research.
- Farmer, T. W., Lines, M. M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology*, *32*(5), 247–256.
- Gestsdottir, S., & Lerner, R.M. (2008). Positive development in adolescence: The development and role of intentional self-regulation. *Human Development*, *51*(3), 202–224.
- Goldberg, J. M., Sklad, M., Elfrink, T. R., Schreurs, K. M., Bohlmeijer, E. T., & Clarke, A. M. (2019). Effectiveness of interventions adopting a whole school approach to enhancing social and emotional development: a meta-analysis. *European Journal of Psychology of Education*, *34*, 755–782.
- Kidron, Y., & Osher, D. (2010). *The social-emotional learning component of City Year's Whole School, Whole Child service model: A focus on the middle grades*. American Institutes for Research.
- Kieffer, M. J., & Marinell, W. H. (2012). *Navigating the middle grades: Evidence from New York City*. Research Alliance for New York City Schools.
- Kuhfeld, M., Soland, J., Lewis, K., & Morton, E. (2022). *The pandemic has had devastating impacts on learning. What will it take to help students catch up?* Brookings.

  <a href="https://www.brookings.edu/blog/brown-center-chalkboard/2022/03/03/the-pandemic-has-had-devastating-impacts-on-learning-what-will-it-take-to-help-students-catch-up/">https://www.brookings.edu/blog/brown-center-chalkboard/2022/03/03/the-pandemic-has-had-devastating-impacts-on-learning-what-will-it-take-to-help-students-catch-up/</a>

- Lerner, R. M., Lerner, J. V., Bowers, E., & Geldhof, G. J. (2015). Positive youth development: A relational developmental systems model. In W. F. Overton & P. C. Molenaar (Eds.), *Handbook of child psychology and developmental science: Theory and method* (pp. 607–651). Wiley.
- Juvonen, J., Le, V., Kaganoff, T., Augustine, C., & Constant, L. (2004). *Focus on the wonder years:* Challenges facing the American middle school. RAND.
- Meredith, J., & Anderson, L. M. (2015). *Analysis of the impacts of CY's WSWC model on partner schools'* performance. Policy Studies Associates.
- Nagaoka, J., Farrington, C. A., Ehrlich, S. B., Heath, R. D., Johnson, D. W., Dickson, S., Cureton Turner, A., Mayo, A., & Hayes, K. (2015). Foundations for young adult success: A developmental framework. concept paper for research and practice. University of Chicago Consortium on Chicago School Research.
- Norwalk, K., Hamm, J., Farmer, T., & Barnes, K. (2016). Improving the school context of early adolescence through teacher attunement to victimization. *Journal of Early Adolescence*, *36*(7), 989–1009.
- Osher, D., Moroney, D., & Williamson, S. (2018). *Creating safe, equitable, engaging schools: A comprehensive, evidence-based approach to supporting students*. Harvard Education Press.
- Raposa, E. B., Rhodes, J., Stams, G. J. J., Card, N., Burton, S., Schwartz, S., Yoviene Sykes, L. A., Kanchewa, S., Kupersmidt, J., & Hussain, S. A. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of Youth and Adolescence*, 48, 423–443.
- Roehlkepartain, E. C., Pekel, K., Syvertsen, A. K., Sethi, J., Sullivan, T. K., & Scales, P. C. (2017).

  Relationships first: Creating connections that help young people thrive. Search Institute.
- Ryan, A., Shim, S., & Makara, K. (2013). Changes in academic adjustment and relational self-worth across the transition to middle school. *Journal of Youth & Adolescence*, 42(9), 1372–1384.
- Washor, E., & Mojkowski, C. (2014). Student disengagement: It's deeper than you think. *Phi Delta Kappan*, 95(8), 8–10.
- Zlotnik, S., & Toglia, J. (2018) Measuring adolescent self-awareness and accuracy using a performance-based assessment and parental report. *Frontiers in Public Health, 6*(15), 1–9. 10.3389/fpubh.2018.00015