Worcester HEARS

Healthy Environments And Resilience in Schools

Final Evaluation Report January 2015 to August 2020

Prepared for:

Worcester Public Schools and The Health Foundation of Central Massachusetts

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Table of Contents

Executive Summary	
Introduction	1
Worcester HEARS Partners	2
Evaluation Approach	2
Worcester HEARS Approach	3
Worcester HEARS Components	3
Goals and Target Outcomes	5
Implementation Findings	6
Implementation Sites	6
Lesley University Courses/Flexible Framework	6
Additional Social Emotional Learning Supports	6
HEARS Support Team and Mental Health Supports	8
School-Based Health Center	9
Community of Practice	9
Community and Family Engagement	10
Outcome Data	11
Lesley University Courses/Flexible Framework	11
Student Data	12
Teacher Data	19
Replication and Sustainability	25
Summary and Recommendations	26
References	28



Executive Summary

In 2013, the Worcester Public Schools (WPS) reported high rates of suspension throughout the district, resulting in low attendance rates (Reis, 2013). WPS recognized that underlying Adverse Childhood Experiences (ACEs), such as experiencing or witnessing violence at a young age or family substance use or mental health problems, impact a student's experience in the classroom and subsequent educational and health outcomes ((Felitti et al., 1998; Sacks et al., 2014).

To better support educators in addressing students' experiences and building healthier and safer classrooms and school climates, WPS and its partners applied for and received grant funding totaling \$1.9 million from 2015-2020 from The Health Foundation of Central Massachusetts. With this grant, WPS implemented the Worcester's Healthy Environments and Resilience in Schools, or *Worcester HEARS*, initiative. Worcester HEARS trained and supported educators in five schools in a universal trauma sensitive approach in combination with increased training on social emotional learning curricula, namely MindUP and Open Circle, to improve classroom and school environments.

Specifically, the Worcester HEARS initiative included:

- Lesley University Courses on trauma, designed explicitly for school-based educators, administrators, and other staff. The course prepares teachers, administrators, and support staff to implement the Flexible Framework, an organizational approach that supports school districts, in collaboration with families and community partners, to integrate trauma sensitive practices with a universal focus on the whole school.
- **HEARS Support Team and Mental Health Supports** involving a team of clinicians to provide immediate interventions with highly dysregulated students, connect students to additional community resources as necessary, and offer guidance to teachers and staff within HEARS sites.
- A School-Based Health Center at Worcester East Middle School run by Family Health Center of Worcester to provide easy access to health and behavioral health services for medically underserved youth.
- **Community of Practice,** a working group of professionals from: Clark University, the WPS, Edward M. Kennedy Community Health Center, Community Healthlink, Family Health Center of Worcester, and YOU Inc., that created a sustainable and responsive set of guidelines, tools, and resources for educators to utilize when working to create trauma sensitive schools.
- **Family and Community Engagement** that supported Worcester HEARS by providing insight into the specific community difficulties that can impact Worcester students, identifying the best ways to reach Worcester families in the North Quadrant, and creating a guiding framework for including family and community members in the HEARS project.

In terms of outcomes, the HEARS interventions produced a change that was incremental and promising but not transformational. Overall, 53 educators took part in the Lesley trainings, but only 39 completed all four courses and only 25 still work within the intervention schools. Moreover, educators who took the training were transferred to non-intervention schools in the district, thereby spreading the treatment to the comparison schools. Additionally, the HEARS grant coincided with a district-level action to decrease absenteeism and discipline, with the HEARS initiative informing district-level work in this





area. Thus, due to the limited dose of services received by educators in the HEARS schools, and the cross-over of trained educators moving from HEARS schools to non-HEARS schools, as well as the general diffusion of strategies learned through HEARS, including modified versions of the training offered throughout the district, WPS data on absenteeism and discipline did not show significant changes across the years relative to comparison schools.

But survey data from educators indicate that staff in the Worcester HEARS schools had more training on trauma sensitive practices in general and on MindUP and Open Circles specifically, two social emotional learning (SEL) curricula introduced during the project. Educators who are trained on and used SEL curricula demonstrated a commitment to improving students SEL skills and found the curricula useful.

To sustain the work of Worcester HEARS and diffuse trauma sensitive practices, WPS leadership has developed a partnership with Dr. Heather Forkey and her colleagues at the UMass Medical School. They have developed a series of recorded trainings for staff across the district. WPS has begun using these with staff during professional development. Building staff also hold discussions on these trainings to support implementation of skills learned. The district will provide further training on application across schools to support system-wide implementation of trauma sensitive practices. The district will also continue to train staff in Open Circle and Second Step.

Although it took some time to become operational, the School Based Health Center at Worcester East Middle School will be funded beyond the Worcester HEARS grant by Family Health Center of Worcester through referrals to MassHealth and private insurance and through state funding. Additionally, because of the work with the Worcester HEARS clinicians and the evidence of the need provided by that work, WPS has adopted mobile Stabilization Teams throughout the district to help staff in implementing universal strategies and tiered interventions to improve and sustain school climate and culture. Moreover, Worcester HEARS led to the district establishing the position of behavioral health providers as they assumed and sustained the work done by HEARS funded clinicians. WPS also continues to work with providers to offer mental health services after school hours at school sites.

Recommendations

Worcester HEARS demonstrated that WPS can successfully implement training and supports to improve trauma sensitive education practices and SEL. Although the Worcester HEARS evaluation did not demonstrate changes in student outcomes due to study limitations, it did demonstrate widespread educator support for trauma sensitive and SEL practices. Given the documented evidence of the impact of trauma on learning and other life outcomes in the literature, and WPS educators' commitment to this work, WPS should continue to support educators throughout the district on trauma sensitive educational practices and SEL curricula. WPS should also maintain its commitment to the Stabilization Teams and to the community partnerships that were strengthened through the Communities of Practice and Community and Family Engagement working groups. Further, WPS continue to build trust with community behavioral health services to provide behavioral health supports to students and their families during and after the school day. Finally, WPS should continue to collect data on key elements of their strategic efforts, to support WPS in applying for and receiving new grants and future WPS budgets that support students with trauma sensitive practices and social emotional learning.



Introduction

In the fall of 2014, the Worcester Public Schools applied for a grant from The Health Foundation of Central Massachusetts to address adverse childhood experiences (ACEs) and trauma among its student population. The focus on trauma resulted from a study by the Latino Education Institute of Worcester State University (LEI) and Worcester Education Collaborative (WEC) in 2013 that explored the role of school suspension on attendance in the Worcester Public Schools (WPS) (Reis, 2013). LEI and WEC found that one factor clearly affecting student presence in school was discipline. With a suspension rate of 12 percent, more than twice the state average, Worcester Public School students received more than 4,800 out-of-school suspensions in the 2011-2012 school year. That translated into nearly 35,000 hours of lost instruction across the disciplines. School suspension carries with it a significant increase in the likelihood of dropping out, with the attendant personal and societal strains (Smith & Harper, 2015; American Academy of Pediatrics, 2013). For children in the primary grades, suspension means missing instruction in the foundational subjects and the risk of not mastering critical skills needed for continued educational attainment. Suspension also results in a compromised quality of life, with significant numbers of idle or unsupervised students in the city each day.

The high level of disciplinary suspensions is a significant problem and a substantial barrier to a student's success in college, career, and life. Moreover, suspensions are only a symptom of a larger problem, specifically the high number of students experiencing trauma associated with ACEs, and the toxic stress of chronic poverty, coupled with ineffective strategies for addressing the effects of child trauma in schools (Felitti et al., 1998; Sacks et al., 2014). WPS reports on the reasons for suspension and other discipline demonstrate classic behavioral responses to trauma of fight, flee, or freeze. In its application to The Health Foundation of Central Massachusetts, WPS noted that ACEs and the toxic stress of chronic poverty have a serious impact on WPS students; they face challenges in learning, making friends, and trusting adults. They cannot keep up in school. They shut down, are truant, or get in fights. They are considered the "problem" kids and then schools suspend them. Through their initial application, which was granted in January 2015, WPS and its partners sought to break this pattern by training educators to build more trauma sensitive classrooms and school environments to support students.

Worcester's Healthy Environments and Resilience in Schools initiative, or *Worcester HEARS*, brought a universal trauma sensitive approach to five intervention schools. Worcester HEARS implemented the Flexible Framework, an evidence-based model developed by the Massachusetts Advocates for Children, in collaboration with Harvard Law School and the Task Force for Children Affected by Domestic Violence (Cole et al., 2005). With in-depth training on trauma sensitive schools, educators use the Flexible Framework to build an action plan that provides guidelines for establishing schoolwide practices and supports for staff and students.

Worcester HEARS aimed to change school environments to help children thrive in a complex and everchanging world. Worcester HEARS brought together advances in brain science, child development, and best practices to address childhood adversity in its schools and community. The Health Foundation of Central Massachusetts provided \$1.9 million in funding for this initiative from January 2015 through August 2020.



Worcester HEARS Partners

The Worcester HEARS project consisted primarily of a partnership between the Worcester Public Schools (WPS), the Worcester Education Collaborative (WEC), Clark University and Family Health Center of Worcester. The funder, The Health Foundation of Central Massachusetts, advised WPS throughout the initiative and Brandeis University researchers provided evaluation support.

- Worcester Public Schools (WPS) provide learners with quality education in a safe and healthy
 environment. They believe all students can achieve at high levels as they prepare to become
 productive citizens in our changing technological world. Further, they are committed to
 supporting students, parents, educators, and citizens in their pursuit of learning. WPS
 implemented the Worcester HEARS initiative in five schools within the district.
- Worcester Education Collaborative (WEC) is committed to supporting, facilitating, and
 developing a wide variety of partnerships among families, schools, organizations, and businesses
 to enhance the quality of public education and therefore the quality of the common life in
 Worcester. WEC coordinated the integration of families and community partners into the
 project and communicated regularly with the broader community regarding the progress of the
 initiative. They also supported the diffusion of the intervention by providing educator training
 throughout the district.
- Clark University faculty from two centers based in their Education Department (the Adam Center for Urban Teaching and School Practice and the Hiatt Center for Urban Education) participated in the initiative. Clark has pioneered and applied a model from medical education, called teaching rounds, that allows instructors to share pedagogical strategies and make constant adaptations to teaching and classroom management strategies to improve student performance. They brought this approach to Worcester HEARS' Community of Practice working group to support teachers and staff in successfully integrating both academic and social emotional learning (SEL) strategies in a deeper, more robust way.
- Family Health Center of Worcester is dedicated to improving the health and well-being of all residents in the Greater Worcester area, especially culturally diverse populations, by providing access to affordable, high quality, integrated, comprehensive, and respectful primary health care and social services, regardless of patients' ability to pay. Family Health Center worked with WPS to open a school-based health center and provide mental health services at one of the Worcester HEARS schools.

Evaluation Approach

Researchers at Brandeis University used an Empowerment Evaluation approach with WPS to help them evaluate the impact of the Worcester HEARS initiative. The evaluation included:

- A review of key documents, including all reports to The Health Foundation of Central Massachusetts, to track changes in services and document plans for sustainability;
- Data from WPS on the educators taking part in the Lesley training including completed courses and retention at Worcester HEARS schools;
- Student data on absenteeism and discipline from WPS; and





 Teacher data on staff retention from the Department of Elementary and Secondary Education and a survey of educators in schools across the district on training and use of trauma sensitive practices and social emotional learning curricula.

During the project, WPS staff met quarterly with the evaluation team and a representative from The Health Foundation of Central Massachusetts to use evaluation data to track implementation, identify problem areas and strategize on solutions to improve the project and work toward a sustainable model.

Worcester HEARS Approach

Worcester HEARS Components

The Worcester HEARS initiative strove to create school environments that support children's health, social and emotional development, and academic success. Ultimately, their goal was that all caregivers, educators and youth development workers in the participating schools and neighborhoods confidently engage in evidence-based and trauma-informed practices and pedagogical approaches, providing students with the foundation for educational achievement, lifetime resiliency, and health.

WPS implemented the Worcester HEARS initiative in four elementary schools and one middle school in the area of the district identified as the North Quadrant. The schools included Rice Square Elementary, Grafton Street Elementary, Roosevelt Elementary, City View Elementary, and Worcester East Middle Schools. Each school had high levels of children experiencing trauma, poverty, mobility, and other challenges.

Worcester HEARS included five key components:

Lesley University: In partnership with Massachusetts Advocates for Children and Harvard Law School, as well as the Oak Foundation, educators at Lesley University have created a sequence of courses that focus on trauma, designed explicitly for school-based educators, administrators, and other staff. Teachers who complete the four courses in sequence receive a Trauma and Learning Professional Certificate. The courses examine the impact of traumatic experience on student learning (both academic and social emotional) and provide a structured approach to individual and schoolwide interventions. The courses prepare teachers, administrators, and support staff to implement the **Flexible Framework** developed by **The Massachusetts Advocates for Children**. The Flexible Framework is an organizational approach that supports school districts, in collaboration with families and community partners, to integrating trauma sensitive practices with a universal focus on the whole school.

HEARS Support Team and Mental Health Supports: As part of Worcester HEARS, the Worcester Public Schools hired a Behavioral Health Clinician and a Licensed Social Worker to support the five HEARS sites in their implementation of the Flexible Framework. This team provided immediate interventions with highly dysregulated students, connected students to additional community resources as necessary, and offered guidance to teachers and staff within HEARS sites. The two professionals worked alongside school staff at all five sites to build trauma sensitive education practices into all teachers' daily pedagogy. This team also worked directly with the Community of Practice working group to identify behavioral health services that are available to students in need and connect the students with those resources. As the project progressed, there was staff turnover on this team and the Worcester Public Schools took the opportunity to reorganize the mental health supports to increase clinical support at





each school. In the new model, WPS hired two clinicians to work half-time at two elementary schools each, and a third clinician who provided intensive care coordination and back up to the behavioral health providers in the school-based health center (SBHC) at Worcester East Middle School.

School-Based Health Center: Family Health Center of Worcester partnered with the Worcester HEARS project and opened a SBHC at Worcester East Middle School, the largest HEARS site. The SBHC helps to maximize time spent on learning, by providing easy access to health and behavioral health services for medically underserved youth. The behavioral health staff also collaborated with teachers to implement the Flexible Framework and integrate trauma sensitive practices into their daily work. The SBHC included a full-time Nurse Practitioner, a full-time Medical Coordinator, and a full-time Behavioral Health Provider. After delays related to the level of renovations needed and the amount of time required to get DPH approval, WPS and Family Health Center of Worcester opened the School Based Health Center in April 2018.

Community of Practice: The Community of Practice working group partnered within the Worcester HEARS project to create a sustainable and responsive set of guidelines, tools, and resources for educators to utilize when working to create trauma sensitive schools. The working group included professionals from: Clark University, Worcester Public Schools, Edward M. Kennedy Community Health Center, Community Healthlink, Family Health Centers of Worcester, and YOU Inc.

Family and Community Engagement: The Family and Community Engagement Working group supported Worcester HEARS by providing insight into the specific community difficulties that can harm Worcester students, identifying the best ways to reach Worcester families in the North Quadrant, and creating a guiding framework for including family and community members in the HEARS project. The group included a large group of Worcester community organizations, including: You Inc., Worcester Community Connections, Worcester Education Collaborative, United Families for Change, Clark University, and Worcester Police Department.

The Worcester HEARS project implemented interventions with students in three tiers:

Tier I: Universal Interventions: Interventions that targeted and affected all students within HEARS schools. This included schoolwide enhancements in pedagogy and discipline and the addition of MindUp, a research-based social emotional curriculum developed by the Hawn Foundation, in the four elementary schools.

Tier II: Targeted Interventions: Interventions that targeted students who were having some academic or behavioral difficulty but were not in need of intensive services. This included working with the HEARS Support Team or mental health supports and making connections to outside agencies for additional non-clinical supports.

Tier III: Intensive Interventions: Interventions that targeted students who had serious behavioral or safety issues. This included working with the HEARS Support Team and mental health supports and collaborating with behavioral health agencies in the community to provide afterschool counseling on site with students and families in Worcester HEARS schools.





Goals and Target Outcomes

Worcester HEARS worked toward achieving the following five goals:

- Enhance intervention schools and create a safer and more supportive environment.
- Enhance educator knowledge so teachers will implement trauma sensitive approaches in their practice.
- Build resilience within students at HEARS schools.
- Increase and strengthen district partnerships, including higher education organizations, non-profits, and mental health agencies.
- Increase and strengthen family engagement within the participating school community.

Worcester HEARS identified target outcomes for students, teachers, and community partners. For students, Worcester HEARS aimed to:

- Demonstrate significantly lower levels of chronic absenteeism relative to students in comparison schools.
- Reduce students' level of disciplinary referrals/infractions relative to students in comparison schools.
- Demonstrate higher rates of stability relative to students in comparison schools.
- Significantly increase students' academic achievement (e.g., standardized testing scores) relative to students in comparison schools.

For educators, Worcester HEARS aimed to:

- Show improvements in their knowledge, attitudes and behaviors concerning trauma and learning relative to their baseline assessment.
- Have at least 95% of the educators who completed the Lesley course receive passing grades.
- Demonstrate significantly less turnover among teachers relative to teachers in comparison schools, after accounting for retirements and any positive turnover.

For community and family engagement work, Worcester HEARS aimed to:

- Have the Community and Family Engagement Frameworks accepted by community partners and the school district.
- Change practices within the district so community agencies would be able to run services for students at school sites, after school.
- Have community agencies help teachers and school leaders develop Flexible Framework Action Plans.
- Have parents demonstrate greater involvement by helping to create the final Flexible
 Framework Action Plans, increasing the number of parents involved in School Site Councils at
 each school, and having at least five parents complete a six-session People Empowering People
 training.





Implementation Findings

Implementation Sites

The Worcester Public School district is a large, diverse, low-income urban school district composed of 45 schools. The five schools chosen as Worcester HEARS pilot schools included a diverse student population, many of whom were low income, which was representative of the district. Students in these schools, and across the district, struggle with poverty, homelessness, language barriers, and a lack of infrastructure in the area of the city in which schools are located. The five Worcester HEARS schools included: Rice Square Elementary, Grafton Street Elementary, Roosevelt Elementary, City View Elementary, and Worcester East Middle School.

Lesley University Courses/Flexible Framework

During the spring of 2016, 18 Administrators from the five pilot schools, along with 6 district staff and 1 member of WEC (25 in total), completed a Masters-level course that provided an overview of the effects of trauma on learning. Based on the training, Principals from each school worked with their staff to identify specific areas within their schools that needed to be enhanced or altered to make their schools more supportive and safer for all students.

A second round of Lesley's course on trauma sensitive practices was offered in the fall of 2016 to educators at the five intervention schools. To kick off these trainings, WPS held a six-hour professional development event on August 25, 2016, with a keynote lecture by Dr. Joel Ristuccia, the co-director of Lesley's Trauma and Learning Policy Institute, for all staff in the five Worcester HEARS schools. Teachers, Instructional Assistants, Coaches, and all other staff learned about the effects of trauma on learning and met in focused workshops to evaluate their school's current climate and identify areas that could be improved. Teachers and staff from the five schools were then invited to apply for the Lesley course, of which 28 were selected to begin the course in September 2016. These teachers, along with the administrative cohort that also completed the four-course sequence, led their schools in developing a Flexible Framework action plan and transforming their schools into trauma sensitive environments.

Additional Social Emotional Learning Supports

During the Worcester HEARS project, WPS increased social emotional supports within the intervention schools including adding the MindUP, Open Circle and Second Step programs, all evidence-based social emotional learning curricula. Additionally, WEC created newsletters, a web site, and videos to support Worcester HEARS and WPS implemented use of Panorama software to help educators track individual student outcomes.

MindUP

With support from The Health Foundation of Central Massachusetts and the Fred Harris Daniels Foundation, the Worcester HEARS project conducted a full-day training for more than 170 teachers and administrators in the four Worcester HEARS elementary schools on the MindUP program, a social emotional learning curriculum developed by the Hawn Foundation. MindUP brings additional social emotional learning supports to the classroom and throughout the school. In the second year of implementation, Worcester HEARS expanded the MindUP curriculum to the Worcester East Middle School and provided shorter professional development opportunities throughout the year focused on MindUP to support implementation at the four elementary schools.



Healthy Environments And Resilience in Schools

Open Circle

During the summer of 2019, the three HEARS behavioral clinicians became certified Open Circle trainers. Open Circle is an evidence-based social and emotional learning program for students in Kindergarten through grade 5. The behavioral clinicians ran whole class Open Circle groups in Kindergarten and first grade classrooms at all the HEARS elementary schools and trained 50 staff in the intervention elementary schools on the program.

Second Step

In the last year of the grant, WPS purchased the Second Step curriculum for all intervention schools. Second Step is a universal SEL program which was initially led by counseling and HEARS staff but eventually was assumed by classroom teachers as they learned to incorporate the strategies and techniques into their classroom structure and practices.

Additional SEL Supports from WPS and WEC

WPS created Recovery Boxes for all the intervention schools. HEARS specialists worked in conjunction with classroom teachers to identify the most appropriate materials to place within these boxes based on the age and needs of students within the classroom. The Recovery Boxes included materials such as coloring books, fidget spinners, and stress balls. These tools were for student use while in the classroom to self-regulate and refocus. Teachers and students received instruction on how to use the tools to support self-regulation. Creating a calming space within the classroom allows students to remain calm during instruction, thereby reducing the need to remove students from the classroom. In turn, this leads to reduction in referrals and cultivates not only the individual student's ability to use the materials to self-regulate but a classroom culture that supports this type of intervention.

WEC developed a series of six videos on Worcester HEARS and trauma informed practices. These videos covered:

- ACEs & Learning Part 1
- ACEs & Learning Part 2
- Implicit Bias
- Moral Injury
- Trauma Sensitive Classroom Practices
- Teacher Stress & Self Care

WEC also developed a series of newsletters that covered the following topics:

- HEARS Newsletter
- Child Development
- ACEs
- Implicit Bias and Shame
- Moral Injury
- Social Emotional Learning
- Mindfulness
- Restorative Justice
- Transitions





Finally, WEC developed a SEL resource website to support WPS as they implement proven practices. The web site covers:

- Child development and ACES
- Implicit bias and shame
- Racism as trauma
- Developmental discipline
- Practicing mindfulness in the classroom
- Teacher stress and self-care
- Universal strategies for elementary and secondary school education.

The web site is located at: https://www.wecollaborative.org/resilient-classroom-resources.

In 2018, Worcester HEARS incorporated the use of Panorama software, which helps schools and districts measure students' and teachers' perceptions of SEL, explore students' test results with interactive reports, and provide educators with actionable strategies to build their students' SEL skills. WPS continues with this initiative through another funding source to identify and support the SEL needs of students in grades 7 through 12. The data has been supportive of identifying students at risk and monitoring the impact of interventions.

HEARS Support Team and Mental Health Supports

From January 2016 to April 2018, two full-time staff members supported the five pilot schools: one Behavioral Health Specialist and one Community Intervention Specialist. The Behavioral Health Specialist was certified in Trauma Focused Cognitive Behavioral Health Therapy, and the Community Intervention Specialist was a Licensed Social Worker. Both staff worked with the five schools to identify students who needed additional support and provided either direct services or connected these students with the appropriate out-of-school resources they required. The HEARS Support Team became fully integrated into the communities of each of the five schools. Both staff received very positive feedback from teachers and principals in their work with students and with staff in each school. School staff at each of the intervention schools included the HEARS Support Team in weekly meetings, parent conferences, Individualized Education Plan discussions, and in the mental health referral process. The HEARS Support Team spent one day a week in each school.

In Spring 2018, staff transitions led to a new model where three clinicians were hired to replace the previous two HEARS Support Team. Under this new model, two clinicians each worked half days at two of the elementary schools, providing half-time clinical support to each school. The third clinician worked at Worcester East Middle School full time, supporting the behavioral health clinician in the SBHC. The three behavioral health clinicians had extensive clinical and trauma sensitive experience. This change was well-received at the school level. The clinicians become integral in school culture and connected with both students and families.

In 2018, the Worcester HEARS initiative also added additional behavioral health resources to the after-school programming at Worcester East Middle School. This component ensured that students at Worcester East Middle had a safe and supportive environment during and after school hours. Worcester East Middle School hosted several well attended after school programs, including





Recreation Worcester, whose students benefitted from this expansion. Worcester HEARS also added after-school counseling at the HEARS elementary schools in conjunction with multiple community agencies. The agreements with three agencies took time to develop but counseling was available at all HEARS schools as of fall 2019. The services included both individual and group sessions, depending on the partnering community agency and its capacity. About 30 students took part in these services during the 2019-2020 school year, noting that the sudden shut-down of inperson education and services in March 2020 due to the COVID-19 pandemic likely reduced the total number who might have participated in services.

School-Based Health Center

The Worcester HEARS team and Family Health Center of Worcester began work on the school-based health center (SBHC) in August 2016. This required a significant amount of planning, renovations to prepare the space, and approval from the Massachusetts Department of Public Health (DPH). The space at Worcester East Middle School required significant renovations to meet DPH code even though the space had been previously licensed, which required additional funds beyond those provided by The Health Foundation of Central Massachusetts. Family Health Center of Worcester paid for the architect to write a preliminary renovation plan for the SBHC. Additionally, the Worcester HEARS project sought out and received \$50,000 from the city of Worcester to match The Health Foundation's funding. In January 2017, Family Health Center of Worcester received a \$30,000 one-time grant from the Hoche-Scofield Foundation, Bank of America, N.A., Co-Trustee to support the purchase of medical, office, and computer equipment to outfit the new health center at Worcester East Middle School.

Initially, Worcester HEARS expected to open the SBHC in March 2017. Delays due to the level of renovations needed and the amount of time required to get DPH approval resulted in the SBHC opening in April 2018. Once fully operational, the SBHC included a full-time behavioral health clinician who saw students throughout the day. The district continued to work with the school and Family Health Center of Worcester to coordinate and increase services in the school community. The SBHC continues to operate beyond the close of the Worcester HEARS initiative.

Community of Practice

The Community of Practice Working Group prepared a collaborative learning protocol to bring school staff and community behavioral health providers together to leverage community resources and help the most challenged students. Using the protocol, the group routinely reviewed case studies of challenging students to identify best practices to better serve WPS students and worked to find more efficient referral processes for behavioral and mental health services. These learning sessions helped build alignment with the trauma sensitive practices and shared best practices between behavioral health experts and school staff. In the summer of 2019, team members within the Community of Practice held four 2.5-hour sessions with principals of the HEARS schools to help them build universal trauma sensitive practices within their schools.





Community and Family Engagement

WEC worked with community partners to develop a Community and Family Engagement framework, which was approved by the community partners in the Community and Family Engagement Working Group and by district staff. As part of this effort, and in collaboration with Worcester Community Connections Coalition (WCCC), WEC conducted a six-session Parent Empowerment training with ten parents in HEARS schools. The training included modules on communication, local resources, childhood adversity and learning, and the role of School Site Councils. These parents then served on Site Councils of targeted schools and met with designated "gatekeeper" organizations (e.g., Oak Hill CDC, Friendly House) to help them better understand, identify, and raise family and community issues with the schools. They also met bi-monthly in a community of practice to review emerging issues with WEC and WCCC staff.

WEC also provided 14 workshops and information sessions for 27 parents focused on the Worcester HEARS project, and on building partnerships with their public schools. Additionally, WEC held three TedX Salon workshops focused on Social and Emotional Learning for over 100 community members, and a training on trauma sensitive services facilitated by Joe Ristuccia of Lesley University for 50 youth workers within the city.

In October 2016, the district implemented a parent engagement platform at Worcester East Middle School called the Worcester Institute for Parent Leadership in Education (WIPLE), separate from the Worcester HEARS initiative. WIPLE is based on the Parent Institute for Quality Education (PIQE), which has had success in providing parents with the necessary tools to navigate the school system and to access the best educational opportunities for their children. The PIQE model has been adapted in 12 different states. PIQE chose the Worcester Public Schools as the district to pilot the first replication in New England. WPS WIPLE offered a nine-week series of free interactive workshops in English and Spanish to parents to help them better understand the educational system and advocate for their children. The program is intended to increase parent engagement and therefore support youth in their pursuit of higher education.

Rather than compete against WPS WIPLE, since they worked with many of the same community partners and parents, WEC worked directly with WPS WIPLE to coordinate and collaborate with Worcester HEARS to expand the programs into all four of the remaining HEARS school sites. About 50 parents graduated from cohorts offered in both Spanish and English at Worcester HEARS schools. Additionally, The Health Foundation of Central Massachusetts provided supplemental funding to train professionals at the Latino Education Institute (LEI) at Worcester State University in the WIPLE Model for parent coaching. LEI then offered WIPLE at all HEARS schools with some additional support from the Worcester Public Schools. Despite these efforts, WEC, LEI and Worcester HEARS continued to struggle with parent enrollment and retention. The district learned from the WIPLE implementation the need to be responsive to parents'/guardians' expressed needs and interests. WPS continues to work with community agencies and faith-based groups to offer parent/guardian programing and related support.

The Worcester HEARS initiative worked closely with The Health Foundation of Central Massachusetts to educate the community about ACEs and the impact on children. Specifically, the Foundation assisted with public awareness of the ACEs issue by hosting Dr. Nadine Burke Harris, a pediatrician recognized for her work on ACEs, at an event at Worcester Technical School that included over 700 registered attendees on Sept. 19, 2017.



Outcome Data

Lesley University Courses/Flexible Framework

Data from the district indicate that there was significant movement of teachers and staff from the five intervention schools and central office who were involved in Worcester HEARS either out of the district or into non-intervention schools.

- Overall, 53 teachers and staff took part in the Lesley trainings on trauma sensitive schools, this included 6 administrators in central office, 1 staff at WEC, and 46 teachers and staff in the five intervention schools.
- Among the 53 educators who took at least one of the four Lesley courses, only 39 (74%) completed all four courses. Among these 39, 100% passed the courses.
- By the end of the project, only 25 teachers and staff who took part in the Lesley trainings, fewer
 than half of those originally trained, were still working with Worcester HEARS. This included 1
 central office administrator, 1 WEC staff, and 23 educators in the five intervention schools.

This highlights the challenge of implementing an intervention in specific schools over several years, with a research design to measure the change between the intervention schools and the comparison schools. With this type of movement across schools, it was difficult to disseminate the intervention beyond those teachers/staff initially trained. As a result, the district adopted a systemwide model to train all staff on trauma sensitive practices. Working with Dr. Heather Forkey and colleagues at UMass Medical School, principals and staff from the Office of Social Emotional Learning (OSEL) were introduced to specific topics via recorded presentations. WPS administrators and OSEL building staff facilitated discussions. Year one focused on building a shared understanding of trauma and trauma sensitive practices. Year two continues with a focus on classroom application. As Worcester Public Schools spread the intervention more widely, the ability to measure the effect of the intervention was lost.

To compensate for the movement of educators, WEC offered a more concise professional development opportunity in this area. Jennifer Davis Carey, WEC's founding Executive Director, took part in the first cycle of the trauma course offered by Lesley University. When the Worcester HEARS leadership realized that many teachers trained by Lesley had shifted to non-HEARS schools or left the district, Dr. Carey was able to collaborate with Lesley University to develop and offer a ten-hour training called Understanding Trauma Sensitive Practices (USTP) for educators in the HEARS schools and eventually throughout the district. Dr. Carey developed a fully in-person training, a blended in-person/on-line training and a fully on-line training that was offered in Spring 2020 during the COVID-19 pandemic. In total, WEC trained six cohorts of educators – three with educators at the HEARS schools only and three district-wide trainings. Across these six cohorts, WEC trained 246 educators, 97 of whom worked at HEARS schools and 149 who worked at other schools in the district. With the foundation of educators who have been trained in the Lesley model and the partnership with UMass Medical School to bring recorded trainings to staff through their routine professional development opportunities, the district can provide a low-cost sustainable approach to continued training on trauma sensitive practices throughout its schools.



Student Data

WPS staff in the Office of Research and Accountability provided data on the Worcester HEARS initiative, comparing HEARS schools to non-HEARS schools. It should be noted that due to the Covid-19 early closure of Massachusetts schools, the analysis focuses on school years 2015 to 2019.

Two primary categories of data were analyzed for the five HEARS schools to identify any significant changes from 2015 through 2019. Note that 2015 was considered a baseline year prior to the year 1 training and implementation that occurred in 2016. Analyses covered:

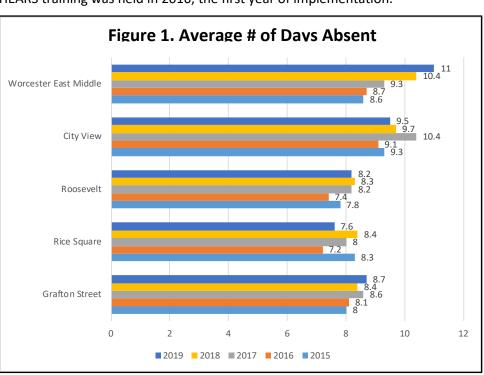
- Attendance data:
 - Average # of days absent,
 - Attendance rates, and
 - Percent chronically absent.
- Discipline data:
 - In-school suspensions,
 - Out-of-school suspensions, and
 - Emergency removals.

Data on Attendance Rate and Chronic Absenteeism was sourced from the Student Attendance data on the Department of Elementary and Secondary Education (DESE) School and district profile. Discipline data reflect discipline actions that occurred in the five HEARS intervention schools from 2016 through 2019.

Attendance Data

These data reflect full school years for 2015 through 2019. Data from 2015 are provided as a baseline for comparison. The initial HEARS training was held in 2016, the first year of implementation.

There were no significant differences in the average number of days absent from 2015 to 2019 within the Worcester **HEARS** schools (see Figure 1). Averages at Worcester East Middle climbed steadily since 2015, and all schools showed an increase from the baseline in 2015 through 2019 except Rice Square.



Similarly, attendance rates stayed relatively flat from 2015 to 2019 (see Figure 2). Schools demonstrated variable patterns over time, with Worcester East Middle having slight but steady declines and Rice Square and City View having slight declines in 2017 with subsequent increases.

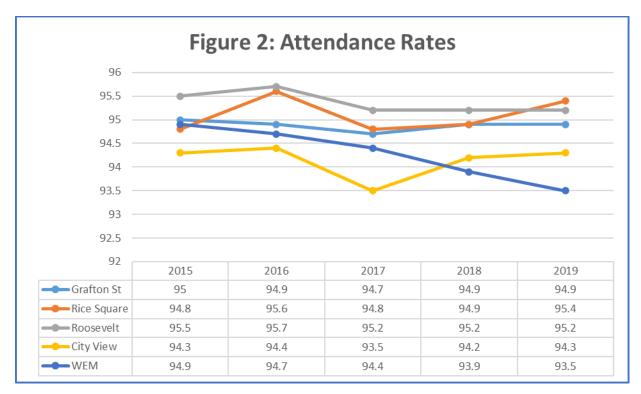
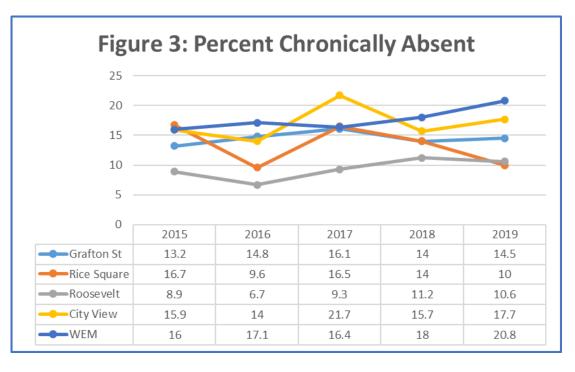


Figure 3 documents the chronically absent rates across schools from 2015 to 2019. Comparing rates over time, rates at Rice Square were variable, but showed an overall decline from 16.7% to 10.0%. All other schools showed an increase in the chronically absent rate from 2015 to



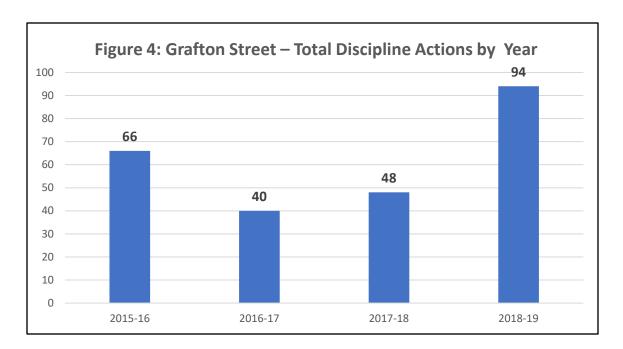
2019.

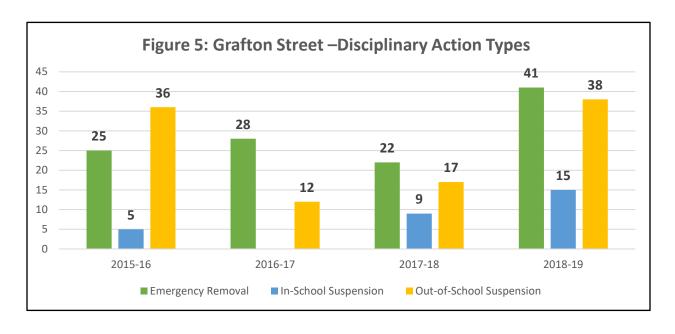


Discipline Data

This section provides discipline data by school and within school by year. As with the absentee data, the discipline data are full school years for 2015-2016 through 2018-2019.

Figure 4 presents Total Discipline Actions for Grafton Street, showing a drop off from 2015-2016 to 2016-2017, but then a sharp increase in 2018-2019. In all years at Grafton Street, most disciplinary actions involved emergency removals and out-of-school suspensions (see Figure 5).

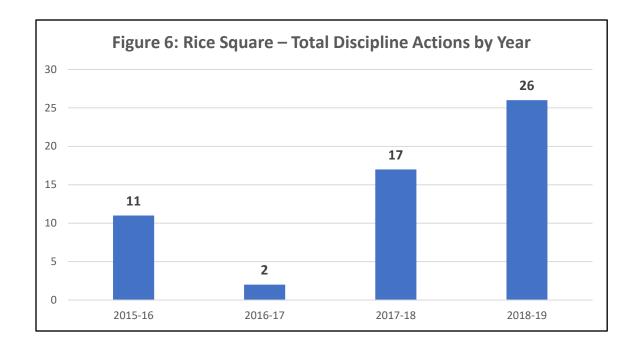


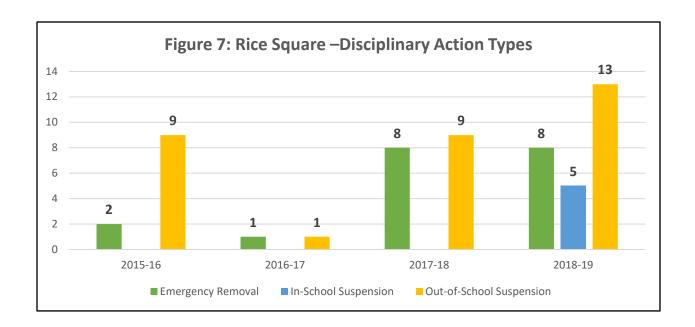






Similar to Grafton Street, total discipline actions at Rice Square decreased from 2015-2016 to 2016-2017 then increased steadily through 2018-2019. Most disciplinary actions involved emergency removals and out-of-school suspensions across all years at Rice Square.

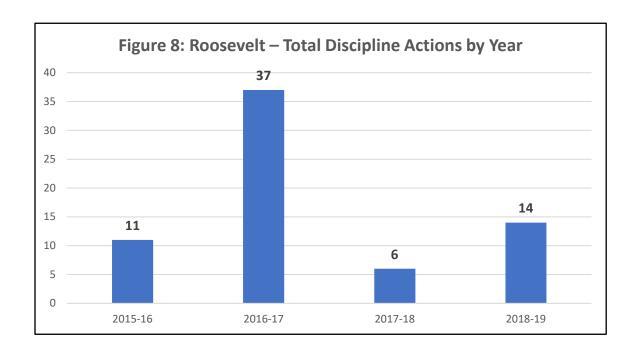


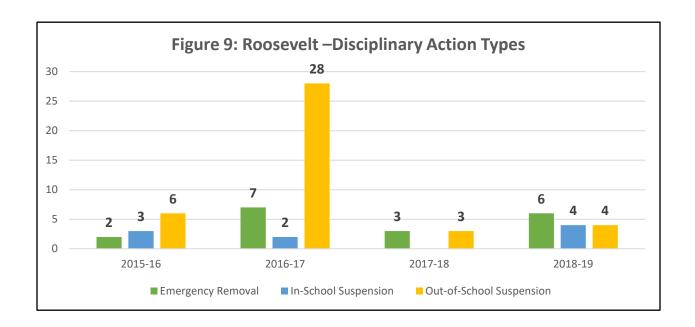






For total discipline actions, Roosevelt showed a notable increase from 2015-2016 to 2016-2017 and then a sharp decrease in 2017-2018 (see Figure 8). In the next year, discipline actions increased reaching more than in 2015-2016 but not reaching the highest in 2016-2017. The type of disciplinary action was fairly evenly distributed in all years except 2016-2017 when out-of-school suspensions were the norm (see Figure 9).

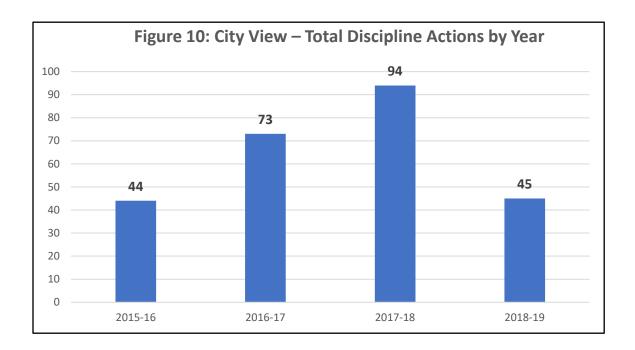


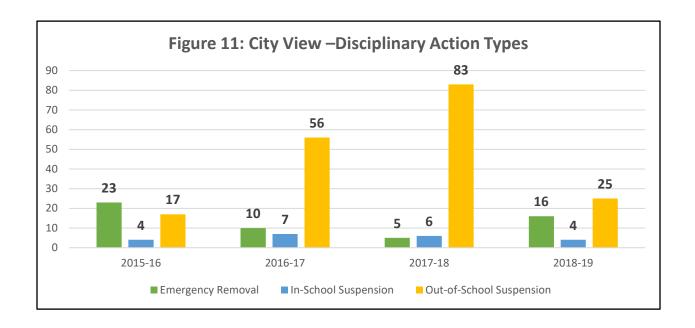




Worcester HEARS

City View had a steady increase in total discipline actions from 2015-2016 through 2017-2018 (see Figure 10). In 2018-2019 there was a sharp decrease back to the 2015-2016 level. The type of disciplinary action was fairly evenly distributed in all years except 2016-2017 and 2017-2018 when out-of-school suspensions predominated (see Figure 11).

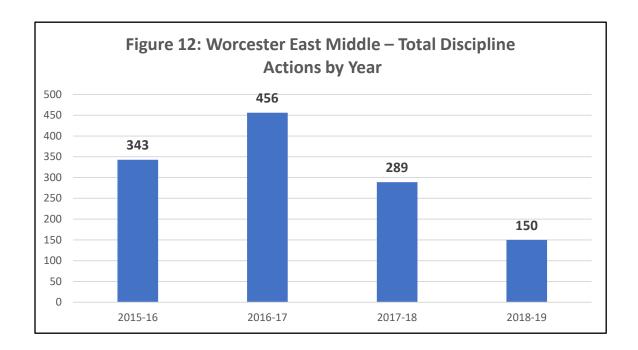






Worcester HEARS

At Worcester East Middle School, total discipline actions increased from 2015-2016 to 2016-2017 and then decreased steadily through 2018-2019 (see Figure 12). Most disciplinary actions at Worcester East Middle School were out-of-school suspensions across the years, followed by in-school suspensions (see Figure 13). There were proportionately fewer emergency removals at this level.



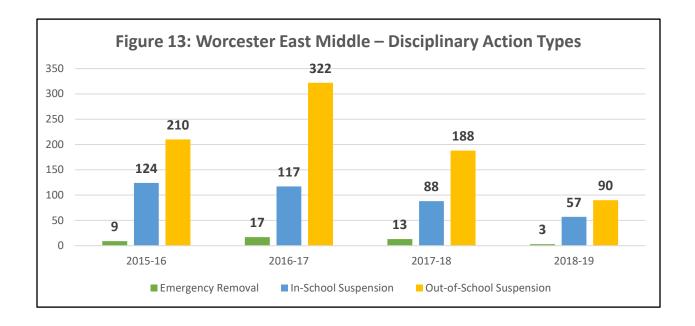




Table 1 provides data on chronic absenteeism for Worcester HEARS schools versus non-Worcester HEARS schools. These data indicate that chronic absenteeism declined from 2017 to 2018 for schools in the Worcester HEARS intervention, but chronic absenteeism for schools in the comparison group declined at a similar rate (see Table 1). Similarly, chronic absenteeism for Worcester East Middle School (WEMS) increased from 2017 to 2018, while chronic absenteeism for middle schools in the comparison group also increased at a similar rate. Overall, the data across schools are extremely variable suggesting that the Worcester HEARS project had little noticeable impact on discipline actions. Given the movement of trained educators out of the intervention schools, it is difficult to see an impact from Worcester HEARS and the trauma sensitive schools approach taught by Lesley University.

Table 1. Chronic Absenteeism for Worcester HEARS Schools versus Non-Worcester HEARS Schools				
	2017	2018		
Elementary Schools				
HEARS ES Average	15.9%	13.7%		
Non-HEARS ES Average	11.6%	9.2%		
City View	21.7%	15.7%		
Grafton Street	16.1%	14.0%		
Rice Square	16.5%	14.0%		
Roosevelt	9.3%	11.2%		
Middle Schools				
WEMS	16.4%	18.0%		
Non-HEARS MS Average	12.9%	14.4%		

These findings do not suggest that the trauma sensitive schools approach, and Worcester HEARS more specifically, do not work, but rather that the intervention may not have been implemented as planned due to the high mobility of teachers and staff in the intervention schools. This is further complicated by trained teachers who then move to comparison schools and who may take the trauma sensitive approach with them and diffusing of trauma sensitive training throughout the district in the last year of the project. Thus, diminishing the difference between intervention and comparison schools.

Another way to measure the impact of the Worcester HEARS project is to look at the impact on teachers involved in the initiative compared to those in other schools.

Teacher Data

In assessing the impact on teachers, the evaluation included an analysis on teacher retention and a survey of teachers' practices using SEL curricula.

Teacher Retention

In providing educators with skills to address trauma in the classroom and build SEL among students, Worcester HEARS was also trying to increase teacher retention within the intervention schools. Overall, teacher retention increased less in Worcester HEARS schools compared to all other schools (5.9% versus 7.3%) (see Table 2). Retention at Worcester East Middle School increased by 12.9% from 2016 to 2018,



more than the 5.5% among other middle schools, however, this change could have been due to factors other than the Worcester HEARS initiative given many changes from year to year. With elementary schools, Worcester HEARS schools had less teacher retention. We had hoped to be able to remove positive changes, such as a promotion from teacher to Principal of another school, in this analysis, but the retention data reported to the Department of Elementary and Secondary Education includes all changes including retirements and promotions.

Table 2. Teacher Retention by	Type of Scl	hool and Yo	ear*		
	2016	2018	Difference		
Worcester HEARS	68.7%	74.6%	5.9%		
All Other Schools	69.1%	76.4%	7.3%		
Worcester East Middle School	67.8%	80.7%	12.9%		
All Other Middle Schools	81.2%	86.7%	5.5%		
Worcester HEARS Elementary Schools	69.0%	72.2%	3.2%		
All Other Elementary Schools	66.7%	74.3%	7.6%		
*Data reported by the Department of Elementary and Secondary					
Education					

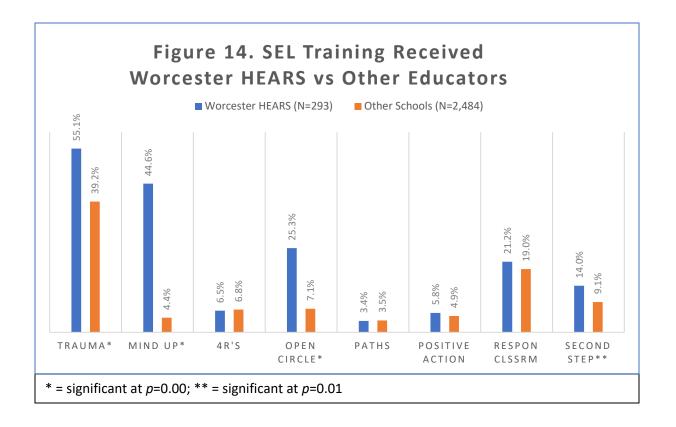
Teacher Practices Using SEL Curricula

In August 2020, the evaluator conducted a survey with WPS educators regarding SEL practices. WPS administrators arranged to have educators complete the survey as part of a professional development at the beginning of the new school year. In total, 2,777 educators completed the survey, of which 293 (10.6%) were educators within the five Worcester HEARS schools and 2,484 (89.4%) were educators in other schools within the district or part of central office staff. For both Worcester HEARS educators and educators in other settings, two out of three respondents were teachers (66.6% and 64.8%, respectively). Other staff answering the surveys were Instructional Assistants/Aids (14.4%), School Adjustment Counselors (2.5%), Principals or Assistant Principals (2.4%) or other roles (15.7%).

Proportionately more educators in Worcester HEARS schools reported training on trauma sensitive schools, MindUp, Open Circle and Second Step (See Figure 14). When asked if they had taken part in training on Trauma Sensitive Schools or Practices (e.g., Understanding Trauma Sensitive Practices UTSP, Integrating Trauma Sensitive Practices ITSP or Lesley University training) 55.1% of educators in Worcester HEARS schools said yes, compared to 39.2% in other schools. Similarly, proportionately more educators in Worcester HEARS schools received training in MindUP (44.6% versus 4.4%), Open Circle (25.3% versus 7.1%) and Second Step (14.0% versus 9.1%).







The survey asked respondents who used 15 specific trauma sensitive practices to indicate how helpful each was during the 2019/2020 school year before the COVID pandemic (see Table 3). More than nine out of ten educators in Worcester HEARS schools and in all other schools thought each practice was helpful.

Table 3: Trauma Sensitive Practices Considered Helpful Before COVID						
	Wo	rcester HEARS		Other Schools		
	N	N Saying	%	N	N Saying	%
	Response	Helpful	Helpful	Response	Helpful	Helpful
Reviewing/Changing						
Policies and/or						
Practices to Reflect an	102	96	94.1%	531	491	92.5%
Understanding of						
Trauma						
Connecting with MH						
and Social Svc Orgs in	47	44	93.6%	331	305	92.1%
Community						
Tailoring Learning to						
Students' Areas of	92	85	92.4%	545	516	94.7%
Competence						
Providing a Predictable Environment	117	113	96.6%	696	666	95.7%



Table 3: Trauma Sensitive Practices Considered Helpful Before COVID						
	Worcester HEARS			C	ther Schools	
	N	N Saying	%	N	N Saying	%
	Response	Helpful	Helpful	Response	Helpful	Helpful
Communicating a						
Schedule of Lessons	112	106	94.6%	673	639	94.9%
and Activities						
Preparing Students for Transitions	121	118	97.5%	687	658	95.8%
Creating a Safe Environment	125	122	97.6%	727	699	96.1%
Addressing Trauma in Students' IEPs	93	88	94.6%	456	431	94.5%
Using Multiple Ways to Present Information	121	119	98.3%	705	678	96.2%
Processing Specific Information with Students	120	116	96.7%	660	633	95.9%
Identifying and Processing Feelings	118	114	96.6%	671	641	95.5%
Considering Trauma in Student Evaluations	89	85	95.5%	485	453	93.4%
Building Non-academic Relationships with Students	116	113	97.4%	672	649	96.6%
Finding Extra-curricular Activities that Build on a Student's Interests	95	92	96.8%	529	487	92.1%
Involving Families in Strategies to Address Trauma	84	78	92.9%	435	396	91.0%

One out of four educators in the Worcester HEARS schools (23.8%) used MindUP with their students during the 2019-2020 school year. This compares to 3.8% of educators in all other schools. Within Worcester HEARS schools for educators using MindUP, 14.1% of educators used MindUP every day with their students, another 14.1% used it 3 to 4 times a week, 32.8% 1 to 2 times a week and 39.1% a few times a month (See Table 4). The frequency of use was similar for educators using MindUP in other schools.

Table 4. Frequency of MindUP Use Pre-COVID Onset for Worcester HEARS and Other Educators					
	N Every 3-4 1-2 A Few Time			A Few Times a	
	Response	Day	Times/Wk	Times/Wk	Month
HEARS Pre-COVID	64	14.1%	14.1%	32.8%	39.0%
Other Schools Pre-COVID	81	17.3%	12.3%	28.4%	42.0%



When asked about the extent to which they had adopted the MindUP philosophy in their classrooms, three out of five educators in HEARS schools prior to the onset of COVID indicated completely or mostly, compared to about half of educators in other schools (61.0% versus 51.8% -- See Table 5).

Table 5. Adoption of MindUP Philosophy for Worcester HEARS and Other Educators					
N Response Completely/Mostly Partially Not at A				Not at All	
HEARS Pre-COVID	64	61.0%	34.3%	4.7%	
Other Schools Pre-COVID	85	51.8%	42.3%	5.9%	

In both groups of schools, educators found the MindUP lesson book and activities the most useful (see Table 6).

Table 6. MindUP Resources Educators Found Useful in 2019-2020 Pre COVID by Type of School				
	Worcesto	er HEARS	Worcesto	er HEARS
	(n)	%	(n)	%
MindUP Activities	56	87.5%	48	56.5%
Lesson Book	40	62.5%	34	40.0%
Videos	20	31.3%	26	30.6%
Online Lesson Plans	12	18.8%	15	17.6%
Total	64		85	

In terms of specific MindUP components, educators in the Worcester HEARS schools found Chimes and Meditation most useful, followed by the Lessons (see Table 7). In other schools, educators found Meditation most useful, followed by the Lessons and Debriefs.

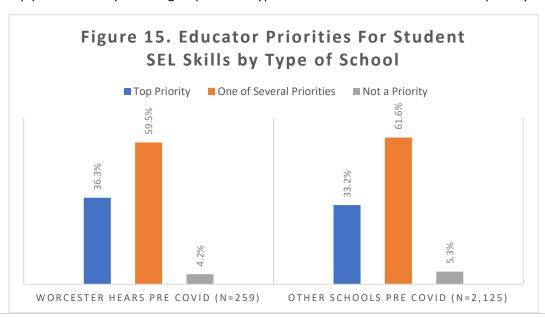
Table 7. MindUP Components Educators Found Useful in 2019-2020 Pre COVID by Type of School				
	Worcest	er HEARS	Worcest	er HEARS
	(n)	%	(n)	%
Chimes	53	82.8%	26	30.6%
Meditation	45	70.3%	47	55.3%
Lessons	38	59.4%	31	36.5%
Debriefs	19	29.7%	31	36.5%
Tangles	9	14.1%	10	11.8%
Total	64		85	

Table 8 provides data on the percentage of educators in Worcester HEARS and other schools who were trained on selected SEL curricula and which they used before the onset of COVID. Proportionately more Worcester HEARS educators were trained on and used Open Circle, compared to educators in other schools.



Table 8. Training on and Use of Other Social Emotional Learning Curricula in 2019-2020 Pre COVID by Type of School				
	Trained	Used 2019-2020 Before COVID		
4R's				
Worcester HEARS	6.5%	5.5%		
Other Schools	6.8%	5.9%		
Open Circle				
Worcester HEARS	25.3%	29.4%		
Other Schools	7.1%	6.7%		
PATHS				
Worcester HEARS	3.4%	3.8%		
Other Schools	3.5%	3.8%		
Positive Action				
Worcester HEARS	5.8%	6.8%		
Other Schools	4.9%	6.1%		
Responsive				
Classroom				
Worcester HEARS	21.2%	18.8%		
Other Schools	19.0%	17.4%		
Second Step				
Worcester HEARS	14.0%	5.1%		
Other Schools	9.1%	7.8%		

Figure 15 shows that about one out of three educators in Worcester HEARS schools and other schools felt student SEL skills were a top priority before the onset of COVID and another 60% felt it was one of several top priorities. Only a small group in each type of school felt SEL skills were not a priority.





Overall, educators in Worcester HEARS schools indicate more training in trauma sensitive practices generally, and in MindUP and Open Circle specifically. They also report more use of the MindUP and Open Circle curricula. Among educators in Worcester HEARS and the comparison schools who are using specific SEL curricula, however, there seems to be similar levels of commitment to use SEL practices with students and similar findings of usefulness for specific curricula components. Thus, with greater training and use in the Worcester HEARS schools, the data suggest an overall greater commitment to using these SEL practices.

Replication and Sustainability

In preparation for diffusing practices learned through Worcester HEARS, WPS leadership provided district-supported, school-based professional development on resiliency during the last year of the grant. WPS provided five sessions held during contractual monthly meetings. As part of this effort, through Worcester HEARS, WPS brought in Dr. Heather Forkey, pediatrician and recognized expert on supporting children recovering from trauma. Dr. Forkey presented to all WPS principals on August 12, 2019 and subsequently trained Assistant Principals, School Adjustment Counselors, HEARS staff, interns, and Special Education Behavioral Specialists (110 staff). This last session was recorded and shown to all educators in WPS schools during the month of September 2019. This session provided an overview of the impact of trauma and ways to support student resilience ("All the Fright We Cannot See"). It was very well received. Subsequent sessions included topics such as anxiety, mindfulness, the need for predictability and routines and a summary review focused on creating climate and competency in all classrooms. A second year of this effort will continue with Dr. Forkey and her colleagues at UMass Medical School with a focus on application across the district. School Psychologists and Adjustment Counselors have taken part in these trainings and continue to hold additional presentations and discussions with staff at each school. The structure is in place for ongoing district support and buildingbased staff capacity development to support implementation of trauma sensitive schools. Further, the district will continue to train staff in Open Circle and Second Step.

Although it took some time to become operational, the SBHC at Worcester East Middle School will be funded beyond the Worcester HEARS grant by Family Health Center of Worcester through referrals to MassHealth and private insurance and through state funding.

As a result of the work with the Worcester HEARS clinicians and the evidence of the need provided by that work, WPS has adopted mobile Stabilization Teams throughout the district. These teams offer WPS staff trauma training through bimonthly staff meetings and help staff in implementing universal strategies and tiered interventions to improve and sustain school climate and culture.

Toward the end of the project, the WPS established behavioral health provider positions as they assumed and sustained the work done by HEARS funded clinicians. The HEARS grant helped rebuild trust between behavioral health providers and the district, showing both sides the need for additional support. Through this effort, the Worcester HEARS project has produced a systems-level change and had a real effect in redressing the serious health anomaly of ACEs. Specifically, WPS is working with Community Healthlink and other behavioral health providers to fund and place full-time practitioners in several schools within the City. This is a direct result of the work done in the HEARS Community of Practice. The district previously had been very hesitant to offer behavioral health services within the school day, due to logistical concerns and lack of evidence of their success. The HEARS grant has helped





to bridge the gap between these outside agencies and district staff. In addition, WPS continues to work with providers to offer mental health services after school hours at school sites.

In addition to continuing SEL supports such as MindUP and Open Circle in the Worcester HEARS schools, the City of Worcester's Recreation Worcester program began implementing the MindUP program in its after-school program. Additionally, HEARS staff worked closely with the Latino Education Institute to expand their after-school programming at HEARS schools, with a focus on social emotional learning and mindfulness activities, incorporating the MindUP program.

Summary and Recommendations

At this time, the change in the WPS due to the Worcester HEARS project has been incremental but not yet transformational. Educators in the Worcester HEARS schools took part in the Lesley trainings but teacher mobility in and out of the intervention schools left only half of the trained staff to implement trauma sensitive practices. Due to the limited dose of services across the schools, as well as the cross-over of trained educators into non-HEARS schools and the diffusion of trauma sensitive practices in the last year of implementation, WPS data on absenteeism and discipline did not show significant changes across the years relative to comparison schools. However, Worcester HEARS demonstrated that WPS can successfully implement training and supports to improve trauma sensitive education practices and SEL.

Further, survey data from educators indicate that staff in the Worcester HEARS schools had more training on trauma sensitive practices in general and on MindUP and Open Circles specifically, two SEL curricula introduced during the project. Educators who are trained on and used SEL curricula demonstrated a commitment to improving students SEL skills and found the curricula useful. Given the documented evidence of the impact of trauma on learning and other life outcomes, WPS should continue its commitment to supporting educators in the Worcester HEARS schools, as well as all other schools in the district, on trauma sensitive educational practices and SEL curricula.

Toward this end, the district, informed by the Worcester HEARS work, developed and put in place a strategic, systemwide plan for both staff professional development and support in implementation of trauma sensitive practices and SEL curricula. As a key part of WPS' strategic efforts moving forward, WPS should continue to partner with UMass Medical School to diffuse learning and implementation of trauma sensitive practices throughout the district.

To ensure that schools maintain a focus on trauma sensitive practices and SEL, WPS should continue to build in trauma sensitive training and SEL educational components as part of professional development on opening days and throughout the school year. Incorporating new practices into the classroom can be challenging for educators who are overworked. By building this work into continued professional development, educators will learn to incorporate these new practices as part of their standard classroom practices.

WPS should also maintain its commitment to the Stabilization Teams and to the community partnerships that were strengthened through the Communities of Practice and Community and Family Engagement work groups. Further, WPS should maximize partnerships with community behavioral health services to provide behavioral health supports to students and their families during and after the school day. The needs of students have changed dramatically over the last fifteen to twenty years, with





Healthy Environments And Resilience in Schools

much greater needs for mental health supports. Schools provide a natural place to offer such services, and students benefit by improving their ability to focus in the classroom and learn more fully. WPS should not look at behavioral health services as external needs but rather services that are integral to the healthy development and education of students.

Finally, WPS should continue to collect data on key elements of their strategic efforts, including the number of educators trained and the number of students supported through the different tiers of intervention. These data will support WPS in applying for and receiving new grants to support their efforts and in working with the School Committee and City to build future budgets that support students with trauma sensitive practices and social emotional learning.



References

- American Academy of Pediatrics. (2013, March). Out of school suspension and expulsion. *Pediatrics 131* (3), e1000-e1007. https://doi.org/10.1542/peds.2012-3932.
- Cole, S., O'Brien, J.G., Gadd, M.G., Ristuccia, J.M., Wallace, D.L., & Gregory, M. (2005). Helping Traumatized Children Learn: Supportive School Environments for Children Traumatized by Family Violence A Report and Policy Agenda. Massachusetts Advocates for Children: Trauma and Learning Policy Initiative in collaboration with Harvard Law School and The Task Force on Children Affected by Domestic Violence. https://traumasensitiveschools.org/wp-content/uploads/2013/06/Helping-Traumatized-Children-Learn.pdf
- Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., & Koss, M. P. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine 14*(4), 245-258. https://doi.org/10.1016/S0749-3797(98)00017-8.
- Reis, J. (2013, May 9). Suspension rate in Worcester schools higher than Boston's. *Worcester Telegram and Gazette*.
- Sacks, V., Murphey, D., & Moore, K. (2014). Adverse childhood experiences: National and state-level prevalence. *Research Brief*, July 2014, Publication #2104-28. Child Trends. https://www.childtrends.org/wp-content/uploads/2014/07/Brief-adverse-childhood-experiences FINAL.pdf

