

# The Use of Implementation Science to Study Trauma- Informed Practices: A Closer Look at Implementation in Two Oregon Schools

Findings From a Three-Year Pilot  
Study

October 2019



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# I. EXECUTIVE SUMMARY

## Background of the Pilot Study

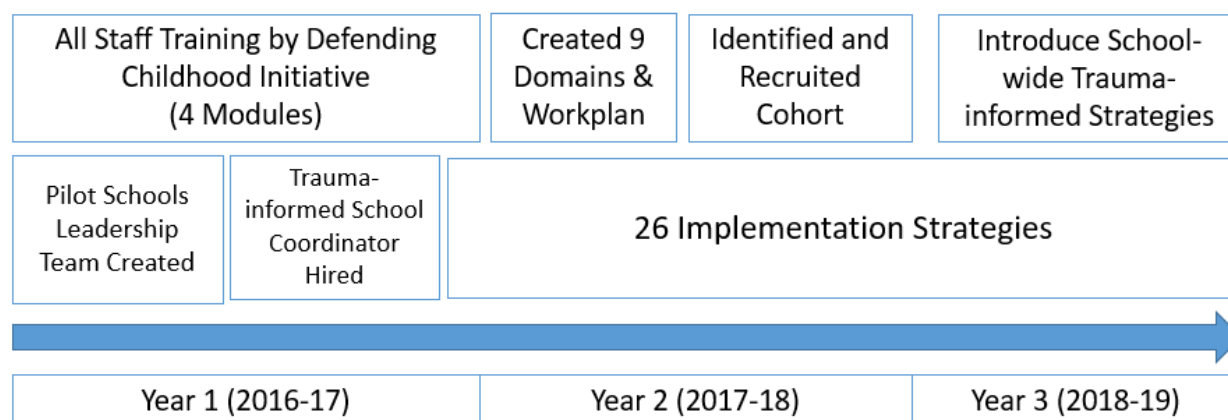
Every day spent in school is an opportunity for a young person to learn and grow. The effects of past and ongoing trauma in a young person's life, among other challenges may create obstacles to school attendance and barriers to learning. Schools are equipped with many elements necessary to create supportive environments for students, and helping schools implement a trauma-informed systems' approach can promote the development of safe and positive relationships with students and their families (Simmons, Brackett, & Adler, 2018). Helping school staff members promote widespread healing and culturally sustaining practices can be a productive way to help students develop stable social connections and build resilience, regardless of their experiences with adversity (Shonkoff et al., 2015).

Focusing on systems change moves away from placing the burden of so-called resilience on youth and instead shifts the focus to necessary and needed improvements within the system for youth to thrive and feel empowered. Trauma-informed practices can advance a schoolwide, asset-based approach to addressing the root causes of chronic absenteeism that is centered on resiliency and systems change.

Oregon is exploring trauma-informed systems approaches to removing obstacles and barriers to school attendance. The first of its kind in Oregon public high schools, a Trauma-Informed Pilot Study was enacted by the State Legislature in 2016 as House Bill (HB) 4002. This bill authorized \$500,000 to support the implementation of trauma-informed practices in two Oregon public high schools. In 2017, the funding (\$1 million) was continued for the biennium via Senate Bill (SB) 183. The legislation defined a trauma-informed approach as "an approach that recognizes the signs and symptoms of trauma in students, families, and staff and responds by fully integrating knowledge about trauma into policies, procedures, and practices for the purposes of resisting the recurrence of trauma and promoting resiliency" (see Appendix A).

With guidance from a steering committee and technical assistance from the Oregon School-Based Health Alliance (OSBHA), the two pilot schools focused on implementing schoolwide trauma-informed practices to promote safe, inclusive learning spaces that support positive outcomes for all students (Figure ES-1). This included hiring full-time trauma-informed school coordinators, forming leadership teams, and recruiting or selecting a core group of staff members to lead implementation efforts (referred to as "the cohort"). Cohort members engaged in monthly trainings on trauma-informed principles facilitated by the trauma-informed school coordinators, and they were given protected time to reflect on the implementation effort, share lessons learned, and support one another's learning.

Figure ES-1. Major activities for the pilot across three years



This report, jointly drafted by Oregon's Chief Education Office (CEdO) and the Oregon Department of Education (ODE), presents findings from the three-year pilot study. The analysis in the report is grounded in implementation science, which aims to understand how interventions are adopted, enacted, and diffused while accounting for local variables in schools and other relevant contextual factors (Nordstrum, LeMahieu, & Berrena, 2017). For this reason, the report focuses on the factors that promoted or impeded the process of implementation, such as organizational capacity, shifts in adults' beliefs and practices, and communication strategies. Data for the report come from program documents; surveys; and interviews with teachers, staff members, and administrators at the two pilot schools.

## Key Findings and Recommendations

### Findings and Recommendations on the Implementation of Trauma-Informed Practices

*Findings:* The pilot schools used 26 strategies to implement trauma-informed practices. Trauma-informed school coordinators played a key role in disseminating trauma-informed principles and guiding the work of a core group of staff members (referred to as "the cohort" and described in greater detail in the body of the report) to lead implementation efforts. Cohorts served an important role in promoting readiness and guiding pilot schools deeper into the stages of implementation, despite challenges related to attrition, changes in composition, and time constraints.

One successful strategy was a full-day training that introduced new concepts and awareness of trauma-informed practices. In addition to more intensive training events, incorporating information about trauma-informed practices into existing meetings raised awareness of these practices, increased perceptions of their usefulness, and sparked more conversations.

Both pilot schools made trauma-informed changes to curricula, attendance team activities, employee resources, improvement plans, and hiring policies. The two pilot schools also developed questions using trauma-informed lens and an environmental assessment tool. A focus on blending trauma-informed practices into existing initiatives, such as positive behavioral

interventions and supports (PBIS), effective behavior and instructional support (EBIS), and Advancement Via Individual Determination (AVID), emerged as an effective way of reducing “initiative fatigue.” Regarding many of the trauma-informed strategies implemented at each school, a gap emerged between staff members’ self-reported awareness of some of the specific strategies and their actual usage of them.

Over the course of the pilot, both schools developed more leadership and decision-making opportunities for students, as well as strengthened their partnerships with families and communities. Conversations between school staff members and community partners and parents/families regarding trauma-informed topics gradually increased over time.

*Recommendations:* Schools interested in implementing trauma-informed practices should allow ample time to assess their needs, the extent to which there is equitable access to resources, their capacity for program sustainability, and their potential for braiding initiatives to alleviate initiative fatigue. For schools or districts that have the resources to hire their own coordinator, we recommend that leadership review and adopt the revised job description for a trauma-informed school coordinator (see Appendix I). If a full-time hire is not an option, establishing or repurposing a small team can be effective for leveraging efforts when leadership and staff turn over. Further, a repurposed team may understand how to address inequitable structures and systems. Input should be incorporated from an inclusive and representative body of stakeholders to determine recruitment methods, training approach, and core competencies desired for forming leadership and implementation teams.

Because research has demonstrated that one-time “train and hope” models of professional development cannot effectively sustain practitioner behavior change (Herschell, Kolko, Baumann, & Davis, 2010; Joyce & Showers, 2002), schools should supplement specialized training in trauma-informed practice with ongoing channels for spreading and reinforcing concepts—including equity, diversity, and inclusion—for staff members. Efforts should be made to increase access to professional development for all staff members, classified and otherwise.

Connecting trauma-informed concepts with existing programs or initiatives (e.g., PBIS, EBIS, AVID) can also help reduce the perception that trauma-informed approaches are just “another thing” for staff members to do, especially those who have not fully bought in to trauma-informed approaches. This may help reduce the gap between awareness and usage of trauma-informed practices.

## Findings and Recommendations on Changing Beliefs and Practices Related to Trauma and Equity

*Findings:* Staff surveys measured changes in attitudes and beliefs over the course of the pilot, indicating gradually increasing positive views of trauma-informed practices among participating school staff members. Findings from surveys and interviews suggest that some school staff members wish to incorporate a stronger racial equity framework into trauma-informed practices and general school practices. The pilot schools demonstrated that they were adopting trauma-informed discipline practices. However, some teachers reported struggling with issues of accountability, expressing concerns about trauma-informed discipline practices feeling too permissive or being applied inconsistently, giving the appearance of favoritism to certain students. Trauma-informed practices progressed unevenly across schools’ departments, with early adopters in a few departments and later adopters in others. The most common barriers

that emerged for changing practices included stress, varying levels of motivation, and unmet needs for support from leadership.

*Recommendations:* Opportunities exist for schools to create more consistent buy-in among teachers by providing ongoing training and support in trauma-informed principles, integrating a racial equity framework to ensure practices are culturally responsive and culturally sustaining.

## Findings and Recommendations on Communication and Diffusion of Trauma-Informed Practices in Pilot Schools

*Findings:* To effect schoolwide changes, trauma-informed information must be shared among and between staff members in different roles. In this sample, informal dissemination events (e.g., book clubs, lunches, or coffee chats) were impactful for those who attended, but they reached a limited number of staff members at both schools, with time conflicts and competing priorities identified as barriers to greater participation. Electronic dissemination channels, such as websites, newsletters, and emails, had a slightly larger but still moderate reach.

Findings from social network analysis (Wasserman & Faust, 2009) revealed differences in the spread of trauma-informed information between the pilot schools, which may have been related to differences in their recruitment methods used for forming the cohorts; one was more teacher-driven, and the other involved administrators as conduits of information. In both schools, the level of communication within the cohort increased over time, but there was no corresponding increase in sharing information with school staff members outside the cohort.

*Recommendations:* When the objective of communication is to offer opportunities for deeper learning of trauma-informed practices to a targeted audience (e.g., individuals who are very engaged or early adopters), informal dissemination and electronic channels serve the purpose of letting staff members exercise their choice to learn at their own pace. When the goal is to reach as many staff members as possible, a more active approach to professional development should be considered. Schools that wish to implement trauma-informed practices should also consider their cohort recruitment strategy with respect to whether they want their network of early adopters to be more teacher- or administrator-driven (or some combination of the two) while being intentional about inclusivity and representation. In either case, when designing a communication strategy, it is imperative for schools to have a schoolwide common vision, priorities, and plan regarding the objective of communication for deeper learning.

## Limitations

### Absence of Equity Framework

Although the pilot study explored issues of equity, the research design itself did not incorporate a consistent equity framework. A major objective of the pilot study was to explore ways that trauma-informed practices relate to changes in staff beliefs, policies, and practices in support of student engagement and attendance, as trauma-informed practices are widely considered a mechanism for the promotion of safe, inclusive, and culturally sustaining learning spaces that encourage healing and the development of stable social connections and resiliency (Shonkoff et al., 2015). In this way, this approach also has the potential to promote more equitable outcomes in school settings.

There are opportunities to strengthen the design of the pilot study itself to reflect evolving knowledge and priorities regarding equity in research and practice. It's recommended that an equity assessment be completed prior to other equity-related initiatives to better understand the historic and contemporary equity issues of each school as context for and the foundation of the work. Further, although the research team conducted periodic sharing of interim findings with partners from the pilot schools and advisory committees, a more equitable approach would have involved leadership teams and stakeholders—including students and their families—participating directly in the design and execution of the study to ensure deep understanding of root causes and inclusion of multiple voices and perspectives. Likewise, advisory committees should intentionally include diverse members and stakeholders who have knowledge and expertise related to equity, diversity, and inclusion so they can integrate and operationalize equity in trauma-informed approaches.

### Evolving Nature of Trauma-informed Research and Practices

Although the ACEs study (Felitti et al., 1998) remains a foundational component of trauma-informed work that has established important evidence-based links between trauma and long-term health outcomes, current literature challenges scholars and practitioners to take their trauma-informed practices beyond those original concepts. For instance, it is important to note that the ACEs study was conducted in a medical setting, with a predominantly white sample that is not representative of the U.S. population. As such, it did not investigate the far-reaching impact of racial trauma, also known as race-based traumatic stress, which refers to the stressful impact or emotional pain of one's experience with racism and discrimination (Carter, 2007). Also, the ACEs study did not explore collective trauma that occurs in systemically oppressed communities, or historical trauma, which can be defined as interpersonal losses passed down within and across generations (Brave Heart, 2003). Caregivers whose family members were directly exposed to historical traumatic events—such as slavery, the Holocaust, or the displacement and murder of Indigenous Americans—may have inherited biological changes in response to trauma in the form of heightened stress responses, which persist in the context of ongoing discrimination or violence (Evans-Campbell, 2008).

### Study Design Limitations

Participant turnover and necessary shifts in data collection methods over the course of the study introduced some inconsistencies in the data, which are highlighted throughout the analysis. Also, the research design and structure of the data collected in this study limit causal inferences about the impact of trauma-informed interventions on student outcomes. The project was designated by the Oregon Legislature as a pilot to enable and support an initial exploration of implementing trauma-informed practices in a natural, authentic setting with a small number of participating schools and individuals. As such, the focus of this pilot study was solely on the implementation of practices—not student outcomes. Further study is needed to explore outcomes and voices of students, which would involve a more participatory research design (e.g., de Koning & Martin, 1996; Minkler & Wallerstein, 2003) with a trauma-informed lens.

As stated earlier, we anticipated that the first two to three years of the pilot would be used for initial adoption and implementation, with many activities centered on changes in school staff members (e.g., shift in attitudes, knowledge of trauma-informed practices). Therefore, findings from this study cannot provide conclusive recommendations on a comprehensive systemwide implementation of trauma-informed practices. Finally, we acknowledge the need to conduct further studies to strongly incorporate a racial equity framework into trauma-informed practices,

and explore possible solutions to balance trauma-informed approaches into disciplinary and resiliency practices.

## Conclusion

The research base on trauma-informed practices in education is still nascent. This pilot study lays the foundation for subsequent, more granular examination and analysis of trauma-informed practices in schools, which may include evaluating impact on students and testing specific hypotheses about causal relationships between practices and student outcomes. It is critical that further research should be carried out with a strong equity framework; the research design and any guiding frameworks should be reviewed by an intentionally inclusive array of stakeholders who may be affected—either positively or negatively—by the process and the findings.

Many of the pilot study's findings point toward the promise of trauma-informed practices to promote positive shifts in adults' beliefs and practices regarding trauma. From an implementation standpoint, we found that despite challenges, the pilot schools were able to use numerous implementation strategies to integrate trauma-informed practices into their existing school culture and system. We conclude that with adequate funding and support from state leaders, Oregon's education system will benefit from policies and practices that help schools formally adopt, institutionalize, and sustain trauma-informed practices.

In accordance with its continuously evolving stance regarding equity in education,<sup>1</sup> and in consideration of the impact of historic and generational trauma on a student's educational trajectory, ODE acknowledges the role institutions can play in perpetuating the very inequities they seek to address. The findings and conclusions of this study are intended to spark conversations and lay a foundation for future studies. We encourage schools to closely collaborate with stakeholders, including youth and families, when considering implementing recommendations for trauma-informed practices and to employ an equity framework.

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<sup>1</sup> <https://www.oregon.gov/ode/students-and-family/equity/Pages/default.aspx>



Northwest’s institutional review board for its review and approval of this project’s research activities.

Above all, we gratefully acknowledge the partnership of Central High School and Tigard High School in this pilot project and their important contributions to advancing our understanding of trauma-informed practices in school settings throughout the state. In the long run, we hope the lessons we learn from this pilot study can help Oregon schools implement trauma-informed practices to help educators and students succeed.

## Acronyms

Acronym Term	Definition
ACEs	Adverse childhood experiences
ARTIC	Attitudes Related to Trauma-informed Care (ARTIC) is a 45-item survey to measure staff members’ attitude shifts over the course of the pilot. Higher scores on the ARTIC indicate more positive attitudes toward trauma-informed approaches. <sup>2</sup>
AVID	Advancement Via Individual Determination is a training program for educators to prepare students for college and other postsecondary opportunities.
CEdO	Oregon’s Chief Education Office (CEdO) worked to build and coordinate a seamless system of education to meet the diverse learning needs of Oregonians from birth through college and career. CEdO sunset legislatively on June 30, 2019, and its planning, policy, and data functions transferred to other state offices.
EBIS/PBIS	Examples of multi-tiered systems of supports (MTSS); systemic, continuous improvement frameworks in which data-based problem-solving and decision-making are practiced across all levels of the educational system for supporting students.
MTSS	<p>A multi-tiered system of supports<sup>3</sup> (MTSS) is an early detection and prevention system that uses differentiated (“tiered”) supports, evidence-based instruction, universal screening, progress monitoring, formative assessments, and research-based interventions matched to a student’s needs.</p> <p>In MTSS, Tier 1 includes services/instruction that all students need, Tier 2 includes services/instruction for students needing moderate support, and Tier 3 includes intense services/instruction for students needing the most support.</p>
NIRN	The National Implementation Research Network (NIRN) is an implementation science framework that describes stages of implementation (exploration, installation, initial implementation, and full implementation) and implementation drivers (competency, leadership, and organization).

<sup>2</sup> [https://traumaticstressinstitute.org/wp-content/uploads/2016/04/ARTIC-Webinars-2016\\_Final.pdf](https://traumaticstressinstitute.org/wp-content/uploads/2016/04/ARTIC-Webinars-2016_Final.pdf)

<sup>3</sup> <https://www.oregon.gov/ode/students-and-family/GraduationImprovement/Documents/MTSS.pdf>

Acronym Term	Definition
NME	The Neurosequential Model in Education (NME) is a neuroscience-based teaching and learning approach developed by the ChildTrauma Academy. <sup>4</sup>
ODE	The Oregon Department of Education (ODE) oversees the education of over 560,000 students in the state's public K–12 education system. ODE encompasses early learning, public preschool programs, the Oregon School for the Deaf, regional programs for children with disabilities, and education programs in Oregon youth correctional facilities.
OHA	The Oregon Health Authority (OHA) is a government agency that works toward comprehensive health reform in Oregon.
PDSA	A Plan-Do-Study-Act (PDSA) approach includes small, cyclical tests of change used in continuous improvement processes. These tests benefit from systematic measurement, and their results are generally studied for insights into improvement strategies.
SNA	Social network analysis (SNA) is an analytic technique used to describe the structure of relationships within groups of individuals.
WICOR	Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) is a strategy used in AVID classrooms.

## II. INTRODUCTION

### Background of Trauma-Informed Pilot Study: Oregon's Statewide Chronic Absenteeism Plan

Every day spent in school is an opportunity for a young person to learn and grow. National data suggest that in 2014, more than 6 million students—14 percent of all students, or about one in seven—missed more than 10 percent of school days, crossing a threshold into what is known as “chronic absenteeism” (U.S. Department of Education, 2016). In 2015–16, nearly 102,000 students in Oregon—more than one in six children—experienced chronic absenteeism. In Oregon, this is a critical issue related to equity because the root causes of chronic absenteeism often involve social determinants and system factors that disproportionately affect specific populations, including (but not limited to) students of color, students with disabilities, and students experiencing poverty. Chronic absenteeism is a concern for students in every grade, with higher rates in kindergarten and first grade that rise again in high school (Hart Buehler, Topanga, & Chang, 2012). The effects of chronic absenteeism can continue to intersect with historical and contemporary equity barriers at policy, system, environmental, and interpersonal

<sup>4</sup> <https://childtrauma.org/>

levels that can last a lifetime and negatively affect an individual's education, health, financial stability, and employment (Robert Wood Johnson Foundation, 2016).

Current research suggests multiple practices can reduce chronic absenteeism, such as engaging families, eliminating exclusionary and discriminatory discipline practices, and improving school climate (Attendance Works, 2014). Best and promising practices are most successful when they are systematically applied with knowledge of the local context. Cross-sector partnerships with local and state health agencies, community-based organizations, community and business members, and families can be leveraged to provide essential wraparound support to address the root causes of chronic absenteeism for all students.<sup>5</sup>

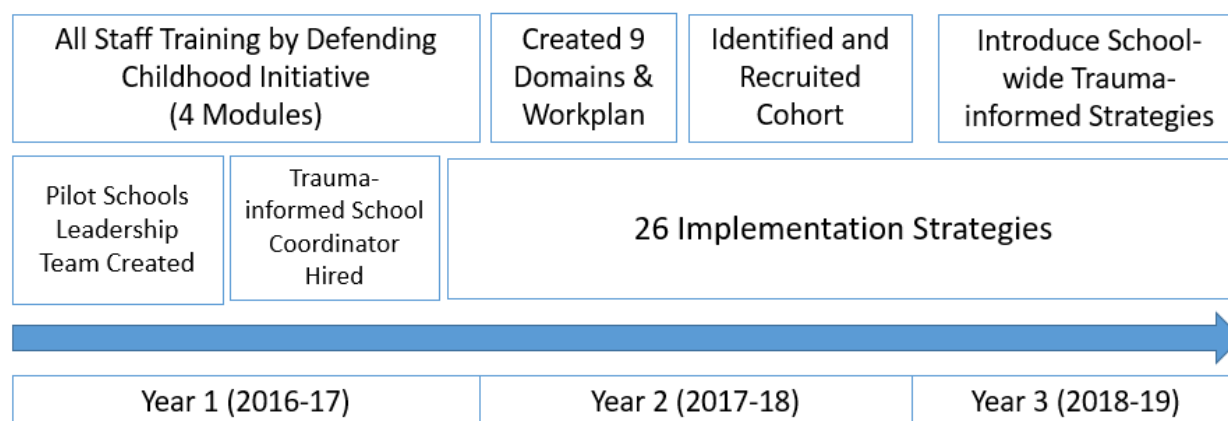
Promoting attendance in school involves building awareness of the root causes of chronic absenteeism, encouraging students to come to school every day, and engaging them once they are in the school building (Attendance Works, 2014). Trauma-informed practices represent an example of a schoolwide approach that aims to make school a safe, engaging place for all students. In 2016, House Bill (HB) 4002 directed Oregon's Chief Education Office (CEdO), with the Oregon Department of Education (ODE) and the Oregon Health Authority (OHA), to distribute the first year of funds for a three-year pilot project using trauma-informed practices to decrease school absenteeism (see Appendix A). In 2017, Senate Bill (SB) 183 directed CEdO to continue the pilot (see Appendix B).

Two high schools, Tigard High School in Tigard-Tualatin School District and Central High School in Central School District, were selected for participation in the pilot (see Appendix C for the selection process; see Table 1 for student and teacher demographic information of the pilot schools). Each of the two pilot schools received \$200,000 per calendar year to implement trauma-informed practices, including hiring a full-time coordinator to oversee a cohort of staff members charged with learning, implementing, and sharing new practices. The funds also allowed the pilot schools to purchase trauma-informed materials, pay training/conference registration fees and other training-related costs (e.g., travel, lodging), hire substitutes, purchase library materials and supplies (e.g., reference books, stationery, fidget toys), acquire technology (e.g., hardware, software), and pay expenses for student engagement activities (e.g., speakers' fees). Both pilot schools launched their implementation work with an all-staff training in October 2016. The schools then engaged in planning activities, including forming leadership teams, hiring trauma-informed school coordinators, and identifying a small cohort of staff members to lead implementation.

To support implementation, the Oregon School-Based Health Alliance (OSBHA) convened a Trauma-Informed Pilot Advisory Committee of experts in various areas related to trauma-informed care, such as culturally specific practice, trauma-informed organizational change, positive behavioral interventions and supports (PBIS), and school mental health. Committee members, who represented multiple agencies, offered individual consultation when needed and helped develop tools for the pilot schools. The committee met monthly in Year 1 and part of Year 2 of the pilot. Figure 1 summarizes the timeline of major activities in the pilot project.

Figure 1. Major activities for the pilot across three years

<sup>5</sup> <https://www.attendanceworks.org/chronic-absence/addressing-chronic-absence/key-ingredients-systemic-change>



## Beyond ACEs: Trauma and Resilience

The pilot study represented an effort by Oregon's state leaders to explore trauma-informed practices as a promising approach for removing obstacles and barriers to school attendance. In HB 4002, a trauma-informed approach was defined as "an approach that recognizes the signs and symptoms of trauma in students, families, and staff and responds by fully integrating knowledge about trauma into policies, procedures, and practices for the purposes of resisting the recurrence of trauma and promoting resiliency."

Trauma means something different for every individual and every community. The Centers for Disease Control and Prevention and Kaiser Permanente conducted research from 1995 to 1997 that culminated in a study on adverse childhood experiences (ACEs) that focused on childhood abuse and neglect, household challenges, and later-life health and well-being (Felitti et al., 1998). From their findings, the researchers developed an ACEs questionnaire that measures an individual's level of exposure to adverse experiences. OHA's 2017–18 Student Wellness Survey examined the prevalence of ACEs among Oregon students in grades 6, 8, and 11. The data showed that more than a third of students in all three grades reported that their parents separated or divorced after they were born and that between a quarter and a third of students reported having lived with someone who is/was a problem drinker or alcoholic. In addition, almost a quarter of students in grade 6 reporting having lived with a household member who is/was depressed or mentally ill, with that rate increasing to over 40 percent for students in grade 11. Other examples of ACEs, including food insecurity and living with someone who uses/used street drugs, were reported by 10 to 20 percent of students in all three grades. About 15 percent of students from all three grades reported having felt like they had no one to protect them.

Although the ACEs study (Felitti et al., 1998) remains a foundational component of trauma-informed work that has established important evidence-based links between trauma and long-term health outcomes, current literature challenges scholars and practitioners to take their trauma-informed practices beyond those original concepts. For instance, it is important to note that the ACEs study was conducted in a medical setting, with a predominantly white sample that is not representative of the U.S. population. As such, it did not investigate the far-reaching impact of racial trauma, also known as race-based traumatic stress, which refers to the stressful impact or emotional pain of one's experience with racism and discrimination (Carter, 2007). Also, the ACEs study did not explore collective trauma that occurs in systemically oppressed

communities, or historical trauma, which can be defined as interpersonal losses passed down within and across generations (Brave Heart, 2003). Caregivers whose family members were directly exposed to historical traumatic events—such as slavery, the Holocaust, or the displacement and murder of Indigenous Americans—may have inherited biological changes in response to trauma in the form of heightened stress responses, which persist in the context of ongoing discrimination or violence (Evans-Campbell, 2008).

In October 2016, participants in a gathering called “Racing ACEs” produced a memo and graphic that demonstrate how the inequitable burden of racial oppression exacerbates the impact of trauma for people of color in what the authors describe as an “atmospheric effect that conveys and compounds harmful pathologies surrounding people of color in the midst of ongoing trauma—pathologies that lead to misdiagnosis, mistreatment, and false assignments that render us as problematic and risk-laden.”<sup>6</sup> In a society characterized by growing inequality—and inequities—supports for students’ social and emotional development need to be socio-culturally informed, relevant, and responsive. Culturally specific approaches can be particularly powerful, such as those adopted by the National Native Children’s Trauma Center (based at the University of Montana), which works to facilitate trauma-focused healing for Native children, families, and communities.<sup>7</sup>

Multnomah County’s Defending Childhood initiative<sup>8</sup> released a list of considerations for training educators and service providers on using the ACEs survey in school settings, cautioning that because the study explored a limited set of experiences that exclude many types of adversity, such as racial trauma, the ACEs questionnaire should not be used as a diagnostic or screening tool in schools. Further, if not handled carefully, the ACEs study can reinforce the common deficit-based assumption that children who experience adversity are permanently damaged because it does not take into account supportive factors, the transformative power of personal strength and resiliency, or the need for system-level change.

Many scholars and practitioners are calling for an asset-based approach that centers on resiliency and systems change rather than “admiring the problem” of individuals’ experiences of trauma. Stanford Social Innovation Review describes systems change as a fundamental change in policies, processes, relationships, and power structures that transforms educational spaces into “learning ecosystems,” where educators and others can operate as a dynamic network to empower young people to create a better world (Raman & Hall, 2017). Importantly, focusing on systems change means moving away from placing the burden of so-called resilience on an individual young person and instead focusing more on the systems and environments that affect individuals’ capacity to not just cope but to thrive and feel empowered to work for the greater common good.

Because supports for children affected by trauma benefit all children, focusing on resiliency, healing, culturally sustaining practice, and lessening policy and systems barriers can be a productive way to take trauma-informed practices beyond the concept of individual trauma. In school settings, caring and understanding adults can help students develop stable social connections—and meaningful, positive relationships and social support can help students build

<sup>6</sup> <https://acestoohigh.com/2016/10/24/racing-aces-gathering-and-reflection-if-its-not-racially-just-its-not-trauma-informed/>

<sup>7</sup> <https://www.nnctc.org/>

<sup>8</sup> <https://www.defendingchildhoodoregon.org/>

resilience, regardless of their experiences with adversity (Shonkoff et al., 2015). For this reason, the Trauma-Informed Pilot study focused on universal schoolwide practices (also known as “Tier 1” strategies in a multi-tiered system of supports) designed to promote safe, inclusive learning spaces that promote positive outcomes for all students.

## Trauma-Informed Practices as a Supportive Factor for Reducing Chronic Absenteeism and Promoting Equity

Strong and positive teacher-student relationships are critical for ensuring that school is a safe, welcoming, and engaging place students want to attend. Schools are equipped with many elements necessary to create supportive environments for students, and helping schools implement a trauma-informed systems approach can promote the development of safe and positive relationships (Simmons, Brackett, & Adler, 2018). A comprehensive study of Oregon students’ chronic absenteeism found that students want to have “better relationships with their teachers, even among students who expressed they did not care about what happens at school; they yearned for relationships with a teacher, any teacher” (Curry-Stevens & Kim-Gerver, 2017).

Trauma-informed practices provide a “strength-based framework that is grounded in an understanding of and responsiveness to the impact of trauma that emphasizes physical, psychological, and emotional safety for both providers and survivors and creates opportunities for survivors to rebuild a sense of control and empowerment” (Hopper, Bassuk, & Olivet, 2010). In its definition of a trauma-informed organization—which has been adopted by agencies in Oregon, such as Multnomah County’s Defending Childhood Initiative—the federal Substance Abuse and Mental Health Services Administration (SAMHSA) (2014) describes four characteristics of the trauma-informed approach (known as the four R’s):

1. Realizes the widespread impact of trauma and the roles of schools in promoting resiliency
2. Recognizes the signs and symptoms of trauma in students, families, and staff members
3. Responds by fully integrating knowledge about trauma into policies, procedures, and practices
4. Resists re-traumatization of students and staff members and fosters resiliency

Schoolwide trauma-informed practices that create supportive school environments can promote more equitable educational outcomes (Simmons et al., 2018). The body of empirical evidence linking trauma-informed practices to positive outcomes in school settings is small but growing, and several studies have documented reductions in discipline disparities, as evidenced by suspensions and office referrals (e.g., Dorado, Martinez, McArthur, & Leibovitz, 2016; Stevens, 2012). However, further rigorous studies are still needed to build evidence establishing what specific elements of trauma-informed practices lead to changes, what short-term outcomes—such as shifting classroom management approaches or discipline policies—may have mediated those changes, and/or what other outcomes might be expected (Chafouleas, Koriakin, Roundfield, & Overstreet, 2018; Overstreet & Chafouleas, 2016).

### III. RESEARCH DESIGN AND METHODS

#### School Selection Process

CEdO designed a two-stage process to select two high schools for participation in this pilot project (see Appendix C for an abbreviated description of the process). Participation criteria were not based on having comparable student demographics, and the findings of this pilot are not meant to compare Tigard and Central high schools, which differ considerably in student demographics, location, structure, history, organizational culture, and leadership backgrounds. Rather, the schools were required to have the following characteristics, which are identified in research as indicators of readiness for a trauma-informed approach:<sup>9</sup>

1. A school-based health center
2. Leadership buy-in
3. Multi-tiered systems of supports (MTSS), such as PBIS or effective behavior and instructional support (EBIS)
4. A willingness to provide data for evaluation

#### Description of Pilot Schools

Located in Washington County, southwest of Portland, Tigard High School employs 93 teachers, 20 educational assistants, and six counselors. In 2018–19, about 2,100 students were enrolled. Located in Polk County, southwest of Salem, Central High School employs 46 teachers, 19 educational assistants, and three counselors. In 2018–19, about 1,000 students were enrolled. (See Table 1 for student and teacher demographic information).

Table 1. 2017–18 Student and Teacher Demographic Information at Trauma-Informed Pilot Schools

<sup>9</sup> Schools were also required to have a valid comparison school—Tualatin High School for Tigard High School and Parkrose High School for Central High School—so that longer-term research may employ causal methods to study the impact of the trauma-informed approach in depth. The comparison schools are not included in this pilot, which focuses on implementation and short-term changes related to trauma-informed practices.

Group	Central High School		Tigard High School	
	Teacher	Student	Teacher	Student
American Indian/Alaska Native	0%	<1%	0%	<1%
Asian	0%	1%	2%	7%
Black/African American	0%	<1%	2%	2%
Hispanic/Latino	2%	42%	3%	24%
Multiracial	0%	5%	2%	6%
Native Hawaiian/Pacific Islander	0%	<1%	0%	2%
White	98%	51%	92%	58%
Ever English learners	-	29%	-	26%
Students with disabilities	-	12%	-	10%
Eligible for free or reduced-price lunch	-	49%	-	32%

Source: Oregon Department of Education

## Conceptual Frameworks

The Trauma-Informed Pilot Study is grounded in implementation science, which aims to understand how interventions are adopted, implemented, and spread while accounting for local variables in schools and other relevant contextual factors.<sup>10</sup> Implementation science seeks to identify factors that may promote or impede an intervention, such as organizational capacity, access to resources, policies, or processes (Nordstrum, LeMahieu, & Berrena, 2017). Implementation science allows researchers to gather feedback from all partners involved in an intervention to quickly identify and facilitate the necessary local adaptations to implement a program at scale or in other contexts. In this report, we draw from the National Implementation Research Network (NIRN) implementation science framework<sup>11</sup> to describe some of the implementation activities at pilot schools. We describe a variety of techniques (referred to as *implementation strategies*) that pilot schools used to enhance the adoption and sustainment of trauma-informed approaches.

The research team, the trauma-informed school coordinators, and the technical assistance provider also drew from existing frameworks related to trauma-informed practices to serve as a road map for implementation. Many frameworks were explored, including the Sanctuary Model,

<sup>10</sup> <https://www.carnegiefoundation.org/blog/quality-improvement-approaches-implementation-science/>

<sup>11</sup> <https://nirn.fpg.unc.edu/>



the Missouri Model for Trauma-Informed Schools, the Whole Child framework (ASCD, 2019), Collaborative Learning for Educational Achievement and Resilience, and Healthy Environments and Response to Trauma in Schools.

This exploration led to the creation of nine domains specific to the pilot (see Appendix D) that addressed the contextual needs of the two schools—including a domain for equity, which had not been adequately addressed in the initial conceptualization of the research design. Using these domains, corresponding goals and objectives (see Appendix E) were developed for both schools, which led to the development of their individualized work plans (see Appendix F). Details of each school's implementation activities, as well as findings on associated changes in each school, are in Section IV.

Finally, we applied Rogers' (2003) "Diffusion of Innovation" model when studying staff members' social networks to explore ways that trauma-informed information was communicated ("diffused") between and among staff members occupying different roles in the school. The spread of information is a fundamental component of implementation science, and we wanted to understand how staff members' social networks influenced diffusion of trauma-informed information in schools and across school systems (Rogers, 2003). Findings on the diffusion of trauma-informed practices at the pilot schools are in Section V.

## Research Questions

Based on the conceptual frameworks that guided the pilot, we posed the following research questions for the purposes of this report:

- What activities and interventions related to trauma-informed practices did the pilot schools implement?
- How did implementation activities relate to changes in staff beliefs, practices, and communication about trauma-informed practices?
- What were the barriers and challenges to schoolwide implementation and spread of trauma-informed practices?

## Description of Participants, Data Collection, and Analysis

In this section, we describe the individuals at each pilot school who constituted the sample for this study. We then outline the instruments used to collect data, along with procedures used to analyze each data source.

### Participants

The initial activities of the pilot study were carried out by many highly engaged individuals, teams, and cohorts at each school. Participation at both schools varied to a small degree each year due to leadership turnover, new staff members, and changing roles of existing staff members.

## Trauma-Informed School Coordinator

Each pilot school hired a full-time trauma-informed school coordinator. These individuals played a key role in disseminating trauma-informed principles and guiding the work of a core group of staff members to lead implementation efforts (referred to as “the cohort,” described below). With consultation from Multnomah County’s Defending Childhood Initiative, CEEdO developed a job description for a trauma-informed school coordinator and shared it with both pilot schools for recruitment (see Appendix J).

## Leadership Teams

At each pilot school, the trauma-informed school coordinator was part of a leadership team consisting of district- or building-level staff members, typically in administrative roles (e.g., superintendent, program director, principal, vice principal, dean of students, lead counselor, and lead secretary). At Tigard High School, community members also joined the leadership team in Year 3. The leadership teams supported each school’s trauma-informed school coordinator and cohort in implementing specific trauma-informed strategies, which are described in subsequent sections of this report.

Several differences between the leadership teams at the two pilot schools may have influenced implementation and outcomes. The leadership team at Central High School consisted primarily of district-level staff members and was led by the district superintendent. At Tigard High School, the leadership team members were building-level administrators and secretarial staff, along with leaders of departments (e.g., counseling). Potential implications of these differences are highlighted in the findings sections of this report.

## Cohorts

At each pilot school, a cohort of staff members was formed to support early implementation efforts and schoolwide sharing of trauma-informed practices. The cohort model was intended as an implementation strategy to share trauma-informed information through high-quality working relationships and networks within and outside the cohort. There were differences in how the cohorts were formed at each school. Cohort members at Central High School were recruited through a schoolwide announcement, and the cohort consisted primarily of classroom teachers. In contrast, cohort members at Tigard High School were selected by the leadership team. Many of the leadership team members also served as cohort members, and fewer classroom teachers were selected to be part of the cohort. Potential implications of these differences are highlighted in the findings sections of this report.

In general, cohort members were identified or recruited because of their early adoption of trauma-informed principles and their interest in dedicating themselves to supporting and driving an implementation process, as well as sharing their knowledge and ideas about trauma-informed principles with colleagues. The cohorts worked closely with the trauma-informed school coordinators to organize and facilitate the implementation activities.

To understand how cohort members shared information about trauma-informed practices schoolwide, we asked them to name individuals outside of the cohort to whom they turned for support in their trauma-informed efforts. Table 2 provides an overview of characteristics of the cohort and the non-cohort staff members named as individuals who supported the implementation of trauma-informed practices. Due to the small size of the cohort and non-cohort

networks, information about staff members' roles is limited to protect the identity, privacy, and personal information of individuals.

Table 2. Cohort and non-cohort member characteristics at pilot schools

School	Cohort member characteristics*	Non-cohort member characteristics
Central High School	English language arts**, math, science, other subjects, language teachers, counselors, trauma-informed school coordinator** (n = 12 in Year 1, n = 8 in Year 2)	Teachers (language arts, social studies, special education, science-related, physical education, math)
Tigard High School	Principal**, vice principal**, dean of students**, counseling department leader**, math department leader, lead learning specialist, instructional coach, trauma-informed school coordinator** (n = 9 in Year 1, n = 8 in Year 2)	Vice principals, learning specialists, counselors, security team members, math teachers, administrative support staff members

*\*Demographic information for the cohort and non-cohort members is not included due to potential issues of identifiability.*

*\*\*Cohort member(s) also serve as leadership team members.*

## Data Collection and Analysis

Table 3 lists the data we collected and analyzed in each year of the pilot study, including surveys, interviews, and archival program documents. Some of the surveys were administered to all staff members in the school. Others were administered to only the cohort implementing the activities or the leadership teams at each school.

Table 3. Data activities for the pilot by source, school years, and teams involved

Source	2016–17	2017–18	2018–19
ARTIC survey**	All staff members*	All staff members and cohort	All staff members and cohort
Self-assessment survey**	All staff	All staff members	All staff members

Source	2016–17	2017–18	2018–19
	members	and cohort	and cohort
Infrastructure survey**	All staff members	All staff members and cohort*	All staff members and cohort
Cohort survey	--	Cohort	Cohort
Individual interviews	--	Cohort	Cohort and leadership teams
Archival records	--	Trauma-informed school coordinator, school, OHA, and ODE	Trauma-informed school coordinator, school, OHA, and ODE

*\*Data collection was conducted twice a year. All other data collection was conducted annually.*

*\*\*The ARTIC, self-assessment, and infrastructure surveys were combined into an annual staff survey. All-staff surveys did not include questions about demographic information due to potential issues of identifiability. We analyzed scores and responses from staff members who completed all items on the survey.*

We conducted descriptive analysis of responses from four surveys. The Attitudes Related to Trauma-Informed Care (ARTIC) survey was used to measure shifts in staff members' attitudes toward trauma-informed practices over the course of the pilot. The self-assessment survey, created by Multnomah County's Defending Childhood Initiative, examined the extent to which program activities were consistent with the guiding principles of trauma-informed practice, including safety, restorative intent, resilience, hope, equity, and connectedness. This survey contained four sections:

1. Knowledge of signs and symptoms of trauma-informed practices
2. Cultural understanding and responsiveness; assumptions and biases
3. Organizational structure; colleague and staff support
4. Positive/negative experiences as a school staff

The infrastructure survey included items measuring staff members' awareness of trauma-informed practices in the school, perceptions of the usefulness of specific trauma-informed practices, and usage of dissemination and communication channels.

We also administered a cohort survey in Years 2 and 3, conducting both descriptive and social network analyses to describe the structure of relationships in the cohorts, as well as between cohort members and their immediate non-cohort connections. By mapping these relationships in and outside the cohort, we sought to identify potential opportunities and challenges related to the flow of information about trauma-informed practices from individuals directly involved in the

core activities of the pilot (i.e., the cohort) to others who were less directly involved (i.e., outside of the cohort).

In addition, we interviewed members of the cohort and leadership teams to gain a more nuanced and contextual understanding of implementation activities, successes, and challenges. Interviews took place in Years 2 and 3 with cohort members and in Year 3 with leadership teams. With consent, we recorded interviews, which were transcribed verbatim by a professional service. We also accessed archival records, including monthly reflection reports trauma-informed school coordinators submitted digitally from August 2017 to February 2019. These reports documented meetings, trainings, conferences, and other events or meetings related to the pilot. Other records included results from the School Health Profiles Survey, student data provided by ODE and pilot schools, meeting minutes of monthly leadership team meetings at each pilot school, and staff handbooks. We used content analysis (Holsti, 1969) to read and code the text in the transcripts and program records to identify major themes, connect the themes, and note changes and patterns over time (Lincoln & Guba, 1985; Miles & Huberman, 1994). We also used direct quotes from the interviews to provide a first-person framing that appropriately reflected those themes. Our overall approach was inductive, building and integrating these findings out of the pieces of data we collected through the various qualitative and quantitative methods (Creswell, 1998; 2002).

For guidance on identifying and categorizing strategies across the multiple data sources, we consulted a study by Powell and colleagues (2015) that lists 73 strategies that can be used either in isolation or in combination with program implementation efforts. It is important to note that the list of implementation strategies is not meant to serve as a “checklist” of strategies that must be used in all implementation efforts. Instead, the strategies can serve as “building blocks” for constructing “multifaceted, multilevel implementation strategies” within complex implementation efforts in school systems (Institute of Medicine, 2009; Powell et al., 2015). Based on this list, we identified 26 strategies that are highlighted in the findings sections of this report.

## Sample and Data Limitations

A pilot study represents a first step in exploring novel applications of interventions, and the conclusions can inform feasibility and identify modifications needed for implementation at a larger scale, as well as provide a series of recommendations for further study. This pilot study was not designed to collect all possible data related to trauma-informed efforts implemented by both schools across the three years. Instead, the data collected represent snapshots of events or activities across the three years in an attempt to focus primarily on the implementation of trauma-informed practices in the two pilot schools. A pilot project is not a hypothesis-testing study; therefore, cause-and-effect relationships cannot be established regarding the effectiveness the interventions.

In accordance with the principles of implementation science, the pilot study focused on successes, challenges, and factors that helped or hindered the implementation process. The research design did not include student data, nor did it include baseline assessment of equity issues affecting schools, students, and families.

Due to the small sample size and presence of potentially identifiable data, protecting the confidentiality and anonymity of research participants—more specifically, members of each

school's cohort—required aggregation of data and the use of descriptors such as “some staff members” and “a few staff members,” where appropriate.

## IV. FINDINGS ON IMPLEMENTATION OF TRAUMA-INFORMED PRACTICES IN PILOT SCHOOLS

To address the first research question (“What activities and interventions related to trauma-informed practices did the pilot schools implement?”), the research team analyzed all data sources to identify specific implementation strategies (Powell et al., 2015). We identified 26 strategies the pilot schools employed (see Appendix G and **bolded text** in the corresponding sections below).

### Cohort Activities

As **champions or early adopters** of trauma-informed practices in pilot schools, both teachers and **staff members in leadership positions** were **recruited, designated, and trained** to be part of cohorts at each school.

### Cohort Members Received Specialized Training

Cohort members engaged in in-depth training on trauma-informed principles by attending monthly meetings organized and facilitated by the trauma-informed school coordinators. Cohort members were given **protected time to reflect on the implementation effort, share lessons learned, and support one another's learning**. With support from the leadership teams, pilot funds were used to access curricula, materials, equipment, and other resources to **prepare** members for their work on implementing the practices. For example, the cohort at Tigard High School participated in the Neurosequential Model in Education (NME) Trainers Program developed by ChildTrauma Academy.<sup>12</sup>

Tigard High School cohort members said learning about NME concepts and principles in professional development was “life changing” and very informative. Others said the training content enabled them to use a common language or operationalize trauma-informed practices. At Central High School, some staff members who attended a restorative practices conference found the relationship-building strategies to be very informative and shared their plans to use these strategies in their daily practice. A few said the content was applicable across key stakeholder groups. There were, however, other training events that appeared to be too “elementary,” suggesting that some cohort members may have already had advanced knowledge in the subject area.

<sup>12</sup> <https://childtrauma.org/nmt-model/>

## Cohorts and Leadership Teams Promoted Readiness and Championed Early Adoption of Trauma-Informed Practices

Cohort and leadership team members played an important role in **assessing and creating readiness for systemwide adoption of trauma-informed practices**. At each school, the trauma-informed school coordinator compiled and **distributed educational materials** on trauma-informed approaches. Selected members of the cohort from both schools participated in the Oregon Quality Assessment Practices: Networked Improvement Community. Members have since engaged in conducting “**cyclical small tests of change**” (Powell et al., 2015). These tests benefit from systematic measurement, and their results are generally studied for insights into improvement strategies. This process continues serially over time, and refinement is added with each cycle. Cohorts from both schools in our pilot used the Carnegie Foundation’s improvement science principles and tools, such as empathy interviews and plan-do-study-act (PDSA) cycles, in a small number of classrooms before taking changes systemwide. By using these tools and principles, the cohorts were also able to learn sources of students’ stress related to assessments and continuously improve on a variety of self-regulation and stress-reduction techniques with them. The knowledge gained from this is valuable, given that evidence- or research-based trauma-informed strategies are still emergent.

The creation of an implementation team at both schools (i.e., the cohort) was important because these members played critical roles in engaging in different levels of activities associated with the first three stages of the implementation science framework of the National Implementation Research Network<sup>13</sup> (NIRN): exploration, installation, and initial implementation (Fixsen & Blase, 2010). At both schools, the leadership team and the cohort started their work by exploring and assessing the extent of “readiness” for a systemwide adoption of trauma-informed approaches (i.e., exploration stage) as part of their activities. Their work prompted their school leaders to study the resources they needed to do the work ahead and to prepare staff members for the new practices (i.e., installation stage). In Year 3, the cohorts started supporting other staff members (i.e., non-cohort staff members) who were interested in using or attempting to use new trauma-informed strategies (i.e., initial implementation stage) through activities such as learning walks, which involved a group of teachers doing classroom observations. In an interview with a leadership team member, this activity was viewed as an indication of willingness for implementation by some:

*We started learning walks, where we take a group of teachers around every Friday and drop in on different classrooms so we can improve instruction and working toward building relationships. So, in that way, hopefully, we’re expanding the conversation about what makes a more welcoming trauma-informed environment. The goal is mostly to give teachers a sampling of different classes ... give them a sense of what’s happening in the building they don’t otherwise get. We’re refining the practices so we have some different goals for helping people track what they’re seeing during the walk, and that can definitely improve trauma-informed practices. (Interview participant)*

<sup>13</sup> <https://nirn.fpg.unc.edu/>

## Challenges for Cohorts Included Attrition, Changes in Composition, and Time Constraints

Overall, most cohort members persisted from year to year, but there was some attrition at both sites. Attrition was higher for Central High School's cohort due to changes in job functions, with 12 members in Year 2 and eight members in Year 3. One cohort member became a school administrator in Year 3. At Tigard High School, one person left the nine-member cohort for a position in a different school.

Both cohorts showed decreases in the time spent on cohort work over time. In Year 1, Central High School's cohort met monthly for six-hour meetings, which had shifted to shorter meetings every six weeks by Year 2. Tigard High School's cohort began with monthly one-hour meetings in the first two years, in addition to 50 hours of online training in the NME model. During the final year, cohort meetings were specific to improvement science work and were held as needed to review progress.

## Staff Training

Training was an important aspect of implementing trauma-informed practices at each pilot school. In this section, we describe the various strategies schools used to incorporate trauma-informed practices into new and existing training opportunities, and we present successes and challenges associated with different training strategies.

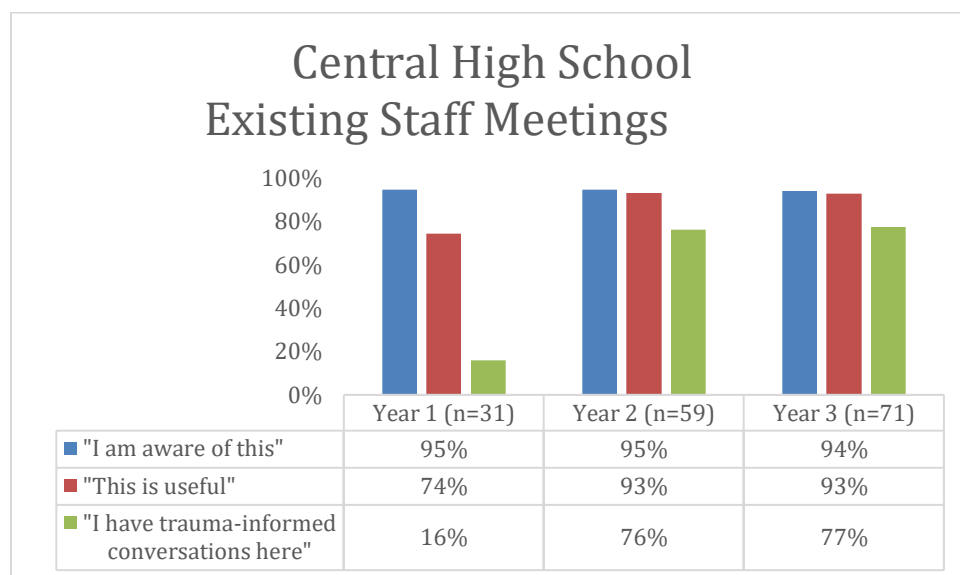
### Incorporating Trauma-Informed Practices Into Existing Meetings Raised Awareness and Generated Conversations Among Staff Members

In Year 1, existing staff meetings were used as **ongoing training** opportunities for staff members, as well as a channel to **spread trauma-informed information** to non-cohort staff members. They also offered opportunities to **conduct educational meetings** focused on teaching and learning trauma-informed principles and strategies without scheduling separate events.

Overall, 80 to 90 percent of staff members at both schools consistently reported awareness of the inclusion of trauma-informed information in staff meetings over the three years. In terms of the perception of the usefulness of the trauma-informed information presented, 74 percent of Central High School staff members reported that the information was useful in Year 1. This percentage increased over the next two years (Figure 2). Some staff members also had conversations about trauma-informed practices during or resulting from these staff meetings; 16 percent reported doing so in Year 1, which increased to more than 70 percent by Years 2 and 3.

Figure 2. Percentage of staff members who reported awareness of, perception of the usefulness of, and conversations about trauma-informed approaches in existing staff meetings at Central High School

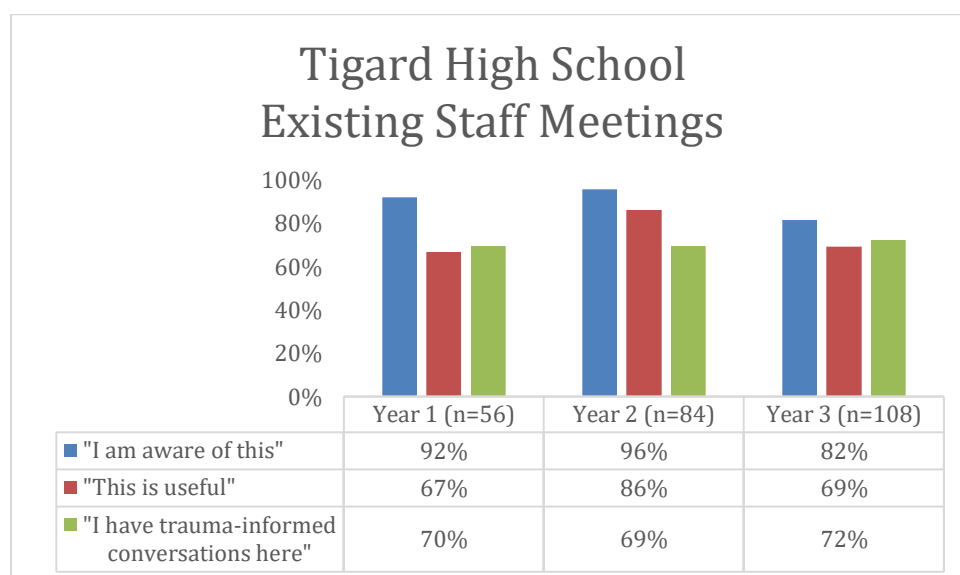




Source: Infrastructure survey

At Tigard High School, the perception of the usefulness of trauma-informed information at staff meetings grew in Year 2 but dropped to baseline in Year 3 (Figure 3). About 70 percent of staff members reported consistently having conversations related to trauma-informed approaches during or resulting from staff meetings over the three years of the pilot.

Figure 3. Percentage of staff members who reported awareness of, perception of the usefulness of, and conversations about trauma-informed approaches in existing staff meetings at Tigard High School

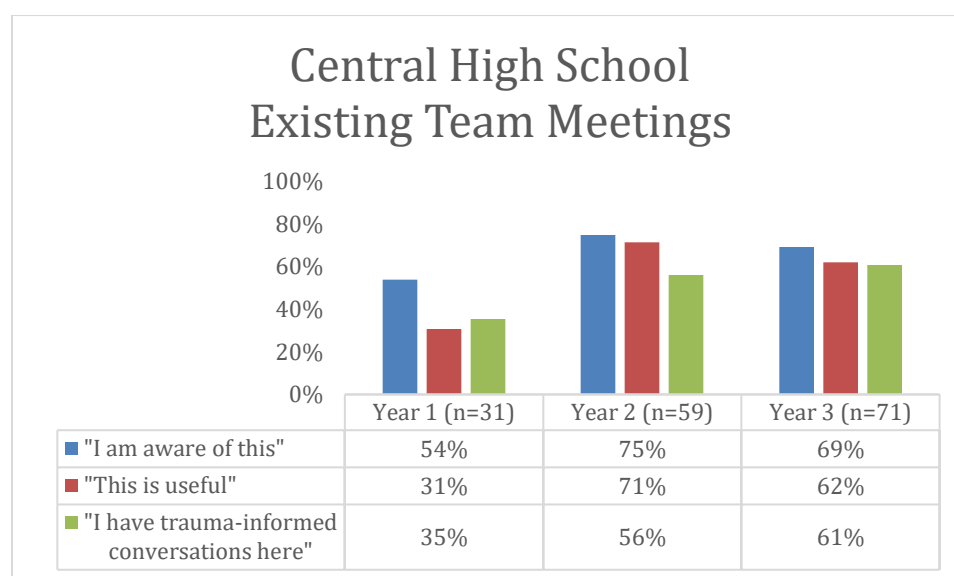


Source: Infrastructure survey

At both schools, the trauma-informed school coordinators became members of other work teams, such as PBIS or EBIS teams, attendance teams, and/or AVID teams. The inclusion of the trauma-informed school coordinators at these team meetings was an intentional effort to help reduce initiative fatigue, specifically by encouraging initiative or program “blending.” This implementation strategy allowed staff members to identify and build on existing high-quality working relationships and networks within existing teams, promoting information sharing and collaborative problem-solving and working toward shared goals.

At Central High School, there was an increase in the awareness and perception of the usefulness of trauma-informed information being shared in existing team meetings and an increase in trauma-informed conversations in team settings (Figure 4).

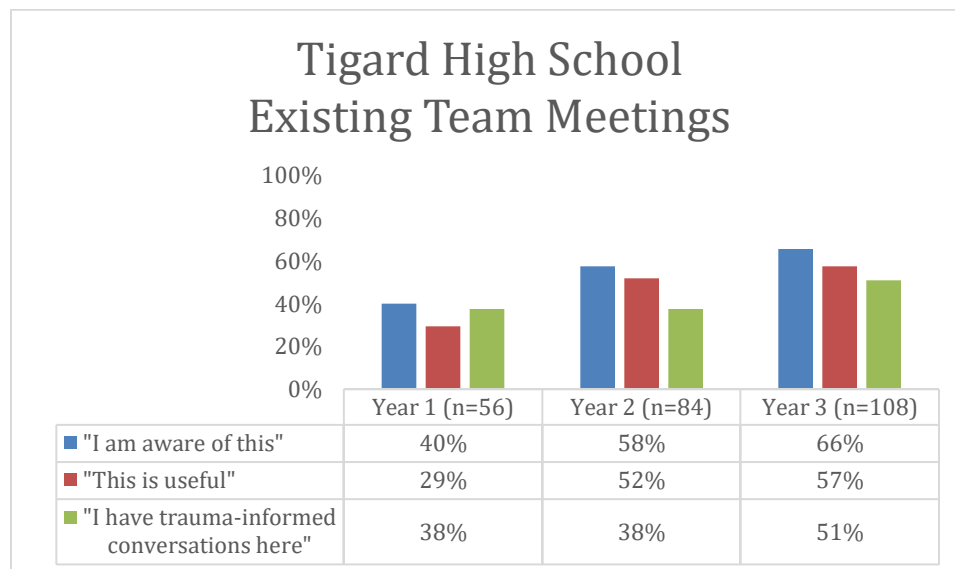
Figure 4. Percentage of staff members who reported awareness of, perception of the usefulness of, and conversations about trauma-informed approaches in existing team meetings at Central High School



Source: Infrastructure survey

At Tigard High School, the staff awareness level on trauma-informed approaches being shared during existing team meetings gradually increased over time. Staff members' perception of the usefulness of such information increased in Year 2 and maintained in Year 3. Overall, 38 percent of staff members reported having conversations about trauma-informed approaches during these meetings in Years 1 and 2, and this percentage increased noticeably in Year 3 (Figure 5).

Figure 5. Percentage of staff members who reported awareness of, perception of the usefulness of, and conversations about trauma-informed approaches in existing team meetings at Tigard High School



Source: Infrastructure survey

In addition, the trauma-informed school coordinators' monthly reflection reports indicated that more of these existing team meetings focused on areas of specific need(s) unique to their respective school over time, such as restorative practice and improvement science concepts and principles. This appeared to largely stem from their participation in network improvement communities. In other words, over time, as existing teams became more aware of and increased their understanding about trauma-informed practices, trauma-informed school coordinators may have been able to introduce more trauma-informed concepts into team discussions, especially regarding the use and application of strategies and practices in specific situations.

## Both Pilot Schools Used Existing On-Site Training to Provide Information Broadly to Staff Members

Trauma-informed school coordinators' monthly reflection reports indicated that both pilot schools used existing professional training events to **conduct educational meetings** and/or **ongoing training** on trauma-informed approaches for licensed teaching staff members. In these trainings, the trauma-informed school coordinator typically presented trauma-informed materials, sometimes accompanied by cohort members. Training events for classified staff members (e.g., administrative assistants, instructional assistants, kitchen staff members, maintenance staff members, and librarians) were not as structured or frequent as those for licensed staff members.

Central High School overcame this challenge by introducing trauma-informed concepts in a one-day training at the beginning of the pilot to all staff members, including both licensed and classified employees. In Year 2, Central High School planned a yearlong professional development calendar that included trauma-informed information for all staff members. A training specifically designed for classified staff members was offered districtwide in May 2018.

Staff members who attended this training were paid for their time. Tigard High School also organized separate and specific trainings for classified staff members. These training events were conducted during lunchtime or were coordinated with the district via trauma-informed breakout sessions during district-level training events for classified staff members. For example, a Tigard-Tualatin School District in-service training for classified staff members in 2018 featured a keynote address on resiliency.

Most staff members (70 to 90 percent) across both schools reported being aware of such training opportunities across Years 2 and 3. Most of these opportunities were existing staff training events, such as in-service days or professional development days that occur right before the school year starts and periodically throughout the school year. Across both schools, 60 percent of staff members reported that the information was helpful.

At Tigard High School, there were also three district-level specific trainings for classified staff members in Year 3. Overall, 30 to 60 percent reported being aware such training opportunities, and 20 to 50 percent reported finding the trauma-informed information to be useful.

## Off-Site Training Provided Deeper Professional Development for Selected Staff Members

Both pilot schools participated in a two-day train-the-trainer program offered by Multnomah County's Defending Childhood Initiative in December 2016 (Year 1 of the pilot). This program covered the four modules presented at the all-staff training at the beginning of the pilot ("Rewiring for Growth, Race, Gender," "Intersecting Systems of Oppression," "Cost of Caring," and "Trauma-Informed Behavior Response") and a fifth module on trauma-sensitive schools' planning and organizational change. Staff members from Central High School and Tigard High School were selected to attend this training event.

A smaller subset of selected licensed and classified staff members from both pilot schools attended a variety of professional development events during the three years on topics that related directly to trauma-informed practices, such as:

- Suicide intervention
- Trauma-informed approaches in education
- Brain- or neuroscience-based teaching and learning approaches
- Mindfulness approaches in education
- Restorative practice in education
- Collaborative problem-solving approaches in education

There were also other professional development events that did not directly relate to trauma-informed practices but were part of initiative-blending efforts:

- PBIS
- AVID college-readiness system
- Network improvement community on assessment practices using improvement science principles and tools to improve educational practice (organized by a center that supports educators on professional practice issues)

Licensed and classified staff members at both schools typically attended one off-site training event in an academic year. Some also attended multiple events due to their administrative roles. Some staff members were selected to attend these trainings, and others participated because the topic was related to their role and/or interests. Although a few staff members said they were already trained in this area and found the training to be “redundant,” most said the information was insightful and useful.

*So far, in my experience with trauma-informed training, we've learned a lot of tools that we are able to apply to the classroom. We've learned theory, but we've also learned practices we can use, which I really appreciate.* (Off-site training participant)

*[This] training was LIFE CHANGING. It has completely transformed my views on teaching, parenting, etc.* (Off-site training participant)

## Challenges to Training

Common challenges related to training included time constraints, pushback or resistance from staff members, competing priorities, and communication barriers. Many of the classroom teachers we interviewed said it was difficult to take time away from their students for optional training opportunities. One teacher said that doing so might even “create a bit of trauma” for students. Others reported simply not being informed of opportunities.

*I think teachers are feeling overloaded. I think people would be more receptive to trauma-informed education if they did not feel like they are swimming.* (Open-ended annual all-staff survey response)

*Book club lunch is difficult because lunch is a time that I can recharge and prepare for afternoon classes.* (Open-ended annual all-staff survey response)

*I wasn't invited [to], nor did I know about, the [event].* (Open-ended annual all-staff survey response)

While staff from both pilot schools were sent to a train-the-trainer training event with the goal of having a selected staff members to return to their schools to train others in trauma-informed approaches, those who participated did not end up training others for reasons that mostly involved staff turnover and scheduling. In some cases, participating staff members reported that they did not feel prepared to train others.

## Policy Changes

**Mandating change** is an implementation strategy that involves leadership prioritizing the implementation of a systemwide innovation or program. Schools typically operate under both external (e.g., federal and/or state) and internal mandates, where leadership implements systemwide mandatory policies and practices. In this pilot, we observed several instances at both schools where leadership mandated schoolwide implementation of trauma-informed approaches through various policies and procedures.

## Both Pilot Schools Made Trauma-Informed Changes to Curricula, Attendance Team Activities, Employee Resources, Improvement Plans, and Hiring Policies

At Central High School, the school board approved the adoption of a districtwide trauma-informed school policy in December 2018 (Year 3). The 2017–18 school improvement plan included trauma-informed teaching and strategies as part of the curriculum, as well as yearlong professional development on trauma-informed information blended with other programs or initiatives (e.g., AVID, poverty issues, Google classroom, and assessment practices). At an all-staff meeting in Year 2 of the pilot, Central High School presented its schoolwide intervention system, consisting of an attendance team (focused on students with less than 95 percent attendance); a care team to support students specifically with attendance, academic, and/or behavior topics with a set of interventions; and a student study team (focused on students who may need special education and related services). Flowchart-like visuals of the teams and the referral process were shared, along with details (such as team membership and each team's purpose).

Tigard High School updated its 2018–19 staff handbook with a section on trauma-informed information and incorporated trauma-informed concepts into several sections: “Academic Concerns,” “Attendance,” and “Correcting Student Behavior.” A guide for substitute teachers was also created using a trauma-informed lens. Trauma-informed concepts and the effects of stress were also incorporated into Tigard High School's 2018–19 continual improvement plan (CIP), with alignment of trauma-informed approaches with work related to culturally responsive teaching, student mentoring, climate and culture, and equity.

Based on leadership responses on the Oregon School Health Profiles Survey administered in 2015–16 (before the pilot started), neither school had provided employee wellness programs, which are an important component of a trauma-informed approach. Since the start of the project, both schools have participated in OEA Choice Trust<sup>14</sup> employee wellness programs (Central High School in 2016–17 and Tigard High School in 2017–18).

Finally, both schools also changed their staff hiring practices by including interview questions specifically about applicants' knowledge of trauma-informed approaches/practices. At Tigard High School, this included asking applicants about experiences and/or knowledge about trauma, trauma-informed practices, and knowledge of self-care (such as “What do you do for stress relief?” and “How do you manage stressful situations?”). The principal at Central High School and the multicultural coordinator at Tigard High School were hired using these updated processes.

## Both Pilot Schools Developed Environmental Assessment Tools and Trauma-Informed Lens Questions

Both schools worked toward developing trauma-informed environmental assessment tools to help educators assess the extent to which a welcoming and safe physical environment exists in their school. Central High School collected feedback on this issue from various stakeholders,

<sup>14</sup> <https://oeachoice.com/school-employee-health-and-wellbeing/>

including staff members (licensed and classified), administrators, district personnel, and students. Tigard High School developed an environmental tool specifically for families based on the six guiding principles adapted from the San Francisco Department of Public Health's Trauma-Informed Systems Initiative Model.<sup>15</sup>

Toward the end of Year 3, the pilot schools' trauma-informed school coordinators and the technical assistance provider co-created a set of multistep questions that are meant for staff members already trained in trauma-informed practices to use in various meetings. These questions were designed to make decision-making processes and interactions more trauma-informed and to be applied even in brief meetings. The pilot schools' trauma-informed school coordinators reported that they intended to test these questions in various meetings and gather application information.

## Cohorts and Leadership Teams Focused More on Blending Multiple Initiatives Over Time to Reduce Initiative Fatigue

Blending initiatives appeared to receive more focused attention at both schools over time, as cohort and leadership team members increasingly recognized a “toolbox” of related practices (e.g., AVID, EBIS), as something they could further develop and use to help students in both academic and behavioral realms. In Year 3, during monthly leadership team meetings at both pilot schools, both schools' leadership teams shared that they were starting to intentionally integrate trauma-informed concepts into daily conversations without necessarily calling them out as specifically “trauma-informed.” This reflects an ongoing effort across both pilot schools to blend trauma-informed practices into everyday practices and also reduce the perception of trauma-informed practices as separate initiatives. In an interview, a leadership team member described the thinking behind the blending of initiatives:

*All those little tools that we've been kind of throwing out along the way—if those things are being observed, that should be captured at this point. And I think, next year, it feels like that's the next natural step in that direction. Also figuring out “How do we really blend this?” We've been very social [and] emotional focus[ed], which is great, but how do we start to really blend this so that it becomes embedded into everyday academics? (Interview participant)*

## Student, Family, and Community Engagement

### Both Pilot Schools Developed Leadership and Decision-Making Opportunities for Students

Both schools developed student and family engagement plans in Year 2 to start involving students and families in schoolwide trauma-informed practices. The primary goal of these plans was to promote students' and families' understanding of the impact of stress on the brain and ways to increase resiliency, as well as develop various activities to engage or include students and families in the implementation effort. One indicator of an organization becoming more

<sup>15</sup> <http://traumatransformed.org/wp-content/uploads/TIS-Program-Overview-11-15-17.pdf>

trauma-informed is giving students “meaningful and developmentally appropriate leadership and decision-making opportunities, particularly around issues that directly impact their experiences and education.”<sup>16</sup>

During a retreat, students from Central High School crosswalked the POWER Matrix from the Collaborative for Academic, Social, and Emotional Learning (CASEL), which outlines five core competencies—self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2019)—as well as the PBIS framework. Relationship-building activities were intentionally integrated with the 2018–19 freshman cohort, and specific relationship-building strategies (see Table 7) were introduced to staff members working with grade 9 students.

Tigard High School also formed a group of student leaders on trauma-informed/equity work and helped create a climate survey. In Year 3, using funding from the state High School Graduation and College and Career Readiness Act<sup>17</sup> (2016), Tigard High School hired an engagement specialist to focus on working with disengaged students. It also hired a second academic engagement specialist, a position that had been converted from an AmeriCorps position, to work with a caseload of students previously identified as needing additional support in middle school.

Teachers and administrators at both schools also encouraged students to promote trauma-informed concepts in existing student leadership activities. For example, selected students at Tigard High School produced a video containing a unifying message to all students about the October 2018 Pittsburgh synagogue shooting, with full support from the school. Tigard High School leadership said “hallways are quieter,” suggesting that students were spending more time in the classrooms receiving instruction. As a result of these efforts, staff members at both schools observed changes in students.

*Students now have a deeper understanding of what mental health means and how it impacts their lives. They understand more that this is a real issue and that it's OK to talk about and find community solutions. They know how to talk about it more and that there is somebody at the school that wants to work with you when you're feeling badly. The stigma of mental health is being broken down, is out there and visible. (Interview participant)*

## Both Pilot Schools Enhanced and Strengthened Their Partnerships With Community Members

With the support of the technical assistance provider, both schools held at least one **meeting with community partners** during the course of the three-year pilot. At Central High School, staff members from the Central School District office and representatives from the Polk County Family & Community Outreach Department, Polk County Behavioral Health, Central Health and Wellness Center, Polk County Public Health, Mano A Mano (community-based organization), Attendance Works, and Education Northwest met to develop a deeper understanding of each organization's programs, clarify roles, and align their partnership around attendance issues. At

<sup>16</sup> [https://dese.mo.gov/sites/default/files/cnsl\\_Missouri\\_Model%20school\\_guidance\\_doc.pdf](https://dese.mo.gov/sites/default/files/cnsl_Missouri_Model%20school_guidance_doc.pdf)

<sup>17</sup> <https://www.oregon.gov/ode/students-and-family/GraduationImprovement/Pages/HSS.aspx>



Tigard High School, five community partners (Immigrant & Refugee Community Organization, Youth Villages, Washington County Behavioral Health, Virginia Garcia, and Tigard Turns the Tide) met to share information on services and started discussions on ways to support Tigard High School students who use their services.

### Schools Reported Ongoing Community-Based Activities

Since the formal data collection period for the pilot study ended, schools have continued to anecdotally report ongoing opportunities to enhance and strengthen their partnerships with community members, including those in the medical (e.g., school-based health center), law enforcement, and health and human services fields.

Central High School continues to meet frequently with its community partners through a concurrent grant received by the technical assistance provider. This collaboration focuses on reducing absenteeism by addressing ACEs and toxic stress, creating Tier 2 interventions, and having a cross-sectoral systems approach to care. The collaboration has also resulted in the creation of a wellness room in the school to teach students who need Tier 2 self-regulation skills, as well as subsequent group-based interventions conducted by a Polk County mental health professional. According to Central High School's leadership, a new family night for English language learners was influenced by their participation in the trauma-informed pilot project.

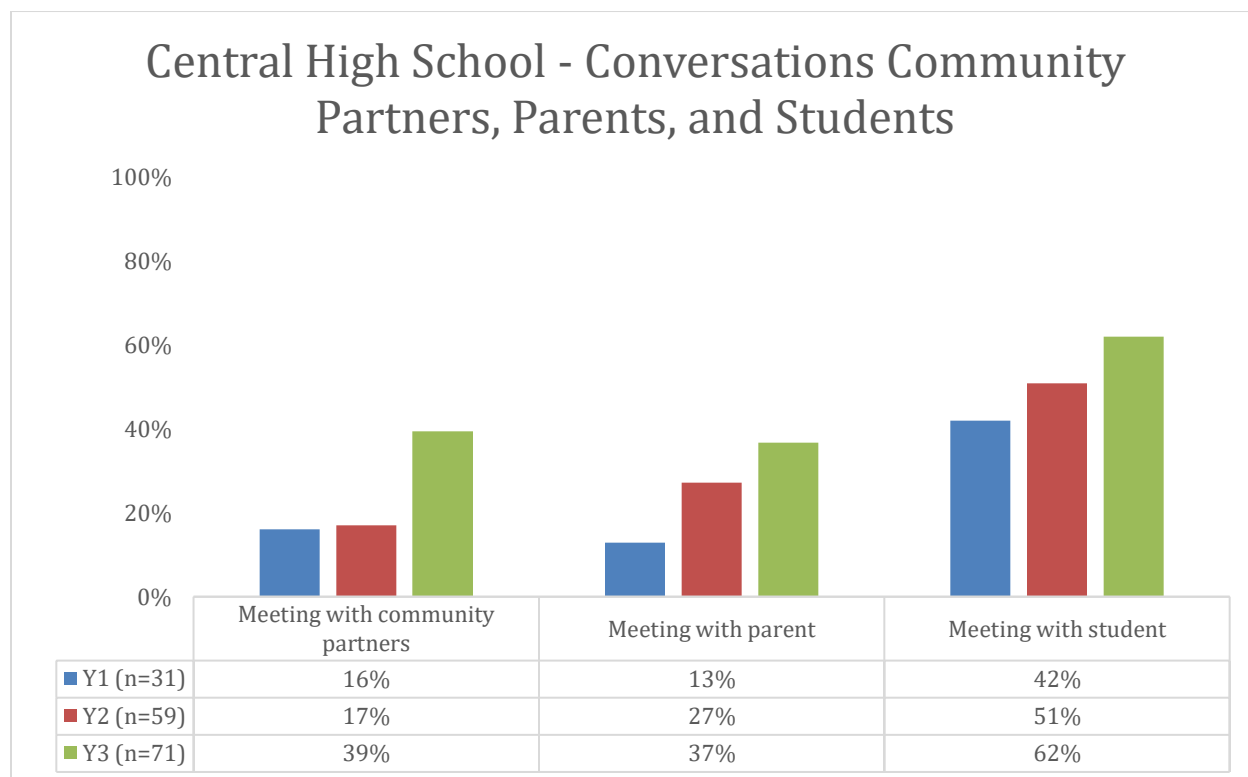
Tigard High School's partnership with Tigard Turns the Tide has led to a collaborative effort to offer a two-day training to community members and educators in the district. This train-the-trainer program has recruited 13 trainees, some with bilingual abilities, who will deliver a family resiliency curriculum in their communities.

Both schools' leadership teams have expressed a strong interest in continuing to build such coalitions, specifically in cultivating relationships with partners for new and ongoing implementation efforts.

### Conversations With Students, Families, and Community Members About Trauma-Informed Practices Increased at Both Schools During the Pilot

Over the course of the three-year pilot, we asked staff members whether they have engaged in conversations with students, families, and community partners on trauma-informed approaches. At Central High School, staff-reported conversations with families and students increased gradually over time. Less than 20 percent of staff members reported having conversations with community partners in Years 1 and 2. This percentage, however, increased to nearly 40 percent in Year 3 (Figure 6).

Figure 6. Conversations about trauma-informed practices with community partners, families, and students at Central High School

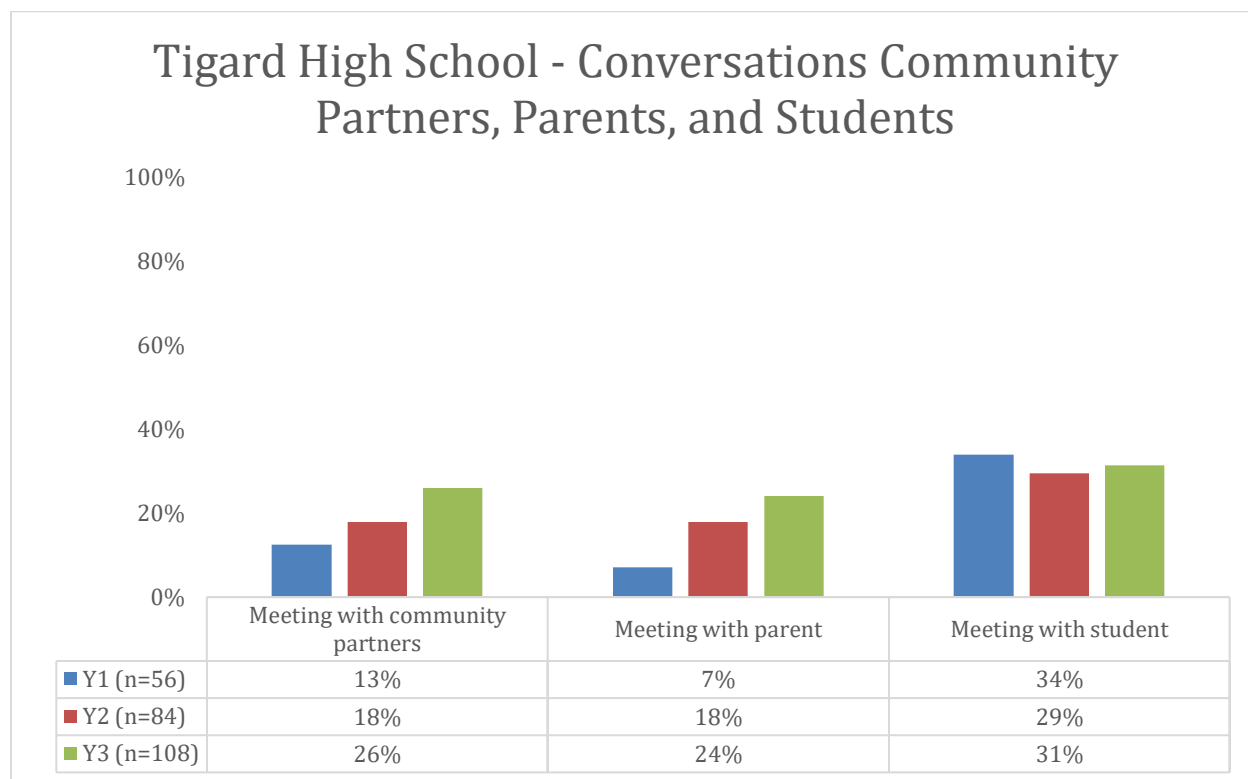


Source: Infrastructure survey

At Tigard High school, staff members reported more conversations with community partners and families over time (Figure 7). Across the three years, the percentage of staff members who reported having conversations with students about trauma-informed practices remained stable at about 30 percent.

The shift toward more family engagement since Tigard High School's participation in the pilot project was important, given that its leadership during 2015–16 (before the pilot started) responded "No" on the Oregon School Health Profiles Survey question about whether they encouraged family or community involvement. In Year 3, Tigard High School organized a series of workshops for families, during which a trained and licensed psychologist was hired to present information about trauma and ACES, compassion-informed school, resilience, and the resilience toolkit (including strategies). Tigard High School also collaborated with Tigard Turns the Tide (an organization focused on preventing alcohol, tobacco, and drug use) on a grant to create a train-the-trainer model to further engage families and the community on trauma-informed approaches and resiliency. At a leadership team meeting, participants said the family workshops were positive and well-received.

Figure 7. Conversations with community partners, families, and students at Tigard High School



Source: Infrastructure survey

## Specific Trauma-Informed Strategies

### Cohorts Introduced Specific Trauma-Informed Strategies at Each Pilot School

By Year 3, both pilot schools introduced a set of specific trauma-informed strategies (Table 4). Many were related to self-regulation, relationship-building, and creating a sense of safety and predictability in school. Tigard High School also incorporated the neuroscience concepts and principles that its cohort had been learning since Year 2. To develop these strategies, school staff members accessed local and readily available online materials, and they took part in training opportunities that were available in Oregon at the time.

These specific strategies allowed cohort members to apply their deepened knowledge of trauma-informed principles and to **capture local knowledge from their own implementation schools or classrooms on how they made something work in their settings and then share it with others**. Both pilot schools capitalized on using strategies already in place, particularly the strategies and routines in AVID.

Table 4. Examples of trauma-informed strategies at both pilot schools

<b>Trauma-informed strategies</b>	<b>Central High School</b>	<b>Tigard High School</b>
Self-Regulation	<ul style="list-style-type: none"> <li>• Square Breathing/Deep Breathing</li> <li>• Flipping Your Lid (Dan Siegel's hand model of the brain)</li> <li>• Chill-Out Corners</li> <li>• Stress Scale</li> <li>• Fidget Tools (e.g., stress balls)</li> <li>• Coloring Sheets for Students</li> <li>• Visuals: "Resiliency" and/or "Flower/Leaf Breathing"</li> </ul>	<ul style="list-style-type: none"> <li>• Brain breaks (e.g., five-minute mental breaks during class to energize or relax)</li> <li>• Square Breathing</li> <li>• Flipping Your Lid (Dan Siegel's hand model of the brain)</li> <li>• Fidget Tools (e.g., stress balls)</li> <li>• Sensory Self-Regulation (incorporating smells, sounds, and visuals)</li> <li>• Walk in the hallway</li> <li>• Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) Stretch</li> <li>• Visuals: Brain Sequence Model</li> <li>• Visuals: Stress Continuum Scale</li> </ul>
Relationship Building	<ul style="list-style-type: none"> <li>• Greeting at the Door**</li> <li>• *Community Building Games/Icebreakers</li> <li>• *Birthday Celebrations</li> <li>• Short inspirational and educational videos</li> <li>• *Circle games during freshman orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Greeting at the Door**</li> <li>• Mentorship of Students</li> <li>• Positive Postcards Sent to Homes</li> </ul>
Sense of Safety and Predictability	<ul style="list-style-type: none"> <li>• AVID strategies and routines to grade 9 and 10 students</li> </ul>	<ul style="list-style-type: none"> <li>• Visuals: Learning Targets, Class Agenda, Cell Phone Use, and Procedures, Routines and/or Rules</li> <li>• Formative Assessment to Track Learning</li> </ul>

Source: Program records

\*Freshman activities.

\*\*This strategy is known as "Positive Greetings at the Door." It was found to have improved academic engagement and reduced disruptive behavior in middle school students (Cook, Fiat, & Larson, 2018).

## Staff Awareness and Usage of Trauma-Informed Strategies

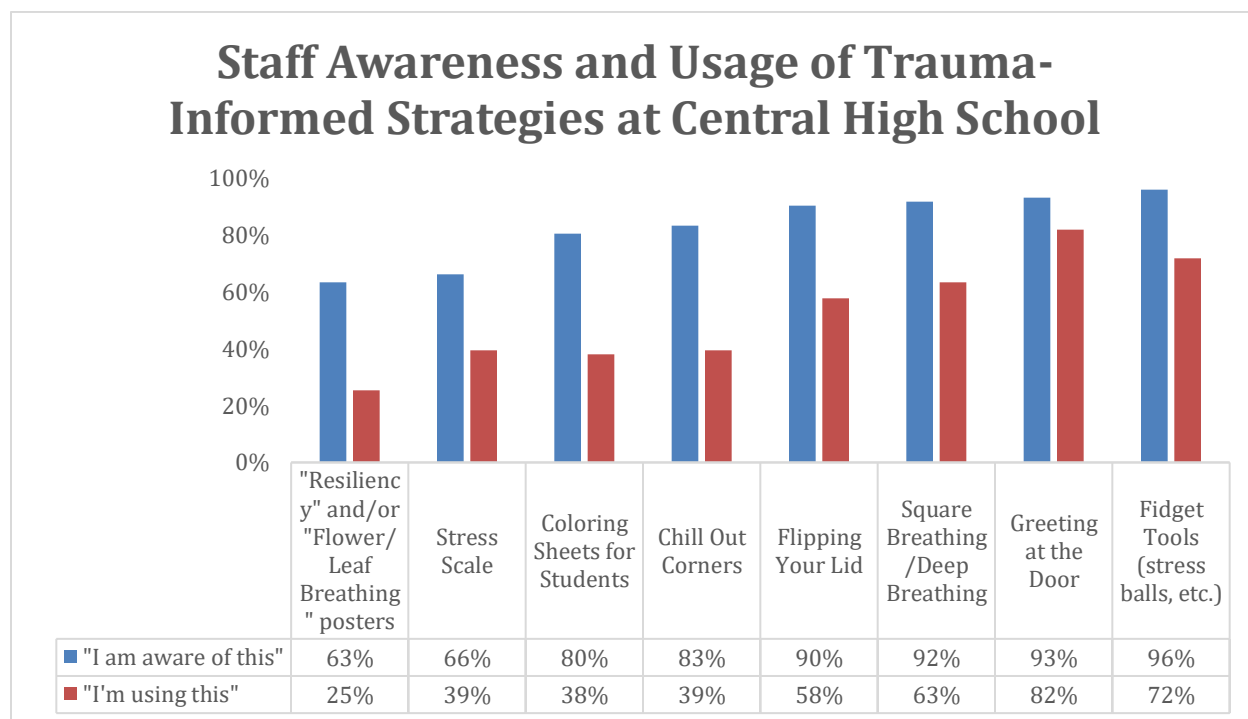
The trauma-informed strategies presented in Table 4 above were introduced as a result of the cohorts' work and continuous support from leadership. This section presents indicators of staff members' awareness of these strategies and their self-reported usage of each strategy.

### Central High School's Trauma-Informed Strategies

All staff members at Central High School received training on a set of trauma-informed strategies. We examined staff members' awareness, perception of usefulness, and usage of these strategies based on data collected from the infrastructure survey section of the annual staff survey in Year 3.

Staff members at Central High School reported a high level of awareness (80 percent or higher) of the following strategies: Greetings at the Door, Square/Deep Breathing, the "Flipping Your Lid" hand model of the brain, "Chill Out Corners," fidget tools, and coloring sheets. About 60 percent of staff members reported being aware of visual aids, such as the "Stress Scale," "Resiliency," and/or "Flower/Leaf Breathing" posters (Figure 8).

Figure 8. Percentage of staff members who reported awareness and usage of trauma-informed strategies at Central High School



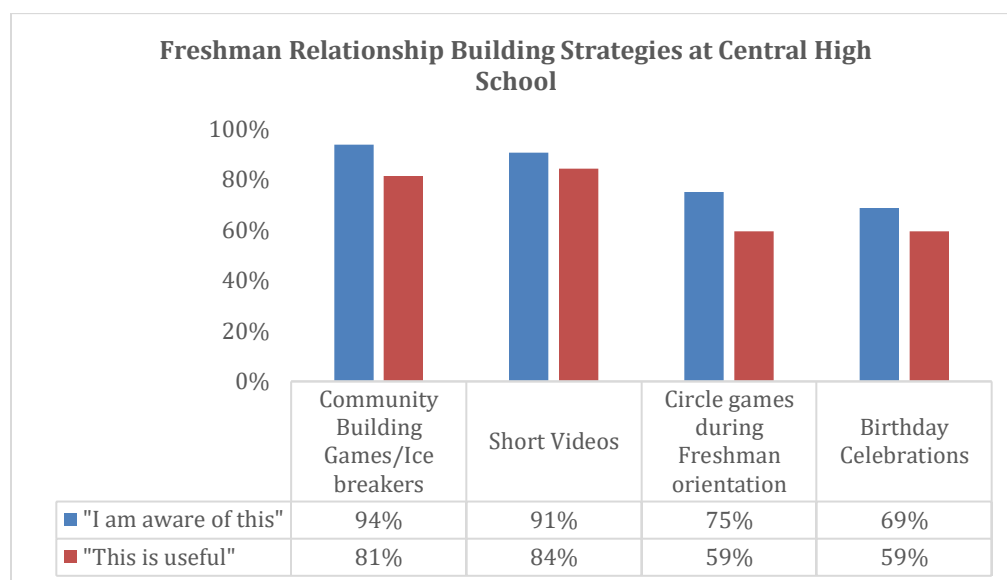
Source: Year 3 infrastructure survey (N = 71)

Over 80 percent of staff members reported using Greetings at the Door, and the other two most commonly used strategies were fidget tools and Square/Deep Breathing. Over half of

respondents reported using the “Flipping Your Lid” hand model of the brain, and less than 40 percent reported using the other strategies (see Figure 8).

Central High School leaders strategically introduced relationship-building practices to their freshman students, such as building games/icebreakers and short videos. Almost a third of staff members said they were aware of these specific strategies. About 80 percent said the community-building games/icebreakers and short videos were useful, and about 60 percent said the circle games during freshman orientation and birthday celebration strategies were useful.

Figure 9. Percentage of staff members who reported awareness and perception of usefulness of relationship-building strategies for freshmen at Central High School



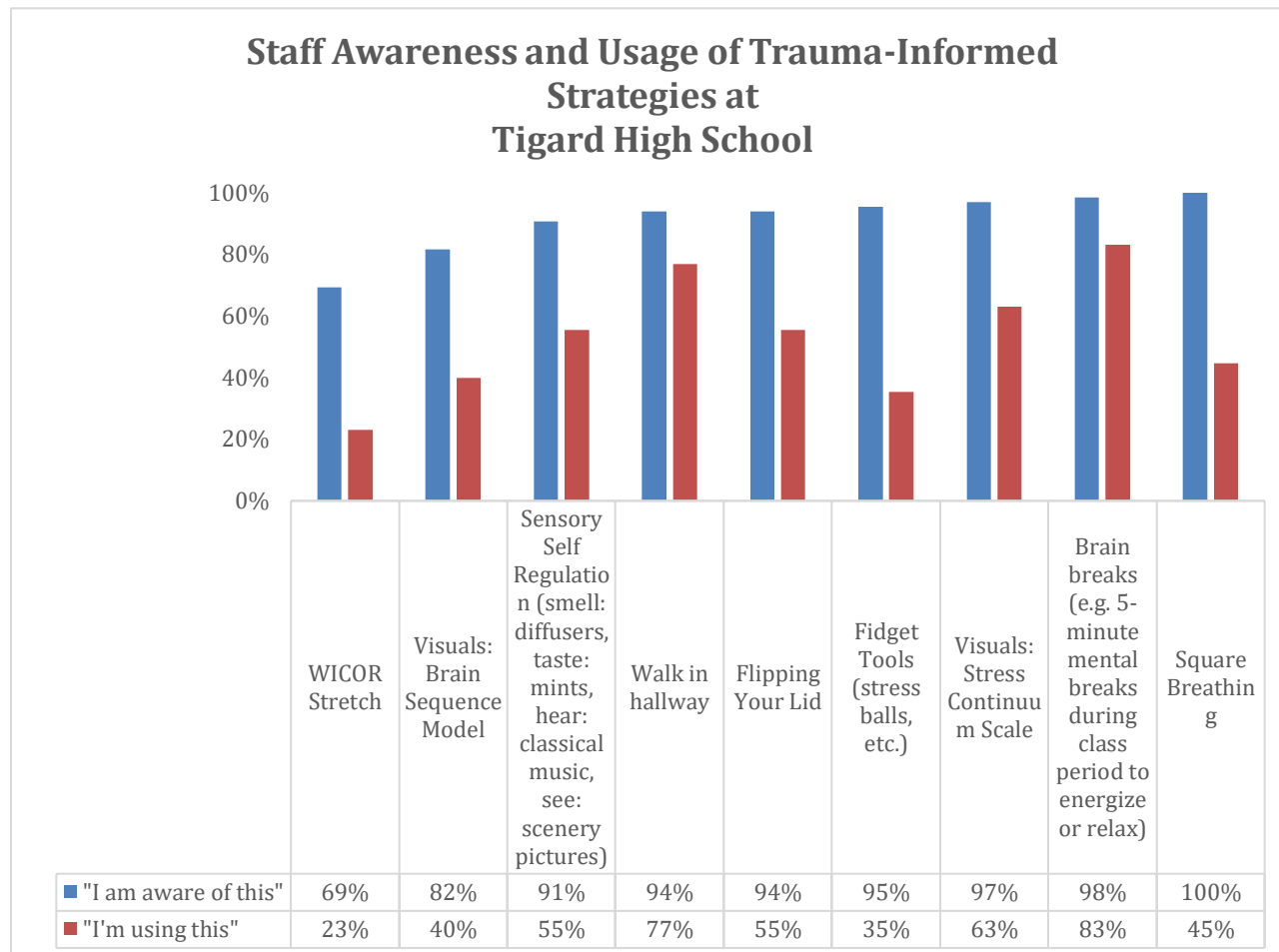
Source: Year 3 infrastructure survey (N = 32; only staff members who responded to the question “I am aware of freshman relationship-building strategies”)

## Tigard High School’s Trauma-informed Strategies

All licensed staff members at Tigard High School received training on a set of trauma-informed strategies. We examined staff members’ awareness, perception of usefulness, and usage of these strategies based on data collected from the infrastructure survey section of the annual staff survey in Year 3.

About 70 percent of staff members at Tigard High School reported being aware of many self-regulation strategies introduced to all staff members, including brain breaks and square breathing (Figure 10). However, 50 to 60 percent of staff members reported less awareness of the Brain Sequence Model visual and the WICOR Stretch.

Figure 10. Percentage of staff members who reported awareness and usage of trauma-informed strategies at Tigard High School



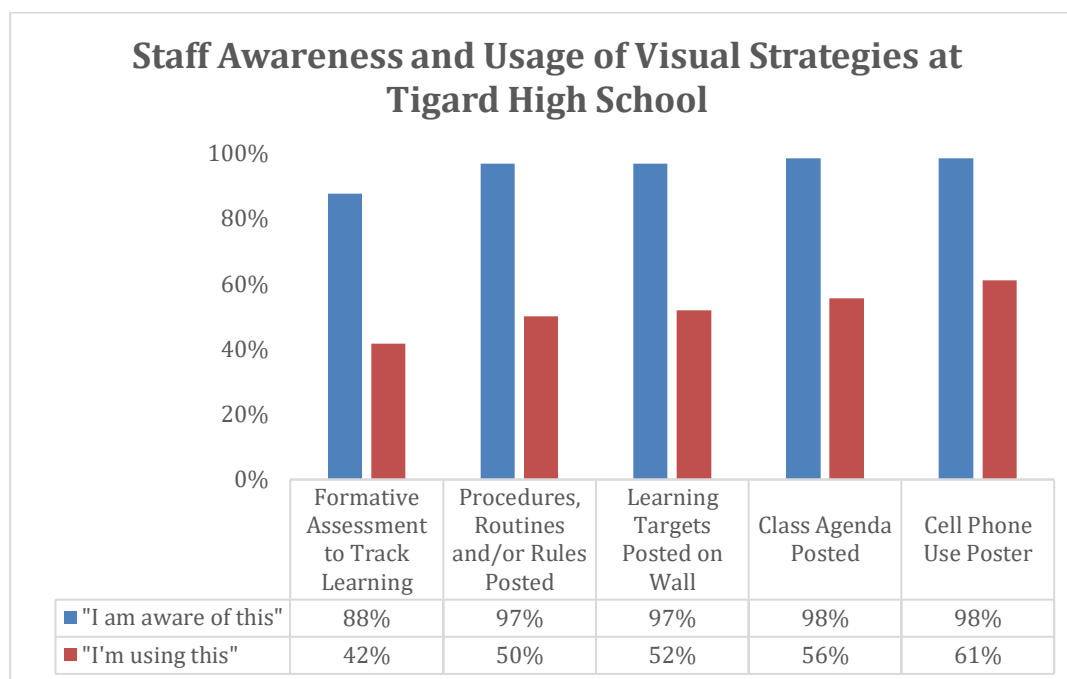
Source: Year 3 infrastructure survey (N = 65; only licensed staff members received training in these strategies)

## Tigard High School's Visual Strategies Promoting Safety and Predictability

Tigard High School leaders strategically introduced the use of several visuals and tools to help create a sense of safety and predictability schoolwide, including reminders about cellphone use; procedures, routines, and rules; class agendas; learning targets; and the use of formative assessments to track student learning.

Overall, nearly all staff members reported being aware of most of these visuals and tools, and about half of staff members reported using the visuals and tools.

Figure 11. Percentage of staff members who reported awareness and usage of visuals and tools to create a sense of safety and predictability at Tigard High School



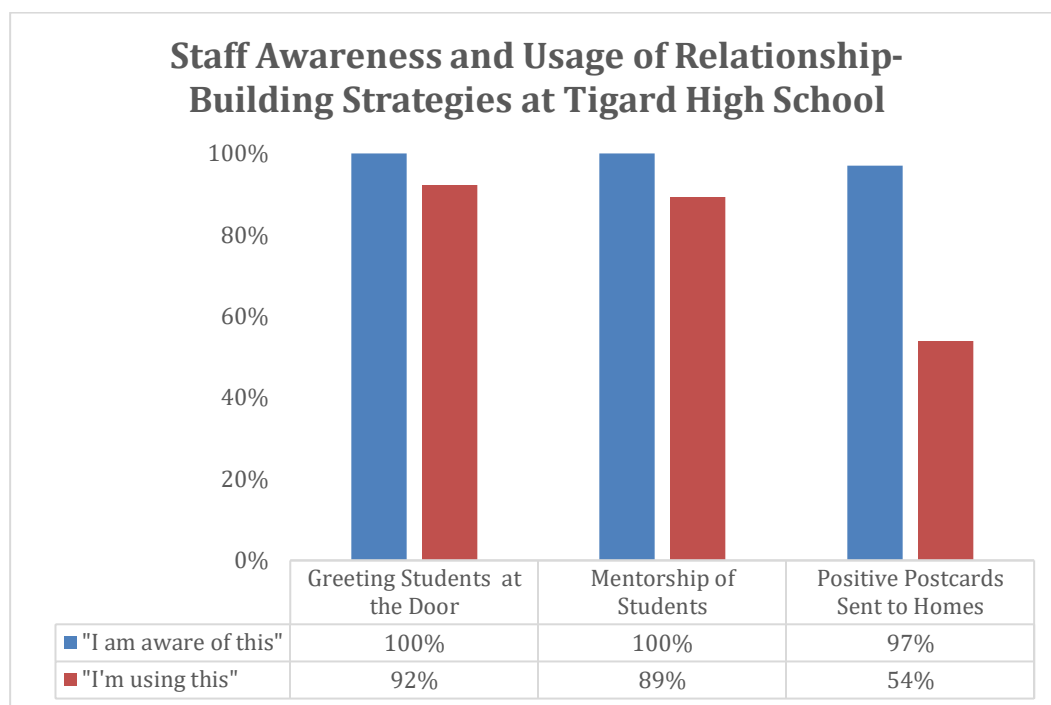
Source: Year 3 infrastructure survey (N = 65; only licensed staff members received training on these strategies)

## Tigard High School's Relationship-Building Strategies

Tigard High School leaders strategically introduced several relationship-building strategies to staff members schoolwide: greetings at the door, mentoring students, and sending positive postcards to students' homes. Overall, nearly all staff members reported being aware of these strategies, and most reported using greetings at the door and mentorship. A smaller proportion, just over half of staff members, reported sending postcards with positive messages (Figure 12).

Figure 12. Percentage of staff members who reported awareness and usage of relationship-building strategies at Tigard High School





Source: Year 3 infrastructure survey (N = 65; only licensed staff members received training on these strategies)

Although greetings at the door may be a method of connecting with students and building relationships, not all staff members found it to be helpful. In the annual survey in Year 3, staff members expressed the following:

*While I'm not greeting students at the door, I have made a goal of saying each student's name during class in a meaningful interaction. "[Student A], how is your group doing?" "[Student B], did you need to borrow notes to get caught up?" Honestly, the greeting at the door was frustrating ... Many want to take a moment to engage in conversation ("I have to leave early today" or "When can I make up the test?"), but I can't have that meaningful conversation because all I have time for is, "Hello, [Student C]"—which, in my opinion, is superficial when a student wants to use that time to engage in something deeper. (Open-ended annual all-staff survey response)*

One staff member also said these strategies were not necessarily new but can still be impactful for all students—regardless of possible experience with trauma.

*"I have done all three of these things for more than 20 years of teaching. They are all important [for all students]." (Open-ended annual all-staff survey response)*

## V. FINDINGS ON CHANGING BELIEFS AND PRACTICES RELATED TO TRAUMA AND EQUITY

To address research question 2, and based on what we learned about implementation (see Section IV), we wanted to understand how implementation resulted in changes to beliefs and practices related to trauma and equity in the pilot schools. In this section, we present findings from survey and interview data.

### Changing Beliefs

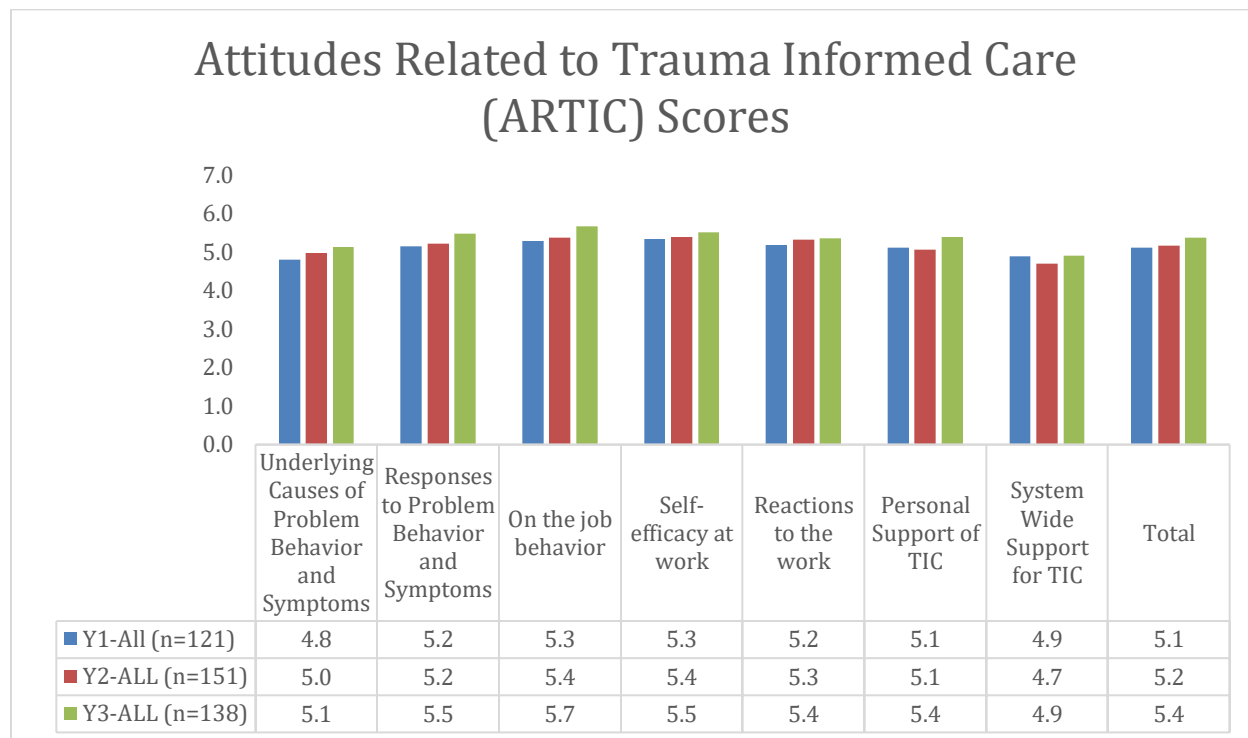
#### Staff Members at Both Pilot Schools Expressed Increasingly Positive Attitudes and Greater Knowledge About Trauma-Informed Practices Over Time

The ARTIC survey was used to measure school staff members' attitude shifts over the course of the pilot. Individual-level implementation factors, such as staff members' attitudes, can influence implementation outcomes (Henggeler et al., 2008). Attitudes that are more favorable toward trauma-informed care or approaches could be important drivers for behavior change and implementation (Baker, Brown, Wilcox, Overstreet, & Arora, 2015).

The ARTIC survey was administered annually to all administrators, as well as certified and classified staff members, typically during events such as all-staff meetings, in-service days, or specific training days. We observed small but gradual increases in positive attitudes toward trauma-informed approaches. Higher scores on the ARTIC survey indicate a more positive attitude toward trauma-informed approaches (Figure 13).

It is important to note that we combined survey responses across both schools in the following figures. There was no intention to compare results between schools due to their contextual differences, and exploration of results revealed no significant differences between schools.

Figure 13. Average ARTIC survey scores across both pilot schools across three years



Note: TIC = trauma-informed care

Source: ARTIC survey

Interviews with cohort and leadership team members supported these findings, with participants reporting positive changes to attitudes toward trauma-informed practices—not just personally but also throughout the school community. For example, a leadership team member who had been involved with the pilot project since its inception said it had been “gratifying” to see trauma-informed practices being used:

*Seeing teachers considering trauma-informed practices as they are making decisions about their classroom structure, about their classroom discipline policies, about some things like seating arrangements—that’s been really positive, to see the way that has worked out in our classrooms ... I think that’s been the most dramatic for me. It’s the way it’s affected both decision-making and classroom practice. (Interview participant)*

Other staff members also reported positive attitude shifts in themselves and around campus:

*I have seen a shift both in how staff approach things and in how I handle my stress in this job, largely due to trauma-informed practices and mindfulness. It really has shifted the way so many of us think and is so much better for our students! Thank you! (Open-ended annual all-staff survey response)*

*Having the grant [pilot project] has altered many dynamics at [our school] in immeasurable positive ways. (Open-ended annual all-staff survey response)*

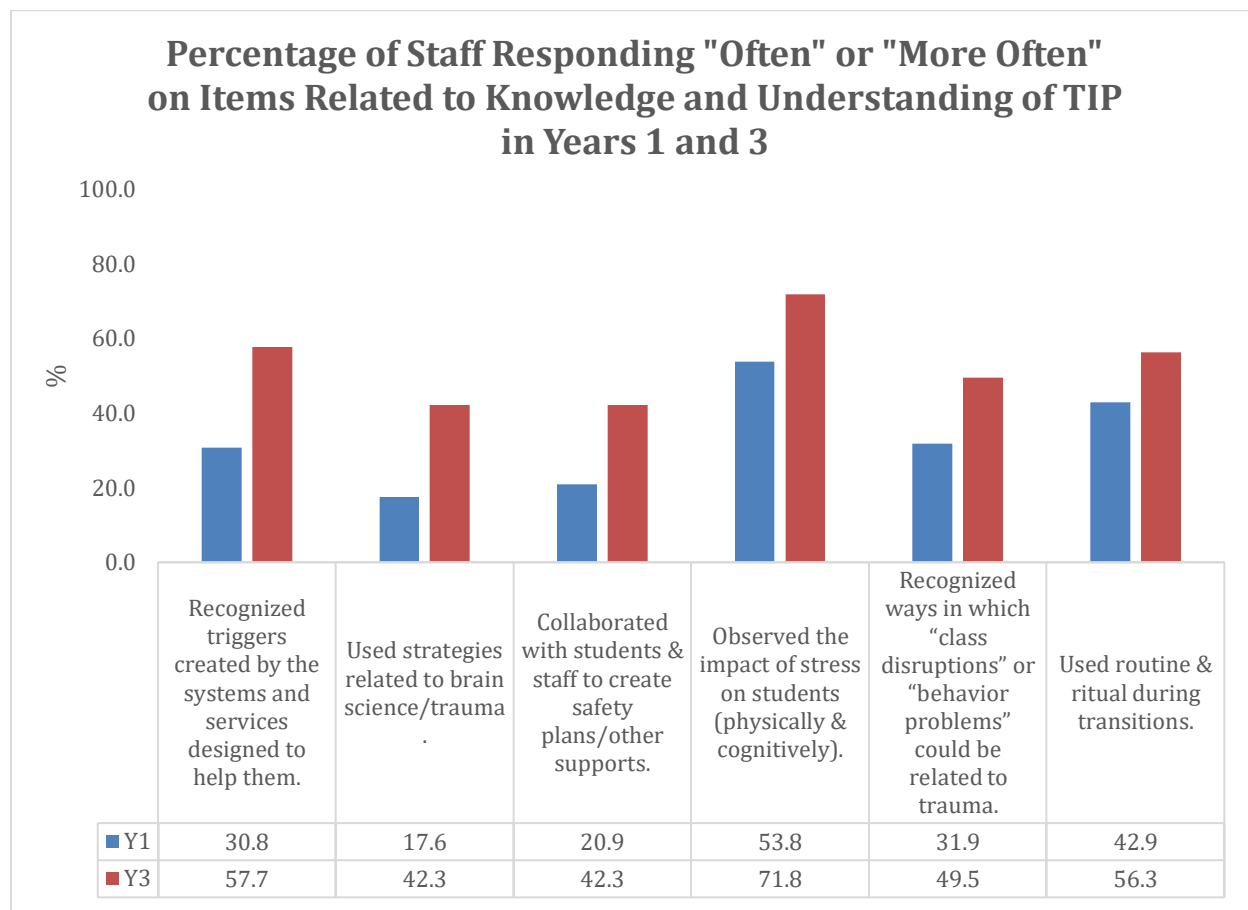
*I know that compared to other schools in Oregon, we are doing a great job teaching and informing students and staff of trauma ... most of the schools do not have things in place that we do. Even though sometimes it can be tough while working with so many kids with trauma, we are helping them realize things they otherwise would not see. I know that this program is very beneficial to our students and [the] way that I personally interact with them. It has made me a better educator and opened my eyes to real issues in our school community and our society in general. Keep up the great work! (Open-ended annual all-staff survey response)*

The increase in positive attitudes about trauma-informed practices was not, of course, universal. Cohort members described varying levels of motivation and buy-in for trauma-informed practices, and in Year 3, several respondents commented in the annual staff survey that trauma-informed practice “just does not seem helpful for my students” and “does not have much realistic applicability to me in my classroom.”

*There is not enough teacher buy-in. There [are] definitely several groups of teachers who have, but there are a clear amount of teachers who have not. (Open-ended annual all-staff survey response)*

Results from the annual self-assessment survey suggest that many staff members increased their knowledge and understanding of trauma-informed practices between Years 1 and 3 of the pilot study (Figure 14). For example, 13.5 percent more staff members in Year 3 reported that they “often” or “more often” used routines and rituals during transitions (an example of a trauma-informed practice) compared with Year 1.

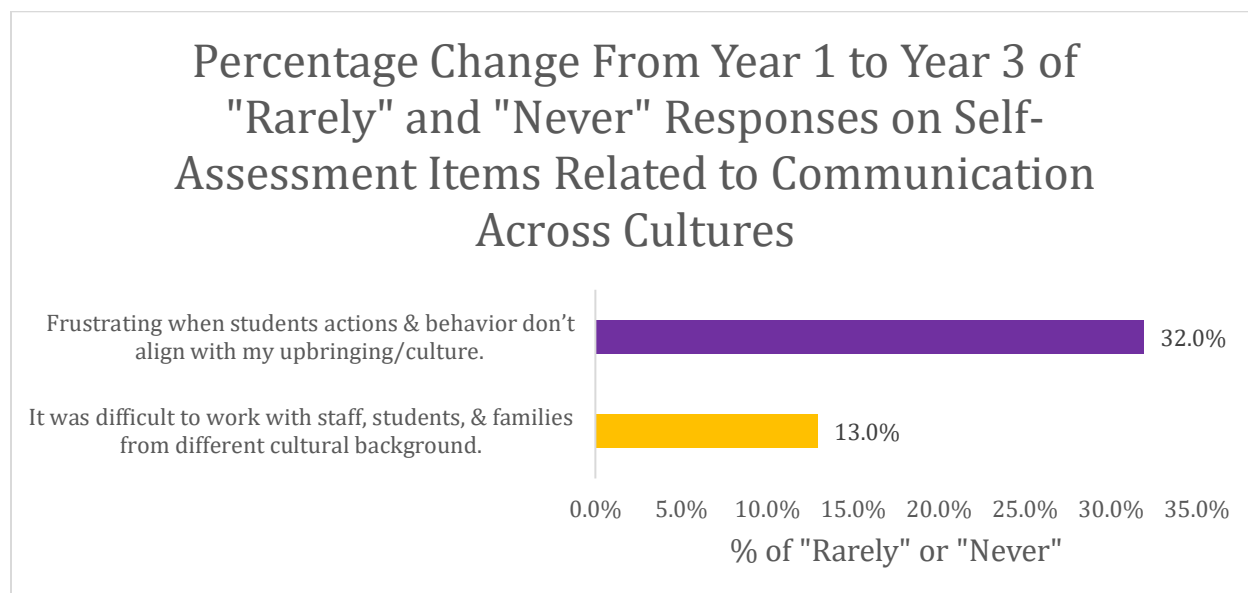
Figure 14. Positive changes in staff members' self-assessment of knowledge and understanding of trauma-informed practices from Year 1 to 3



### Staff Members' Self-Assessment Results About Cultural Communication and Structural Inequities Were Mixed

Several self-assessment survey items suggested positive changes over time in the areas of communication across cultures. In Year 3, more staff members responded that they "rarely" or "never" experienced difficulties working with individuals from different backgrounds (a 32 percent change from Year 1) or felt frustrated with misalignment of students' actions and behavior with their own culture (a 13 percent change from Year 1) (Figure 15).

Figure 15. Positive changes in self-assessment results about communication across cultures



Source: Self-assessment survey (Year 1: n = 182; Year 3: n = 73)

Despite the positive changes described above, we found a decrease in one of the self-assessment items related to cultural understanding and responsiveness. Specifically, in Year 3, nearly 11 percent fewer respondents selected "often or "very often" in their observation of how social factors, such as race, ethnicity, income, and class, affect staff members, students, and families, compared with Year 1.

Interview data supported the mixed survey results, with several respondents describing the work still to be done to incorporate a racial equity framework into trauma-informed practices and general school practices.

*I feel like that's part of the systems work we haven't quite touched on yet—the systemic racism piece, where we are working with student populations that are experiencing generational trauma, as well as [specifically] navigating systemic racism that's right here in their daily life. (Interview participant)*

*We have a lot of work to do in terms of culturally responsive teaching and combating institutional racism. It's just gone at a snail's pace. There's this real hesitance to even talk about race and cultural competency ... When you talk to folks higher up in the district office level, they will say, "Our staff's not ready" or "Our staff would be uncomfortable" ... what I am hearing when they say that is "Our students need it, but it might be difficult for the adults." Well, then the adults need to get over themselves; the kids need it, and we're here for the students. (Interview participant)*

On the Year 3 annual staff survey, a respondent said the school's adoption of trauma-informed practices has not emphasized resiliency enough:

*I'll take more interest when I start hearing the term "resilience." There seems to be too much room for students to fall into the victim role. (Open-ended annual all-staff survey response)*

## Changing Practices

### Pilot Schools are Adopting Trauma-Informed Discipline Practices, but Some Teachers Struggle With Issues of Accountability

Over the course of the three-year pilot, leaders at both schools reported that some of their staff members had begun to shift their “traditional” perceptions of discipline (e.g., punitive and exclusionary discipline involving the use of shaming and isolating) toward a more restorative approach. At Central High School, discussions about interventions to influence behavior changes versus punishing students and revising their discipline matrix started as soon as August 2017 as part of PBIS work. This discussion also resulted in a set of tools for staff members, including a behavior intervention toolkit, general expectations of student behavior, guidelines for calling home, a list of definitions relevant for behavior supports and interventions, and tips for partnering with parents/families.

Tigard High School trained security staff members on the concepts behind Dan Siegel’s “Flip the Lid” hand model representation of the brain, and they have used it during their interactions with students. In addition, some staff members have started replacing terms like “misbehavior” to “stress behavior,” indicating they learned the effects of trauma on student learning—and that their students may have been in “survival mode” and would benefit from the space and ability to self-regulate. One staff member explained how trauma-informed discipline practices still hold students accountable for their behaviors:

*Glad we are striving to both hold students accountable for their actions, as well as working to understand them so that we don't antagonize the situation and rather reach out to offer support to help minimize the undesired behavior. I appreciate knowing also that there will be a few kids that don't respond to trauma-informed approaches and will need to be referred to resources beyond our school. (Open-ended annual all-staff survey response)*

When events such as physical altercations occurred, Tigard High School leadership reported that staff members were no longer “kicking kids out” but were “working on how to keep kids here.” Truancy letters were redesigned to contain more positive messages. Teachers and administrators recently sent 250 “positive postcards” to students’ families. According to the leadership team, several students found that these postcards were helpful and personally thanked the principal for sending them.

During a meeting at Central High School, the leadership team also shared that it has intentionally introduced routines and strategies from AVID to all grade 9 and 10 classrooms beginning in 2018–19 to create a sense of consistency for students, including a new approach to attendance.

*Because of my experience in the cohort, it has allowed me to change my approach when the students are in my classroom ... One of the things that used to just drive me nuts is students that were either tardy to class or had a lot of absences. And I wouldn't rip on them when they would come in, but I have a look ... of disappointment when you walk in late. And now my view is, when they come in, I celebrate —“Hey, thank you for showing up! I'm glad you're back. I know you've been gone a couple of days, but we really missed you.” (Interview participant)*

At Central High School, the members of the leadership team mentioned during one of their meetings that they noticed a difference in the school's culture and climate. There seemed to be an increasing focus on building resilience; some staff members said they immediately used restorative practice skills they had learned, including beginning the day by asking their students, “What do you need to be successful today?” instead of starting with instructional topics. In the annual self-assessment survey responses, over 16 percent more staff members reported in Year 3 that they “rarely” or “never” felt worn out from giving behavioral and social supports to students compared with Year 1.

However, not all staff members shared the same shift in perspective about student discipline. Multiple staff members expressed a desire to balance trauma-informed approaches to discipline with suitable measures of accountability that did not give the impression of excess permissiveness or “favoritism” for certain students.

*I feel that these practices work for most students but feel there still needs to be accountability for some students who are making poor/inappropriate choices. Other students have a hard time knowing and understanding why, if they were to make the same choices, the consequences would be different for them. As a teacher, I feel strongly about helping ALL students but also know that I have personally felt we have given certain students too much leeway with their actions as a result of our trauma-informed approach. (Open-ended annual all-staff survey response)*

In one-on-one interviews with cohort and leadership team members from both schools, one recurrent theme regarding why some remained skeptical about implementing trauma-informed practices was their long-held belief based on years of professional experience that the “traditional” approach to student discipline set clear expectations of acceptable behavior, but trauma-informed practices did not. In one interview, this was a notable source of internal conflict but also an impetus for change:

*When I deal with discipline, it has changed because [of] everything I've learned about this trauma-informed approach. The tough part about it is the adjustment I [had] to make was not easy, and I'm still trying to adjust because I am focused more on the human interaction between myself and the students compared to before. After getting involved with [the] trauma-informed approach, it's opened my eyes that there is more to just learning or teaching. So, I feel a little bit torn because what I'm trying to do in my profession is*



*affected by the way I'm trying to interact with human beings who actually need a lot of guidance. (Interview participant)*

At Tigard High School, teachers and union representatives periodically met with school administrators to express their concerns that the “students were not being held accountable.” In response, the Tigard High School leadership team developed clear communication plans with all staff members to create consistent accountability (i.e., clear rules, clear consequences, consistently applied) and assured its support for this shift to all staff members.

Several staff members expressed concerns about losing momentum for the work unless trauma-informed practices could become more integrated into their routines:

*I think all of the ideas and models of being trauma-informed is a wonderful thing. I feel that some staff started off wholeheartedly, but along the way, have lost the sense of urgency or importance of doing this. (Open-ended annual all-staff survey response)*

## Several Cohort Members Reported Applying Trauma-Informed Practices Beyond School Settings

In Year 2 (when the cohorts were created), several cohort members reported that they had begun to take what they had learned in Year 1 about trauma-informed principles and strategies and apply it to their own personal social interactions with others (including co-workers, friends, and family members) outside of school. In Year 3, we heard from more cohort members that they also engaged in such activities, and they reflected on how they have developed a deeper understanding of trauma-informed principles over time. For example, one cohort member described using trauma-informed approaches with their child, and another reflected on a colleague who was skeptical about trauma-informed practices until learning how they could apply to non-work relationships.

*[They] went to a training over the summer. [They] went in there thinking, “Oh, this isn't going to be great” and just kind of grumpy about the whole thing and then realized, “Oh, wow, my family likes me better. I have a better relationship with my [partner], and my kids are happier, and we're all happier now, and I'm a better teacher.” Pretty powerful when you've got somebody who's made that level of change, and they're willing to share it with other staff members. (Interview participant)*

## Barriers to Implementing Trauma-Informed Practices Included Stress, Varying Levels of Motivation, and Unmet Needs for Support

Staff members' responses to many items on the self-assessment survey indicated burnout and stress that is transferred from work to their personal life. A staff member commented on this topic in the annual staff survey administered in Year 3:

*The current amount of prep time we have doesn't support teachers enough to allow them self-care. (Open-ended annual all-staff survey response)*

Based on interviews with cohort members at both schools, there were changes in barriers and challenges identified from Year 2 to Year 3. In Year 2, there was more of a focus on time and lack of resources to implement practices due to competing school priorities, school initiatives, and other work. In Year 3, however, nearly everyone said trauma-informed approaches were not being implemented evenly across departments for many reasons, such as lack of buy-in from staff members, lack of clarity about expectations for implementing practices, personality differences, and autonomy of classroom teachers. Some described implementation within departments as varying, with some early adopters and some late adopters.

*I think where we are now is like creating that second wave of investment, where we are treating those pilot leaders as change makers that spread it in their departments ... I think we're going to have some really positive conversations around instruction that's based on the pilot and what's worked in that and have some leverage power to make change in other areas where there might be more resistance to change. (Interview participant)*

Self-assessment survey results suggested some unmet needs for support among school staff members. Nearly 11 percent fewer staff members in Year 3 reported that relations among the colleagues at their school were "often" or "very often" characterized by friendliness, concern for one another, and support compared with Year 1. A similar decrease was found in staff members' reporting that their supervisor "often" or "very often" was supportive or praised good work.

## VI. FINDINGS ON COMMUNICATION AND DIFFUSION OF TRAUMA-INFORMED PRACTICES IN PILOT SCHOOLS

To effect schoolwide changes, trauma-informed information must be shared among and between staff members in different roles. To address research question 3, we examined ways information was shared through different communication channels and social networks within the pilot schools.

### Communication Channels

#### Pilot Schools Shared Information About Trauma-Informed Practices Through Informal Dissemination Events and Electronic Communication

Both schools organized new and informal dissemination events to spread trauma-informed information in Years 1 and 2. For example, the trauma-informed school coordinators **facilitated** coffee chats and book clubs at various times during school hours (including lunch). During these events, the trauma-informed school coordinators engaged staff members in a **process of interactive problem-solving in supportive, nonjudgmental settings**. These events sometimes also became a **learning collaborative**, where the trauma-informed school

coordinators **facilitated the formation of groups of staff members and fostered a collaborative learning environment to discuss trauma-informed practice ideas and brainstorm improvement techniques.** In interviews with leadership team members at both schools, a recurrent theme was the importance of these informal interactions with “core resources,” individuals with whom contacts were regular and open for sharing thoughts and ideas about practices.

*In the book club, we took our school's mission statement, and I just asked people candidly, “Do you feel like this works for us? If we apply a trauma-informed lens, does this work for us?” And they gave a bunch of feedback. And I had shared that out with last year's administration and shared it again this year, and the leadership committee adopted those changes to the school's mission statement. So, that was kind of exciting—and that some of the work that we had kind of put in last year is now ... going to be practiced.*  
(Interview participant)

Findings from the infrastructure survey revealed that at least 50 percent of the staff members across both schools were aware of trauma-informed information being shared during informal dissemination events, such as coffee chats and book clubs. These channels, however, reached a limited number of staff members due to their timing; some staff members said they had schedule conflicts or preferred to use their time (e.g., lunch) for self-care.

Staff members' engagement in trauma-informed conversations in these informal dissemination sessions ranged from 15 to 35 percent across both schools over the three years. Further, 20 to 30 percent of staff members said these events were useful. Although such events were discontinued at Central High School during Year 2, Tigard High School continued to use these events to offer opportunities for deeper learning of trauma-informed concepts. The level of awareness and perceived usefulness of coffee chats and book clubs at Tigard High School grew incrementally across the years (22 percent in Year 1 to 37 percent in Year 3). Not many Tigard High School staff members were able or available to attend these events (three to 10 staff members were at each event across the years), but as stated earlier, these events were offered for a targeted audience: staff members interested in deeper discussions on trauma-informed practices.

In addition to informal dissemination events, electronic communication provided important channels for sharing information about trauma-informed practices. Both schools created specific websites to **distribute educational materials** on trauma-informed practices starting in Year 1 of the pilot. In Year 1, over 90 percent of staff members at Central High School were aware of trauma-informed resources made available on websites created by the trauma-informed school coordinators, and 64 percent found it to be useful. At Tigard High School in Year 2, about 25 percent of staff members were aware of the trauma-informed websites and found them to be useful. However, by Year 3, almost 50 percent became aware of the websites, and 37 percent said the websites were useful. Time constraints were consistently found to be a barrier for staff members accessing information on websites, and some expressed in Year 2 and Year 3 annual staff surveys that they didn't have time to “sit and poke through the websites.”

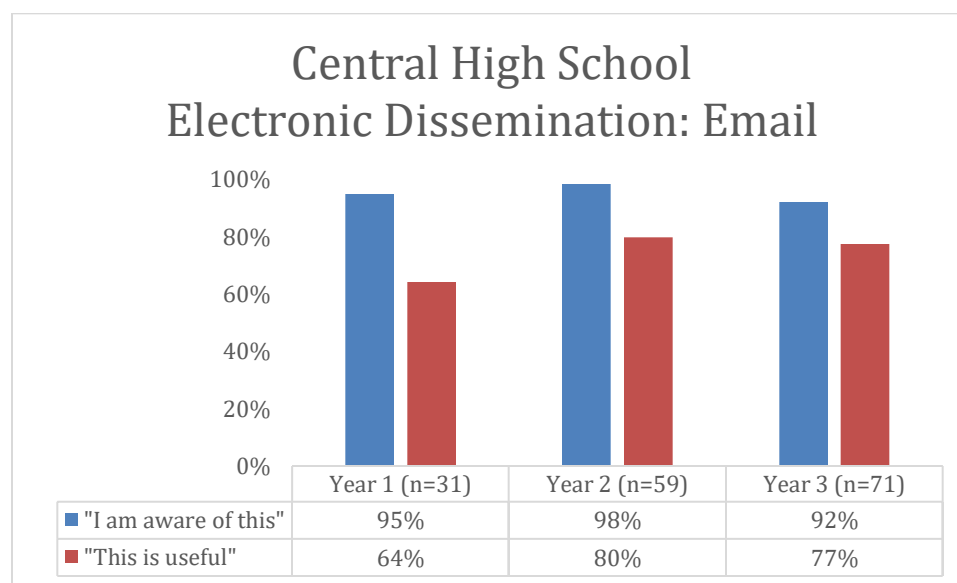
*[The websites] require too much additional time. Given my large class sizes, I don't have time to take advantage of some of these to see if they are useful or not.* (Open-ended annual all-staff survey response)

Trauma-informed school coordinators sent monthly emails to all staff members as another **method to distribute educational materials** about trauma-informed practices. At both schools, 80 to 90 percent of staff members were aware of these emails across the three years (Figures 16 and 17). Although 60 to 80 percent of staff members at both schools said these emails were useful over the three years, staff members also consistently reported receiving high volumes of emails on other topics and reported lacking sufficient time to read emails with specific trauma-informed information. In the Year 3 annual staff survey, some staff members reported preferences for in-person or more personal opportunities:

*We are bombarded with emails daily. Having time to sit down with colleagues and process information is a much better way for me to assimilate it and think through how it impacts our students.* (Open-ended annual all-staff survey response)

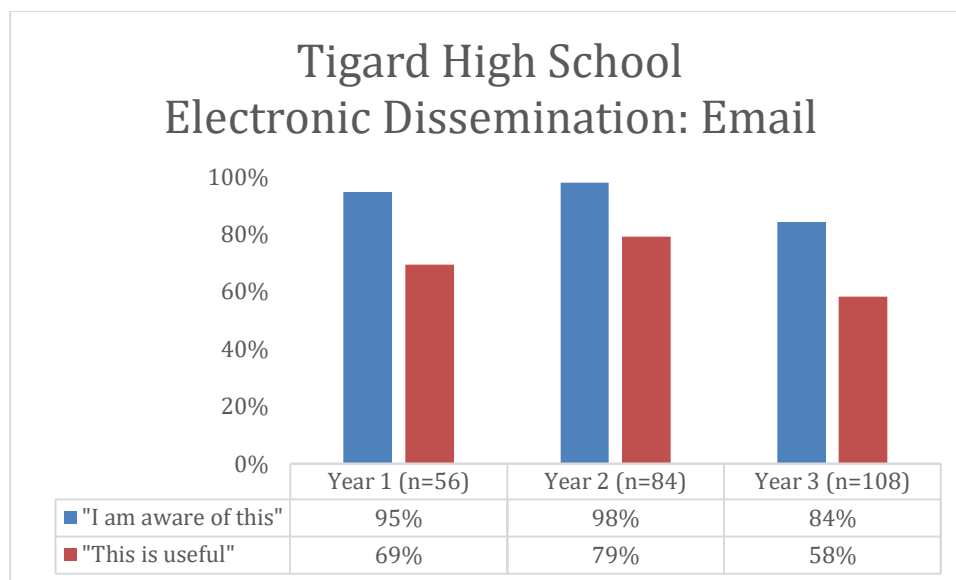
*I am more receptive to personal contact.* (Open-ended annual all-staff survey response)

Figure 16. Central High School staff members reported awareness and perception of usefulness of emails with trauma-informed information



Source: Infrastructure survey

Figure 17. Tigard High School staff members reported awareness and perception of usefulness of emails with trauma-informed information



*Note: Year 2 data were aggregated from two data points*

*Source: Infrastructure survey*

In Year 3, Tigard High School started to include trauma-informed information in a weekly newsletter as another **educational material distribution** source. Instead of creating a separate channel of information for trauma-informed approaches, the leadership team strategically capitalized on the newsletter, an existing source of information for all staff members, and was intentional in “blending” trauma-informed practices into other information. Over 80 percent of staff members reported being aware of trauma-informed information, and 58 percent said the information was useful.

## The Role of Social Networks Within and Outside the Cohort

A foundational assumption of this project was that staff members’ social networks would influence the diffusion of quality trauma-informed information in schools and across school systems. To understand how trauma-informed information might spread within the cohort and among non-cohort members, we analyzed the social networks of cohort members based on survey data. Social network analysis (SNA) was used to describe the structure of relationships within the cohorts, as well as between cohort members and their immediate non-cohort connections.

Applying the lens of Rogers’ diffusion of innovation theory (2003), we examined cohort members’ conversations across both schools with respect to engagement with both other cohort members and non-cohort members (the latter were individuals whom cohort members self-identified as people they turned to for supporting the implementation of trauma-informed approaches). By mapping interaction relationships within and outside the cohort, we sought to identify potential opportunities and challenges in how trauma-informed information might have

flowed between individuals who received it directly through cohort participation and those who did not. Ideally, we were looking for signs of trauma-informed information being discussed not only among cohort members but between cohort members and other staff members, suggesting diffusion (or the spread of the ideas).

Information from the social networks was first captured through the 2017–18 cohort survey via this item: “Name (A) three individuals in your cohort and (B) five individuals outside of the cohort that you turn to for support in implementing trauma-informed practices.” In 2018–19, we used interviews to see whether and/or how the relationships identified in the survey had changed over time. This switch in data collection method—driven by the exploratory nature of the pilot and the need to adapt to shifting priorities, timelines, and needs—limited our ability to fully capture all the types of conversations, which are represented by gray lines in the figures below. We used UCINET software<sup>18</sup> to visualize and analyze the networks (Borgatti, Everett, & Freeman, 2002).

Only cohort members at both pilot schools completed the survey, so the networks described in this study do not represent all possible relationships in either school system. Therefore, although we can generally describe the immediate networks represented by the cohorts’ interactions with non-cohort staff members, there may be different relationships through which trauma-informed knowledge might have spread that are not captured here. This is a challenge that is common in studies using SNA in this way (Wasserman & Faust, 2009) and was considered during the analysis. Although the design had its limitations, the SNA used in this study can provide important insights into the context of diffusion in the pilot schools.

In the figures below, we present two sets of social network maps to visually represent these relationships. In these maps, each box represents an individual, and the lines connecting these boxes represent conversations or other exchanges between individuals.

The first set of maps presents variation in staff members’ roles within cohort relationships to explore ways in which trauma-informed information diffused throughout the school versus remaining in a particular department. The second set of maps presents changes in the frequency and nature of interactions within the cohort and with identified non-cohort members to understand how the pilot might have changed the strength of the relationships regarding trauma-informed practices in each school. The Tigard High School network maps do not specify teachers’ subjects for suppression reasons (i.e., there were fewer teachers in the cohort’s network).

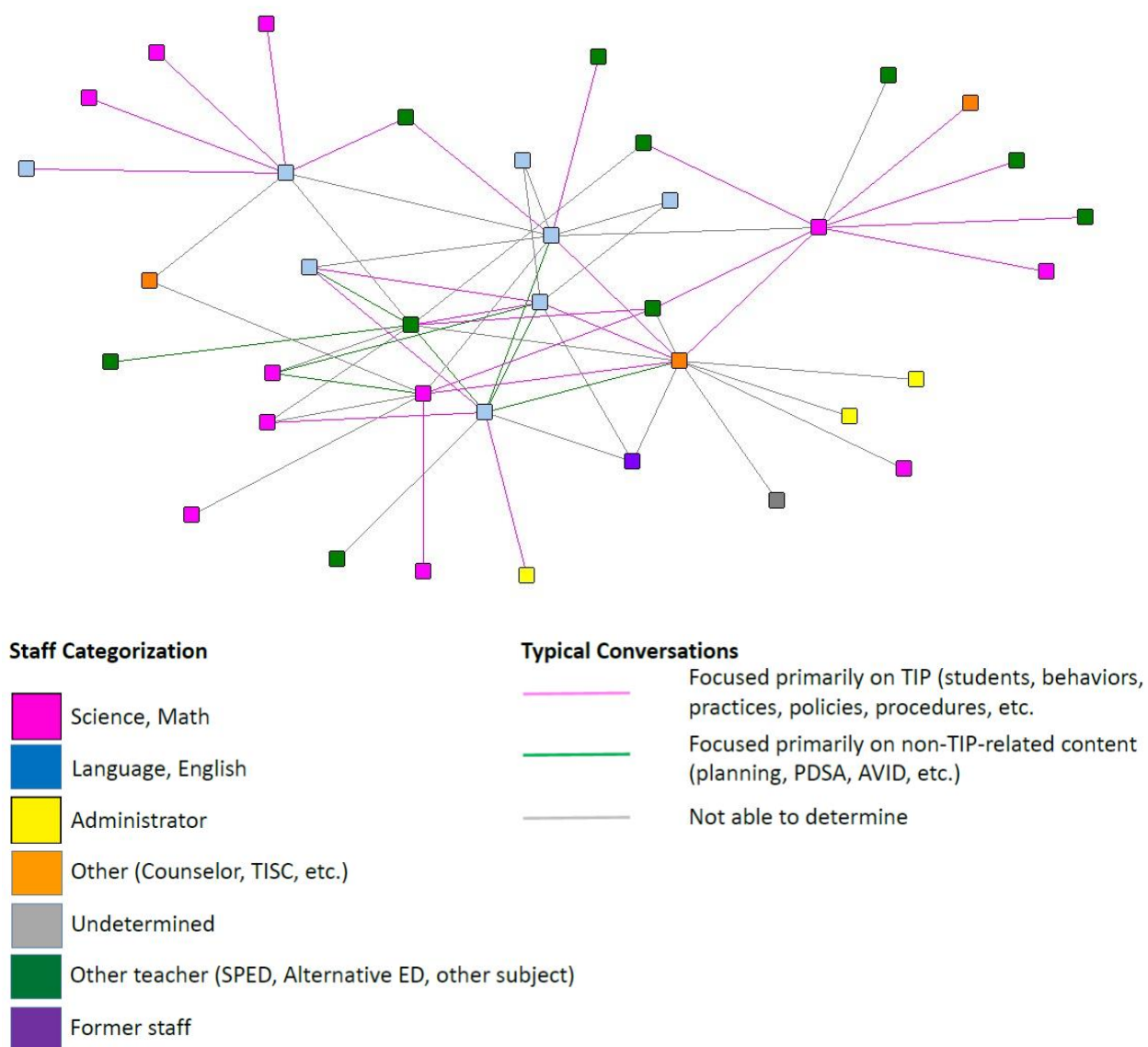
## The Spread of Trauma-Informed Information Across Staff Members’ Roles Differed at Each School

To study the extent of diffusion or “spread” of trauma-informed information across different staff members’ roles, we color-coded the roles of the cohort and other staff members on the same network maps (Figures 18 and 19). Boxes of different colors represent staff members in different roles (e.g., teachers and non-teaching staff members from different departments). In these maps, we are paying the most attention to the pink lines, which represent conversations

<sup>18</sup> <https://sites.google.com/site/ucinetsoftware/home>

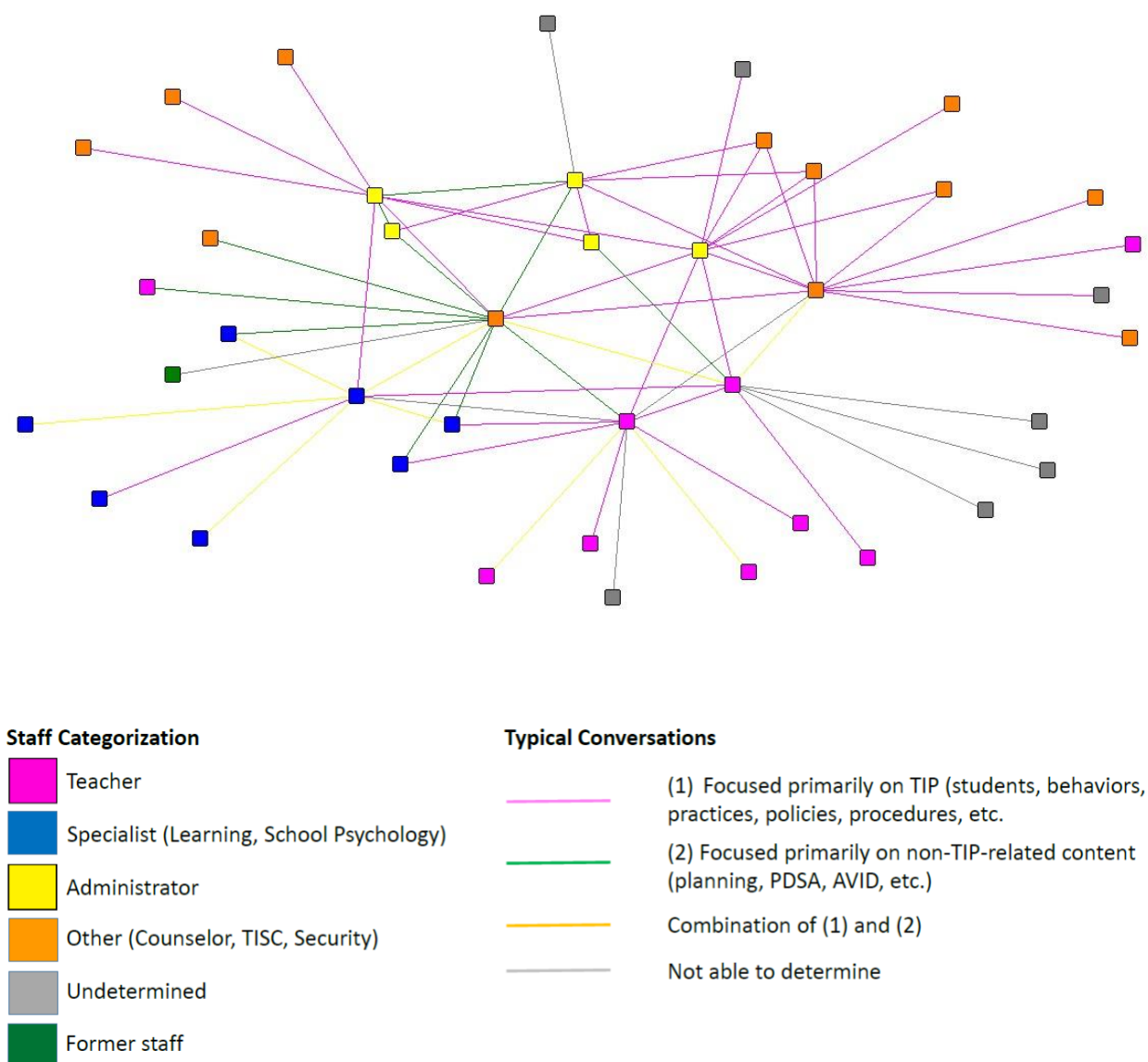
about trauma-informed practices. The more pink lines connecting boxes of different colors, the more diffusion is happening across roles.

Figure 18. Central High School's typical conversations by role



Source: 2017–18 cohort survey and 2018–19 interviews with cohort members

Figure 19. Tigard High School's typical conversations by role



Source: 2017–18 cohort survey and 2018–19 interviews with cohort members

Some notable differences stand out when comparing these two maps. At Central High School, we noted a lot of teacher-teacher interaction, with many conversations about trauma-informed practices (pink lines) connecting teachers from different departments (e.g., language, math, science, special education, and alternative education). In this teacher-driven network, teachers played more of a connective role than administrators in the schoolwide conversations about trauma-informed practices.

At Tigard High School, on the other hand, administrators (yellow boxes) played a much more connective role, serving as a conduit of information for teachers, specialists, and others on campus, who tended to be more clustered in like roles (as demonstrated by the concentration of



same-color boxes in various parts of the map). This observation was echoed in interviews, during which many of Tigard High School's cohort members said trauma-informed approaches were implemented in certain departments where people are members of the cohort (referred to by several cohort members as "pockets").

Differences found in the spread of trauma-informed information between the schools may have been related to the recruitment methods used to form the cohorts. At Central High School, the application process was open to all teachers, which likely attracted early adopters of trauma-informed practices from different departments. Their primary role would naturally afford them opportunities to interact with other teachers. At Tigard High School, administrators selected the cohort members and were more involved in the cohort activities.

Regarding implications for the diffusion of trauma-informed practices, there are benefits to each of these types of networks. In Central High School's teacher-driven network, practices are likely to spread more across different academic departments. Tigard High School's network suggests that inter-department sharing is driven more by administrators, which may introduce the benefit of having "champions" of trauma-informed practices in leadership roles in the school.

## Interactions Between Cohort Members Increased Over Time

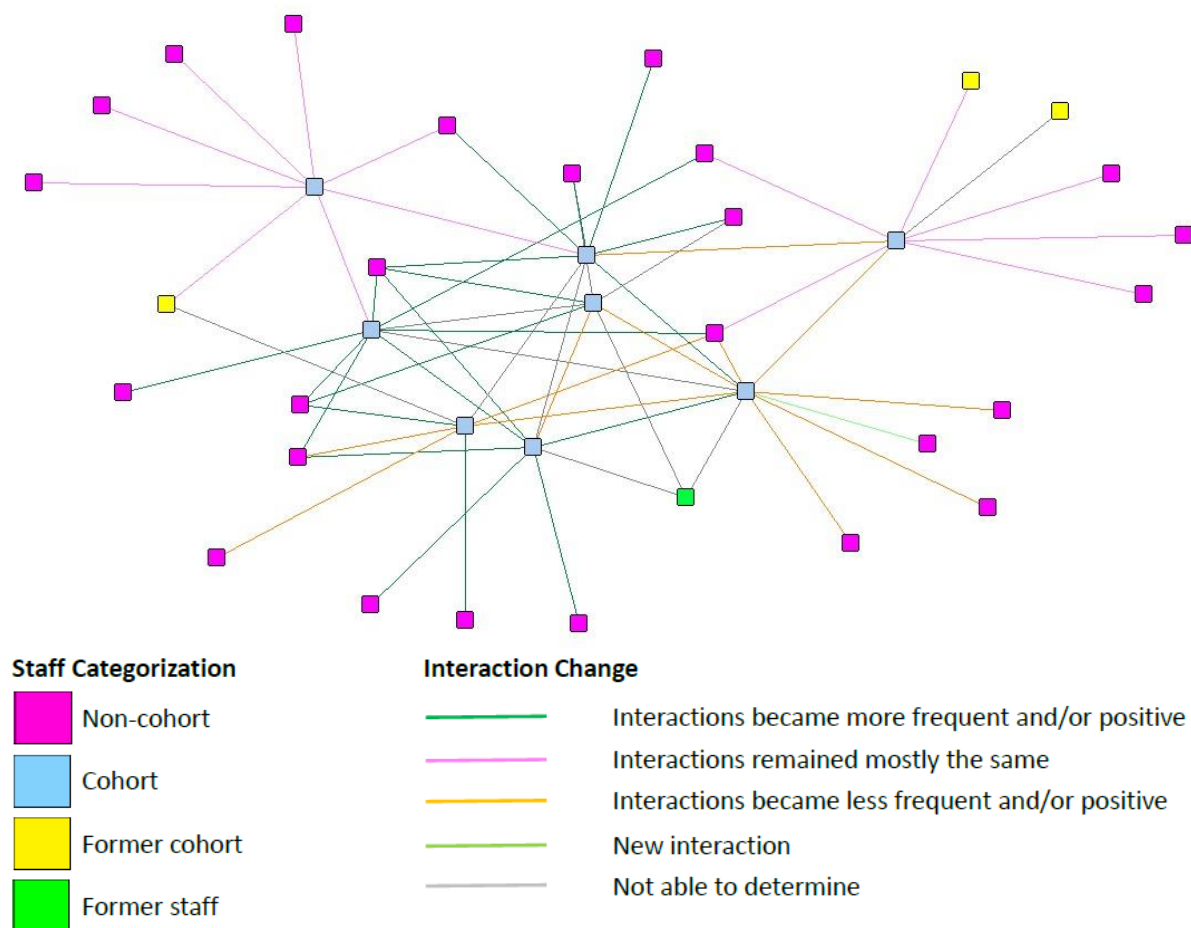
The cohort model was intended as an implementation strategy to share trauma-informed information through high-quality working relationships and networks within and outside the cohort. We attempted to further study cohorts' information-sharing patterns over time by visually examining the changes in their interactions (Figures 20 and 21). To construct these maps, cohort members from both schools were asked whether their interactions with cohort and non-cohort members had changed across Years 2 and 3.

Overall (and not taking into account the cohort vs. non-cohort distinction between individuals), we found that nearly 40 percent of interactions had become more frequent and/or positive (depicted as dark green lines in Figures 20 and 21).

At Central High School, 20 percent of interactions remained the same (pink lines), and 28 percent of interactions became less frequent and/or positive (orange lines). At Tigard High School, 38 percent of interactions remained the same, and 11 percent became less frequent and/or positive.

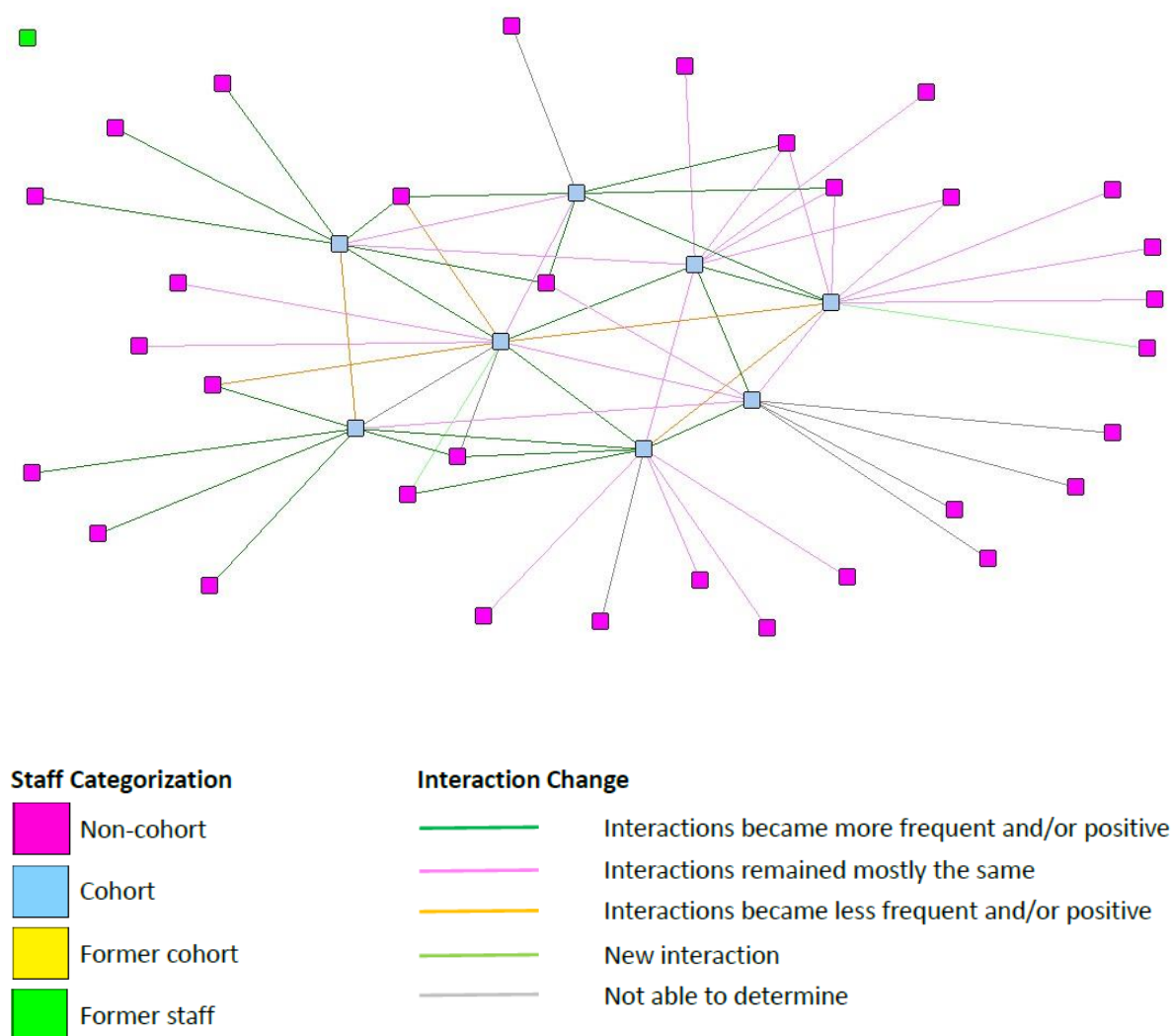
There was cohort attrition from Year 2 to 3. Members who left the cohort (aka "former cohort") in Year 3 are represented by yellow boxes in the maps below.

Figure 20. The interaction changes of Central High School's cohort



Source: 2017–18 cohort survey and 2018–19 interviews with cohort members

Figure 21. The interaction changes of Tigard High School's cohort



Source: 2017–18 cohort survey and 2018–19 interviews with cohort members

According to Central High School's map, most cohort members (blue boxes) increased their interactions with one another over time (green lines), and they also increased their interactions with a few non-cohort members. Two cohort members did not change the frequency of their conversations with others (pink lines), and the interactions of one cohort member decreased (yellow lines).

At Tigard High School, meanwhile, nearly all interactions between cohort members increased. The interactions between cohort members and non-cohort members primarily stayed the same, although some increased—as shown by the green lines on the left side of the map that connect cohort members (blue boxes) with non-cohort members (pink boxes).

Together, these findings point to the relationships within the cohorts evolving to be closer over time, which supports evidence from research that initiatives take time to “mature” (Sugai,

Horner, Fixsen, & Blase, 2010). The findings also suggest that opportunities exist at both schools to increase interactions between cohort and non-cohort members.

## VII. LIMITATIONS OF THE STUDY

### Although the Pilot Study Explored Issues of Equity, the Research Design Itself Did Not Incorporate a Consistent Equity Framework

A major objective of the pilot study was to explore ways that trauma-informed approaches relate to changes in beliefs and practices, as trauma-informed approaches are widely considered a mechanism for promoting more equitable outcomes in school settings. Because equity is of central importance in the outcomes of trauma-informed work, there are opportunities for pilot schools to implement activities with a more explicit equity focus. Equity integration was missing from the original definition of trauma-informed practices in the legislation that guided the pilot study, and it has been added in this initiative due to acknowledgement of its importance and value in meaningfully creating trauma-informed efforts. This change reflects state education leaders' deepening focus on equity, as reflected in ODE's education equity stance:

*Education equity is the equitable implementation of policy, practices, procedures, and legislation that translates into resource allocation, education rigor, and opportunities for historically and currently marginalized youth, students, and families, including civil rights-protected classes. This means the restructuring and dismantling of systems and institutions that create the dichotomy of beneficiaries and the oppressed and marginalized.<sup>19</sup>*

There are also opportunities to strengthen the design of the pilot study (or future related studies) to reflect evolving knowledge and priorities specific to equity in research. Increasingly, researchers and practitioners alike recognize how critical an equity framework is for understanding and addressing the key issues that both drive and challenge the effectiveness of initiatives. Equity is not something that can be tacked on to a specific feature of a study—it requires an ongoing, holistic approach that encompasses all elements of research design, from partnering with stakeholders to understanding root causes related to racism and structural oppression to collecting data that incorporates the voices of the very individuals the work seeks to affect in both content and format. This level of attention is necessary to ensure findings are shared in actionable ways with careful consideration of their potential impact.

In other words, equity in research today is not just what questions we ask but also whom we ask, how we ask, and who benefits from the answers. This shift in focus is reflected in the recent development of equity-based frameworks and tools for research and evaluation that address issues of race and cultural responsiveness (Park, Runes, Katz, & Lou, 2018), health

<sup>19</sup> <https://www.oregon.gov/ode/students-and-family/equity/Pages/default.aspx>

equity (National Academies Press, 2013), and economic disparity (Cookson, 2016), among others.

## The Pilot Study's Research Design Limits Causal Inference

The project was designated by the Oregon Legislature as a pilot, which enabled and supported an initial exploration of implementing trauma-informed practices in a naturalistic, authentic setting with a small number of participating schools and individuals. Although the project's research design allowed us flexibility in collecting that information, it was not designed to establish cause-and-effect relationships between practices and student outcomes.

## Participant Turnover Created Inconsistencies in Data

Another limitation of the project was unique to one of the participating schools. Central High School experienced annual leadership turnover from 2016 to 2018, which appeared to influence (in some manner) the momentum of the buy-in for trauma-informed practices by the school and staff members, as well as clarity of expectations, direction, and consistency.

Lastly, we changed the surveys and interviews over time as we learned more about practices at the two schools and their contexts. As an iterative process, it is likely we gathered some information that might have been interesting and insightful but nevertheless made it difficult to make any direct “apples to apples” connections and comparisons. In any research study, survey responses can be influenced by various factors, such as timing and data collection fatigue.

## The Pilot Study Does Not Capture Student Voice or Student-Level Changes

As stated earlier, we anticipated that the first two to three years of the pilot would be used for initial adoption and implementation, with many activities centered on changes in school staff members (e.g., shift in attitudes, knowledge of trauma-informed practices). Further study is needed to explore the voices of students and their families, which would involve a more participatory research design (e.g., de Koning & Martin, 1996; Minkler & Wallerstein, 2003) with a trauma-informed lens. This could entail, for example, involving students, faculty members, staff members, and administrators at the outset regarding how the study should be carried out via research activities designed with SAMHSA's four R's (SAMHSA, 2014). Such a design would allow for a more robust examination of the student-level impact of trauma-informed practices, particularly whether the system is promoting more equitable educational outcomes.

In this project, and as a result of our focus on implementation specifically within the timeline specified in HB 4002, we were not able to directly measure changes at the student level via the 26 implementation strategies used by the pilot schools. Part of this has to do with the project's design—specifically, the presence of other initiatives used concurrently at the schools. This prevented a direct causal link of student-level changes to any one initiative or practice, as we cannot isolate those specific effects to pinpoint resulting changes. Further, implementation timelines of other more mature schoolwide programs, such as response to intervention, show that successful implementation can take up to two years for initial adoption and implementation,

three to five years for sustained implementation and durable outcomes to be realized, and more than four to five years for sufficient capacity for scaling and continuous regeneration to occur (Sugai et al., 2010).

## VIII. CONCLUSIONS AND RECOMMENDATIONS

The recommendations in this report emerged from the findings of an exploratory pilot project focused on the process of implementation. Many of the project's findings point toward the promise of trauma-informed practices to promote positive shifts in adults' beliefs and practices regarding trauma and equity. From an implementation standpoint, we found that the pilot schools were able to use numerous implementation strategies to integrate trauma-informed practices into their existing culture and system.

We conclude that with continued funding and support from state leaders, Oregon's education system would benefit from policies and practices that help schools formally adopt, institutionalize, and sustain trauma-informed practices. An interview participant echoed this recommendation:

*I think [trauma-informed practices are] a great approach. I think it should be an institutional part of all schools. Of all the initiatives that have drifted through my long career, I think this is the one that really has legs and should stick rather than being another passing educational fad. It nails the fundamental psychology of students and staff and underlies almost all of the issues we face.* (Open-ended annual all-staff survey response)

In this final section of the report, we outline our conclusions for the pilot and recommend next steps that are actionable for educators, families, state lawmakers, researchers, and other stakeholders.

### Invest Time in Training

A full-day training at Central High School was a well-received way of introducing trauma-informed approaches to staff members, especially when many of the concepts were new to most staff members. The full-day format also enabled staff members to engage in group discussions and collaboration.

Because research has demonstrated that the one-time "train and hope" model cannot effectively sustain practitioner behavior change (Herschell et al., 2010; Joyce & Showers, 2002), we recommend that schools continue to provide ongoing channels for spreading and reinforcing trauma-informed concepts to staff members while integrating concepts of equity, diversity, and inclusive practices. We also observed that training opportunities for classified staff members was more limited compared with those for licensed staff members, primarily due to contracting and scheduling issues. District-level trainings or separate training events for this group of staff members could be a viable solution on a short-term basis.

## Seek Ways to Increase Organizational Capacity

We found that pilot schools used 26 implementation strategies (Powell et al., 2015), many of which required a high level of planning and numerous resources on an ongoing basis. As part of the pilot project, Central and Tigard high schools had access to funding to hire a dedicated staff member, the trauma-informed school coordinator, to oversee this level of support and coordination, which helped them increase their organizational capacity. For schools or districts that have the resources to hire their own trauma-informed school coordinator, we recommend that leadership review and adopt the revised job description (see Appendix I).

Many schools may not be able to hire a full-time trauma-informed school coordinator due to funding or human resources constraints. For schools that do not have the resources to hire staff members specifically to coordinate implementation strategies as the trauma-informed school coordinators did, establishing or repurposing a small team may be an option. The Missouri Model,<sup>20</sup> a developmental framework for implementing trauma-informed work used by the Missouri Department of Elementary and Secondary Education, recommends a small core trauma team (five to 10 people) to analyze existing practices and policies, create action plans, and implement change.

Both pilot schools created early implementation teams (referred to as the cohorts) that served an important role in promoting readiness and guiding pilot schools deeper into the stages of implementation. According to NIRN's implementation science framework,<sup>21</sup> creating a team of early implementers is part of the first stage of implementation (i.e., exploration). With the support of the leadership teams, the cohorts helped develop the support needed for systemwide implementation, which also falls under the second stage of implementation (i.e., installation).

As part of this pilot study, a work group met in October 2018 to discuss descriptions for a trauma-informed school coordinator and trauma-informed team (see Appendix K). When discussing the option of a team replacing a full-time trauma-informed school coordinator, the work group expressed concerns about the ability of a small team to increase organizational capacity without the oversight of a coordinator. Selecting a team based on a set of core competencies—with input from stakeholders—may help offset these concerns.

NIRN<sup>22</sup> recommends the following core competencies in an implementation team:

- Knowledge and understanding of the selected program or innovation, including the linkage of components to outcomes
- Knowledge of implementation science and best practices for implementation
- Applied experience in using data for program improvement

A team approach can be effective for leveraging efforts when leadership and staff leave a school. Further, a repurposed team may understand how to address structures and systems that are inequitable. Input should be incorporated from an inclusive and representative body of

<sup>20</sup> [https://dese.mo.gov/sites/default/files/cnsl\\_Missouri\\_Model%20school\\_guidance\\_doc.pdf](https://dese.mo.gov/sites/default/files/cnsl_Missouri_Model%20school_guidance_doc.pdf)

<sup>21</sup> <https://nirn.fpg.unc.edu/>

<sup>22</sup> <https://nirn.fpg.unc.edu/>

stakeholders to determine recruitment methods, training approach, and core competencies desired for forming leadership and implementation teams.

## Connect Trauma-Informed Practices to Other Programs and Projects to Reduce Initiative Fatigue

According to our findings, incorporating information about trauma-informed practices into existing meetings and teams raised awareness of these practices, increased perceptions of their usefulness, and sparked more conversations. Connecting trauma-informed concepts with existing programs or initiatives (e.g., PBIS/EBIS, AVID) can help reduce the perception that trauma-informed approaches are just “another thing” for staff members to do, especially those who have not fully bought in to trauma-informed approaches. Since some of the school staff members in this pilot study expressed concerns about what they perceived as permissiveness or favoritism associated with trauma-informed discipline practices, it would also be helpful practice to suggest schools provide opportunities to integrate trauma-informed principles into their discipline policies and procedures with input from students, teachers, and staff members.

In addition, social and emotional learning (SEL) approaches have been increasingly identified in research literature and adopted in schools (Simmons et al., 2018). Further, frameworks exist that may help guide the integration of trauma-informed practices, equity, and cultural responsiveness into existing SEL work. For example, CASEL developed “Guiding Questions for Educators: Promote Equity Using SEL”<sup>23</sup> for educators who use SEL to promote cultural assets in the classroom.

## Consider the Potential Reach of Different Communication Channels to Select the Best Approach for Meeting Objectives

To effect schoolwide changes, trauma-informed information must be shared among and between staff members in different roles. We found informal dissemination events (e.g., book clubs, lunches, coffee chats) were impactful for those who attended, but they reached a limited number of staff members at both schools, with time conflicts or competing priorities self-reported as barriers to greater participation. Electronic dissemination channels, such as websites, newsletters, and emails, had a slightly larger but still moderate reach. If the goal of communication objectives is to offer opportunities for deeper learning of trauma-informed practices to a targeted audience (e.g., staff members who are very engaged or early adopters), such channels would serve the purpose of letting staff members exercise their choice to learn at their own pace. If the goal is to reach as many staff members as possible, however, a more active approach should be considered. In such a case, it is imperative for schools to have a schoolwide common vision, priorities, and plan that elevate what is important to the school community.

In our SNA findings, we observed differences in the spread of trauma-informed information between the schools that may have been related to the recruitment methods used for forming

<sup>23</sup> <https://files.constantcontact.com/2b18842b001/337ea568-8725-47b3-a148-a747f20cebfe.pdf>



the cohorts. At Central High School, in which cohort participation was open to all teachers via an application process, the network was much more teacher-driven, with information about trauma-informed practices spreading more across different academic departments. Tigard High School's cohort was selected by administrators, and its network map suggested that inter-department sharing was not driven as much by teachers but by central “champions” of trauma-informed practices occupying administrative roles in the school. Schools that wish to implement trauma-informed practices should consider how teacher-driven versus administrator-driven they want their network of early adopters to be and choose their cohort recruitment strategy accordingly.

## Pursue Further Study Using an Equity Framework

The research base on trauma-informed practices in education is still nascent. This pilot study lays the foundation for a subsequent, more granular examination and analysis of trauma-informed practices in schools, which may include testing specific hypotheses about causal relationships between practices and student outcomes.

At the same time, it is critical that further research be carried out with a strong equity framework that integrates equitable, inclusive, and culturally appropriate methodologies. Park and colleagues (2018) underscore the tension that can arise between creating research designs that meet rigorous evidence-based standards and piloting programs that prioritize cultural relevance and responsiveness. Research and technical assistance have a long history of being done *to* participants rather than *with* them. This deficit model ignores the important information, context, experience, and expertise research participants can contribute to a study's design and administration. For example, students live and experience their culture through their families, so including families in the research process would provide an opportunity to integrate perspectives from those who understand their children in ways that researchers and adults in school cannot.

We recommend that future research incorporates ample time to assess the potential match between schools' needs and the trauma-informed practices being implemented and studied. The research design and any guiding frameworks should be co-developed and reviewed by students, families, and other stakeholders who may be affected—positively or negatively—by the process and the findings.

## APPENDICES

### Appendix A. Oregon House Bill 4002 (2016)

Full text of [House Bill 4002 \(2016\)](#).

### Appendix B. Oregon Senate Bill 183 (2017)

Full text of [Senate Bill 183 \(2017\)](#).

## Appendix C. Selection of the pilot schools

The selection of the pilot schools involved a two-phase process: (1) proximity to a school-based health center (SBHC) and (2) meeting the research design criteria outlined by researchers in Oregon's Chief Education Office (CEdO). A cross-match between Phase 1 and the first research design criteria yielded 18 schools (Table C1). These schools also had existing schoolwide organizational systems (e.g., PBIS, EBIS). Subsequent criteria included identification of comparison schools and evaluation of invited schools' application responses.

Table C1. Potential pilot schools

	<b>School Name</b>	<b>School District</b>
1	Roseburg High School	Douglas County SD 4
2	Hood River Valley High School	Hood River County SD
3	Franklin High School	Portland SD 1J
4	Cleveland High School	Portland SD 1J
5	Grant High School	Portland SD 1J
6	Madison High School	Portland SD 1J
7	Roosevelt High School	Portland SD 1J
8	Tigard High School	Tigard-Tualatin SD 23J
9	Tualatin High School	Tigard-Tualatin SD 23J
10	Willamette High School	Bethel SD 52
11	Forest Grove High School	Forest Grove SD 15
12	Central High School	Central SD 13J
13	Centennial High School	Centennial SD 28J
14	Century High School	Hillsboro SD 1J
15	North Eugene High School	Eugene SD 4J
16	Eagle Point High School	Eagle Point SD 9
17	Parkrose High School	Parkrose SD 3
18	Redmond High School	Redmond SD 2J

## Appendix D. Nine domains of trauma-informed practices to guide goal setting at pilot schools

### Domain 1: Sustainability and Committed Leadership

Organizational leadership acknowledges that an understanding of the impact of trauma is central to building effective learning environments, culture, and climate and makes operational

decisions accordingly. There is also demonstrated commitment to planning, implementation, and continuous improvement.

#### Domain 2: Professional Development

A commitment to all staff members and community partners working with the school to learn and use trauma-informed knowledge, strategies, and approaches is built into the professional development plan of the school site/district.

#### Domain 3: Policies, Procedures, Practices

School site/district policies and procedures reflect trauma-informed care principles for staff members, students, and families with a commitment to equity.

#### Domain 4: Behavior Responses and Supports

The school and district reflect a commitment to trauma-informed responses and support to ensure all students consistently receive positive behavioral interventions.

#### Domain 5: Equity, Diversity, and Inclusion

A commitment to ensure each and every learner will receive the necessary resources they need individually to thrive in school, no matter their national origin, race, gender, sexual orientation, differently abled status, first language, exposure to trauma, or other distinguishing characteristic. This commitment is applied to all decisions and activities that the school/district pursues.

#### Domain 6: Organizational Culture and Climate

A commitment to adopting a trauma-informed mindset, key principles, practices, and activities is reflected in the school's culture and climate.

#### Domain 7: Cross-Sector Collaboration

A demonstrated commitment to including community partners in efforts to develop a trauma-informed school.

#### Domain 8: Student and Caregiver Education and Engagement

A demonstrated commitment to including the central users of the school—students and caregivers—in efforts to develop a trauma-informed school through education and continuous feedback.

#### Domain 9: Academic Instruction and Assessment

A commitment to using trauma-informed academic practices in instructional methods, educational services, and school resources.

*Note:* The nine domains are still in development and should be reviewed by a diverse array of culturally specific organizations.

## Appendix E. Aligned domains, goals, and objectives

Domain	Goals	Objectives
Sustainability and Committed Leadership: Organizational leadership acknowledges that an understanding of the impact of trauma is central to building effective learning environments, culture, and climate and makes operational decisions accordingly. There is also demonstrated commitment to planning, implementation, and continuous improvement.	<ul style="list-style-type: none"> <li>• Strong sustained support from school board and leadership</li> </ul>	<ul style="list-style-type: none"> <li>• School board has knowledge of what it means to be a trauma-informed school</li> <li>• School and district administrators, as well as building leaders, are actively engaged in the project</li> </ul>
	<ul style="list-style-type: none"> <li>• Trauma-informed lens is applied to existing and new school initiatives, policies, hires, and standards</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a trauma-informed lens to be used in Year 3</li> <li>• Assess benchmarks for planning and monitoring progress and a means to highlight accomplishments</li> <li>• Align existing initiatives to trauma-informed implementation work</li> </ul>
	<ul style="list-style-type: none"> <li>• Robust systems in place to ensure quality</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinators are proficient in using and understanding improvement science</li> <li>• Mechanisms and processes related to trauma-informed strategies for collecting data are established, and data are used for evaluating short- and long-term change</li> <li>• Standards of practice are defined and assessed</li> </ul>
	<ul style="list-style-type: none"> <li>• A financial mechanism to maintain a coordinator or a team housed in the school</li> </ul>	<ul style="list-style-type: none"> <li>• Secure funding from local, state, or national funder(s)</li> <li>• Develop buy-in from local partners (will lay the groundwork for cost sharing)</li> <li>• Develop a summary of cost-sharing models (e.g., SRO, mental health, DHS social workers)</li> </ul>
Professional Development: A commitment to all staff members and community partners working with the school to learn and use trauma-informed knowledge, strategies, and approaches is built into the professional development	<ul style="list-style-type: none"> <li>• Shared concepts and activities to facilitate open communication about experiences, incidents, and events</li> </ul>	<ul style="list-style-type: none"> <li>• System in place for input/involvement from staff members to leadership and back</li> <li>• Explore avenues for debriefing and facilitating restorative conversations</li> <li>• System in place for input/involvement from students and families to leadership and back</li> </ul>

plan of the school site/district.	<ul style="list-style-type: none"> <li>• Staff members actively use trauma-informed strategies in interactions with students and one another</li> </ul>	<ul style="list-style-type: none"> <li>• Staff members understand and begin implementing two shared concepts</li> <li>• Cohort consistently implements activities related to shared concept</li> <li>• Half of cohort staff members are implementing key concepts and adapting concepts into their own strategies</li> <li>• Cohort's confidence in applying strategies is increased</li> </ul>
Policies, Procedures, Practices: School site/district policies and procedures reflect trauma-informed care principles for staff members, students, and families with a commitment to equity.	<ul style="list-style-type: none"> <li>• Trauma-informed lens is applied to existing and new school initiatives, policies, hires, and standards</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to explore the development of a trauma-informed lens to be used in various settings</li> <li>• Assess benchmarks for planning and monitoring progress and a means to highlight accomplishments</li> <li>• Align existing initiatives to trauma-informed implementation work</li> </ul>
Behavior Responses and Supports: The school and district reflect a commitment to trauma-informed responses and support to ensure all students consistently receive positive behavioral interventions.	<p>Staff members actively use trauma-informed strategies in interactions with students and one another</p>	<ul style="list-style-type: none"> <li>• Staff members understand and begin implementing two shared concepts</li> <li>• Cohort masters activities related to shared concept</li> <li>• Mastery is defined, and the measurement tool is identified</li> <li>• Half of cohort staff members are mastering key concepts and adapting concepts into their own strategies</li> <li>• Staff members' confidence in applying strategies is increased</li> </ul>

	<ul style="list-style-type: none"> <li>• Streamlined and efficient processes with community partners</li> </ul>	<ul style="list-style-type: none"> <li>• Resource map is created, and gaps and inefficiencies are identified</li> <li>• Streamlined data-sharing consent process with health care and other providers</li> <li>• Relationships developed with local foster care system, juvenile justice system, intellectual and developmental disability organizations, conflict resolution organizations, and culturally specific providers, including exploration of opportunities for partnership</li> <li>• Community partners understand trauma-informed concepts and how they are applied in the school setting</li> </ul>
<p>Equity, Diversity, and Inclusion: A commitment to ensure each and every learner will receive the necessary resources they need individually to thrive in school, no matter what their national origin, race, gender, sexual orientation, differently abled, first language, exposure to trauma, or other distinguishing characteristic, is applied to all decisions and activities that the school/district pursues.</p>	<ul style="list-style-type: none"> <li>• Academic and health policies, programs, and services that are culturally specific and appropriate to promote equity</li> </ul>	<ul style="list-style-type: none"> <li>• Assess current equity policies and initiatives and develop a plan for Year 3</li> <li>• Explore partnerships with culturally specific organizations</li> </ul>
	<ul style="list-style-type: none"> <li>• Staff members actively use trauma-informed strategies in interactions with students and one another</li> </ul>	<ul style="list-style-type: none"> <li>• Staff members understand and begin implementing two shared concepts</li> <li>• Cohort masters activities related to shared concept</li> <li>• Mastery is defined, and the measurement tool is identified</li> <li>• Half of cohort staff members are mastering key concepts and adapting concepts into their own strategies</li> <li>• Staff members' confidence in applying strategies is increased</li> </ul>
	<ul style="list-style-type: none"> <li>• Shared concepts and activities to facilitate open communication about experiences, incidents, and events</li> </ul>	<ul style="list-style-type: none"> <li>• System in place for input/involvement from staff members to leadership and back</li> <li>• Explore avenues for debriefing and facilitating restorative conversations</li> <li>• System in place for input/involvement from students and families to leadership and back</li> </ul>

Organizational Culture and Climate: A commitment to adopting a trauma-informed mindset, key principles, practices, and activities is reflected in the school's culture and climate.	<ul style="list-style-type: none"> <li>• Shared concepts and activities to facilitate open communication about experiences, incidents, and events</li> </ul>	<ul style="list-style-type: none"> <li>• System in place for input/involvement from staff members to leadership and back</li> <li>• Explore avenues for debriefing and facilitating restorative conversations</li> <li>• System in place for input/involvement from students and families to leadership and back</li> </ul>
Cross-Sector Collaboration: A demonstrated commitment to including community partners in efforts to develop a trauma-informed school.	<ul style="list-style-type: none"> <li>• Streamlined and efficient processes with community partners</li> </ul>	<ul style="list-style-type: none"> <li>• Resource map is created, and gaps and inefficiencies are identified</li> <li>• Streamlined data-sharing consent process with health care and other providers</li> <li>• Relationships developed with local foster care system, juvenile justice system, intellectual and developmental disability organizations, conflict resolution organizations, and culturally specific providers, including exploration of opportunities for partnership</li> <li>• Community partners understand trauma-informed concepts and how they are applied in the school setting</li> </ul>
Student and Caregiver Education and Engagement: A demonstrated commitment to including the central users of the school—students and caregivers—in efforts to develop a trauma-informed school through education and continuous feedback.	<ul style="list-style-type: none"> <li>• Shared concepts and activities to facilitate open communication about experiences, incidents, and events</li> <li>• Students and families understand how stress affects the brain and how to increase resiliency</li> </ul>	<ul style="list-style-type: none"> <li>• System in place for input/involvement from staff members to leadership and back</li> <li>• Explore avenues for debriefing and facilitating restorative conversations</li> <li>• System in place for input/involvement from students and families to leadership and back</li> <li>• Provide initial engagement and education to a subset of students</li> <li>• Provide strategies and support to increase resiliency to a subset of students</li> <li>• Provide initial engagement and education to families and caregivers</li> </ul>

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Academic Instruction and Assessment: A commitment to using trauma-informed academic practices in instructional methods, educational services, and school resources.	<ul style="list-style-type: none"><li>• Staff members actively use trauma-informed strategies in interactions with students and one another</li></ul>	<ul style="list-style-type: none"><li>• Staff members understand and begin implementing two shared concepts</li><li>• Cohort masters activities related to shared concept</li><li>• Mastery is defined, and the measurement tool is identified</li><li>• Half of cohort staff members are mastering key concepts and adapting concepts into their own strategies</li><li>• Staff members' confidence in applying strategies is increased</li></ul>
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Expected Outcomes: Improved student attendance; reduced referrals; staff members and students reporting feeling safe, empowered, and equitable; positive staff member attitudes; students come to school ready to learn; higher staff member job satisfaction



## Appendix F. Sample work plan template

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GOAL: Strong and sustained support from school board and leadership

2017–18 Objectives	School board has working knowledge of what it means to be a trauma-informed school	<p>School and district administrators, as well as building leaders, are actively engaged in the project (aligned rather than in agreement).</p> <p>A system is in place for input/ involvement from staff members to leadership and back.</p>	<p>Secure funding from local, state, or national funder(s).</p> <p>Develop buy-in from local partners (will lay the groundwork for cost sharing).</p> <p>Develop a summary of cost-sharing models.</p>
Activities			
Timeline			
Lead			
Data to be collected			
Outcome(s)			
Notes			
Status			
Expenditure			

## Appendix G. 26 Implementation Strategies Pilot Schools Used

Table G1. The 26 implementation strategies

Implementation Strategy	Definition
1 Access new funding	Access new or existing money to facilitate the implementation.
2 Assess for readiness and identify barriers and facilitators	Assess various aspects of the school organization to determine its degree of readiness to implement, barriers that may impede implementation, and strengths that can be used in the implementation effort.
3 Build a coalition	Recruit and cultivate relationships with partners in the implementation effort.
4 Capture and share local knowledge	Capture local knowledge from implementation sites (e.g., classrooms) on how implementers and educators made something work in their setting and then share it with other sites.
5 Conduct cyclical small tests of change	Implement changes in a cyclical fashion using small tests of change before taking changes systemwide. Tests of change benefit from systematic measurement, and results of the tests of change are studied for insights on how to do better. This process continues serially over time, and refinement is added with each cycle.
6 Conduct educational meetings	Hold meetings targeted toward different stakeholder groups (e.g., educators; administrators; other organizational stakeholders; and community, student, and family stakeholders) to teach them about the innovation.
7 Conduct ongoing training	Plan for and conduct training in the trauma-informed practice in an ongoing way.
8 Create a learning collaborative	Facilitate the formation of groups of educators or provider organizations and foster a collaborative learning environment to improve implementation of the trauma-informed practice.

Implementation Strategy	Definition
9 ****Compile and develop educational materials	Develop and format manuals, toolkits, and other supporting materials in ways that make it easier for educators to learn about and how to deliver the trauma-informed strategy.
10 Develop resource-sharing agreements	Develop partnerships with organizations that have resources needed to implement the trauma-informed strategy.
11 Distribute educational materials	Distribute educational materials (including guidelines, manuals, and toolkits) in person, by mail, and/or electronically.
12 Facilitation	A process of interactive problem-solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship.
13 Identify and prepare champions	Identify and prepare individuals who dedicate themselves to supporting, marketing, and driving an implementation, overcoming indifference or resistance that the intervention may provoke in an organization.
14 Identify early adopters	Identify early adopters at the local site to learn from their experiences with the practice trauma-informed strategy.
15 Involve executive boards	Involve existing governing structures (e.g., boards of directors, medical staff boards of governance) in the implementation effort, including the review of data on implementation processes.
16 Involve students and family members*	Engage or include students/families in the implementation effort.
17 Mandate change	Have leaders declare the priority of the innovation and their determination to have it implemented.
18 Model and simulate change	Model or simulate the change that will be implemented prior to implementation.

Implementation Strategy	Definition
19 Organize educator implementation team meetings	Develop and support teams of educators who are implementing the innovation and give them protected time to reflect on the implementation effort, share lessons learned, and support one another's learning.
20 Promote network weaving	Identify and build on existing high-quality working relationships and networks within and outside the organization, organizational units, teams, etc. to promote information sharing, collaborative problem-solving, and a shared vision/goal related to implementing the trauma-informed strategy.
21 Provide ongoing consultation	Provide ongoing consultation with one or more experts in the strategies used to support implementing the innovation.
22 Remind educators	Develop reminder systems designed to help educators recall information and/or prompt them to use the trauma-informed strategy.
23 Recruit, designate, and train for leadership	Recruit, designate, and train leaders for the change effort.
24 Shadow other experts	Provide ways for key individuals to directly observe experienced people who engage with or use the targeted practice change/innovation.
25 Stage implementation scale-up	Phase implementation efforts by starting with small pilots or demonstration projects and gradually move to a systemwide rollout.
26 Use train-the-trainer strategies	Train designated educators or organizations to train others in the trauma-informed strategy

Note: We adapted several instances of the original language: \*"patients/consumers" to "students and families," \*\*\*"providers" to "educators," and \*\*\*\*"clinical innovation" to "trauma-informed strategy."

Source: Powell et al. (2015)

## Appendix H. Descriptions of ARTIC subscales (45 items)

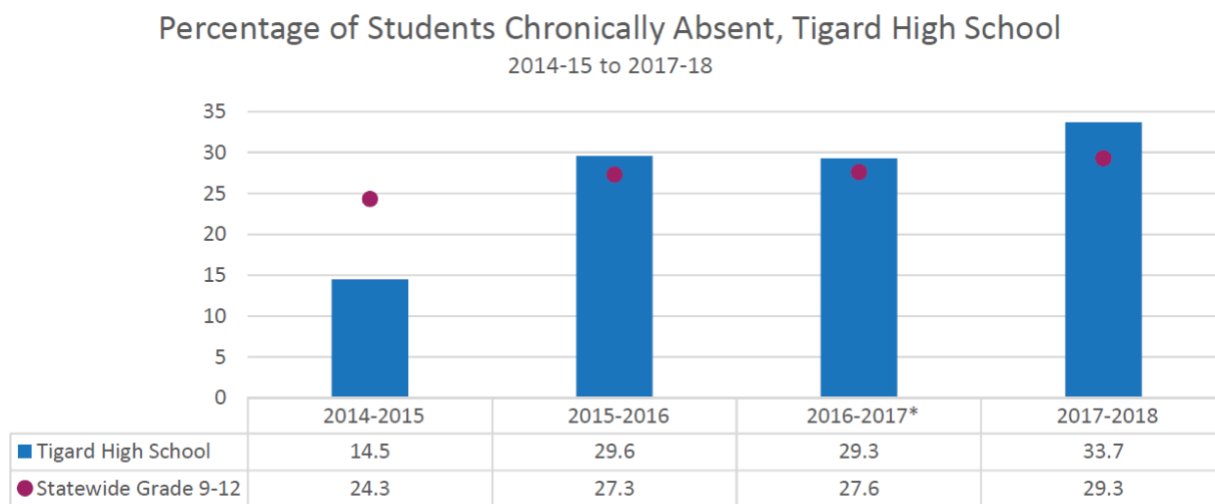
<p>Subscale (low attitude = 1, high attitude = 7)</p> <p><i>Higher scores indicate more favorable attitudes toward trauma-informed care</i></p>	Description
Underlying causes of problem behavior and symptoms (seven items)	Emphasizes internal and fixed versus external and malleable factors
Responses to problem behavior and symptoms (seven items)	Emphasizes rules, consequences, and eliminating problem behaviors versus flexibility, feeling safe, and building healthy relationships
On-the-job behavior (seven items)	Endorses control-focused behaviors versus empathy-focused behaviors
Self-efficacy at work (7 items)	Endorses feeling unable to meet the demands of working with a traumatized population versus feeling able to meet the demands
Reactions to the work (seven items)	Endorses underappreciating the effects of vicarious traumatization and coping by ignoring versus appreciating the effects of vicarious traumatization and coping through seeking support
Personal support of trauma-informed care (five items)	Reports concerns about implementing trauma-informed care versus being supportive of implementing trauma-informed care
Systemwide support for trauma-informed care (five items)	Reports feeling supported by colleagues, supervisors, and the administration to implement trauma-informed care versus not feeling supported

## Appendix I. Student-level data

Notes about student-level data:

- We included student-level data for two years before the pilot project started and for the first two years of the pilot project.
- We excluded the last three months of Year 3 data (March to June 2019) due to the time needed to prepare this report.
- This pilot project was not designed to collect all possible data with details of every trauma-informed effort for both schools across three years. All data collected represent snapshots of events or activities across the three years.

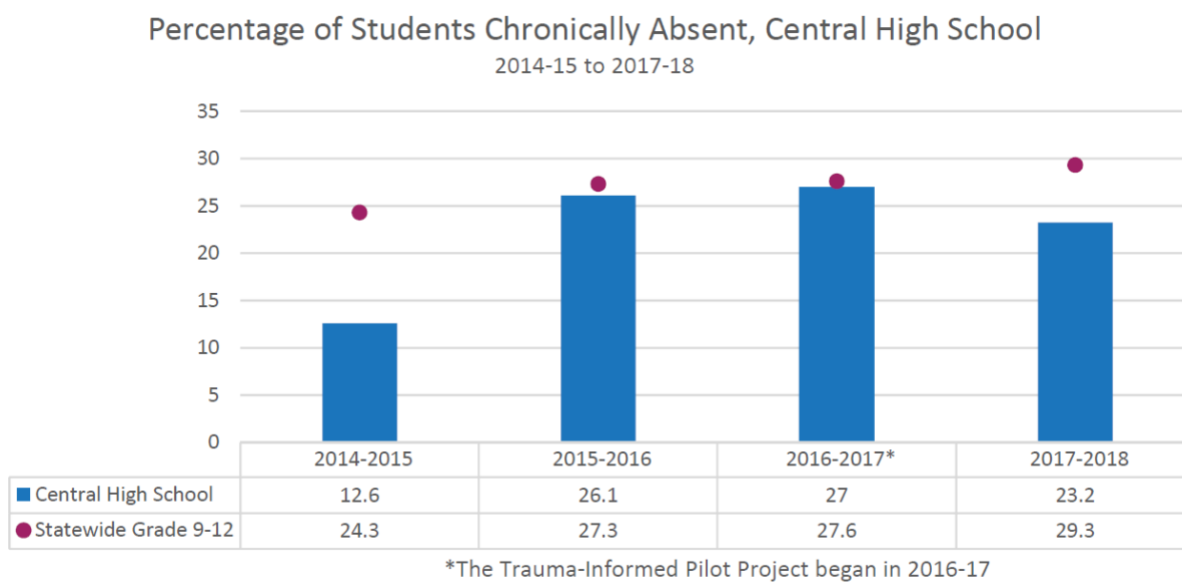
Figure I-1. Chronic absenteeism rates for Tigard High School



\*The Trauma-Informed Pilot Project began in 2016-17

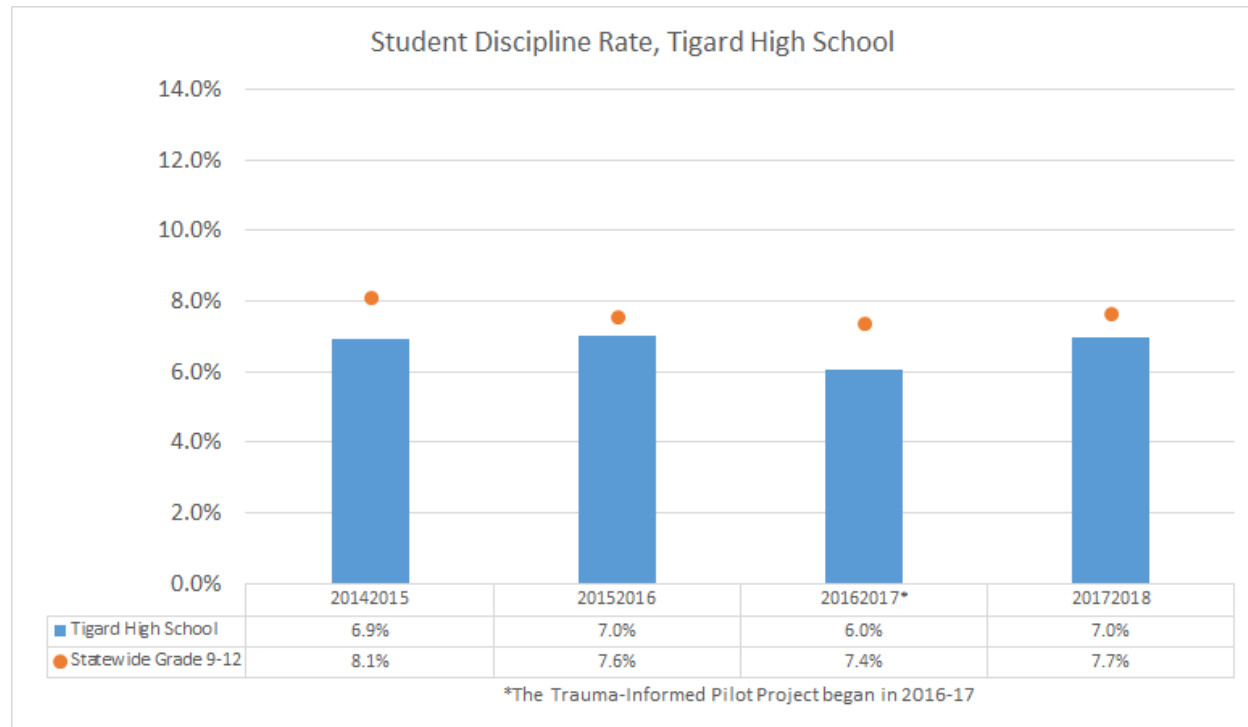
Source: Oregon Department of Education

Figure I-2. Chronic absenteeism rates for Central High School



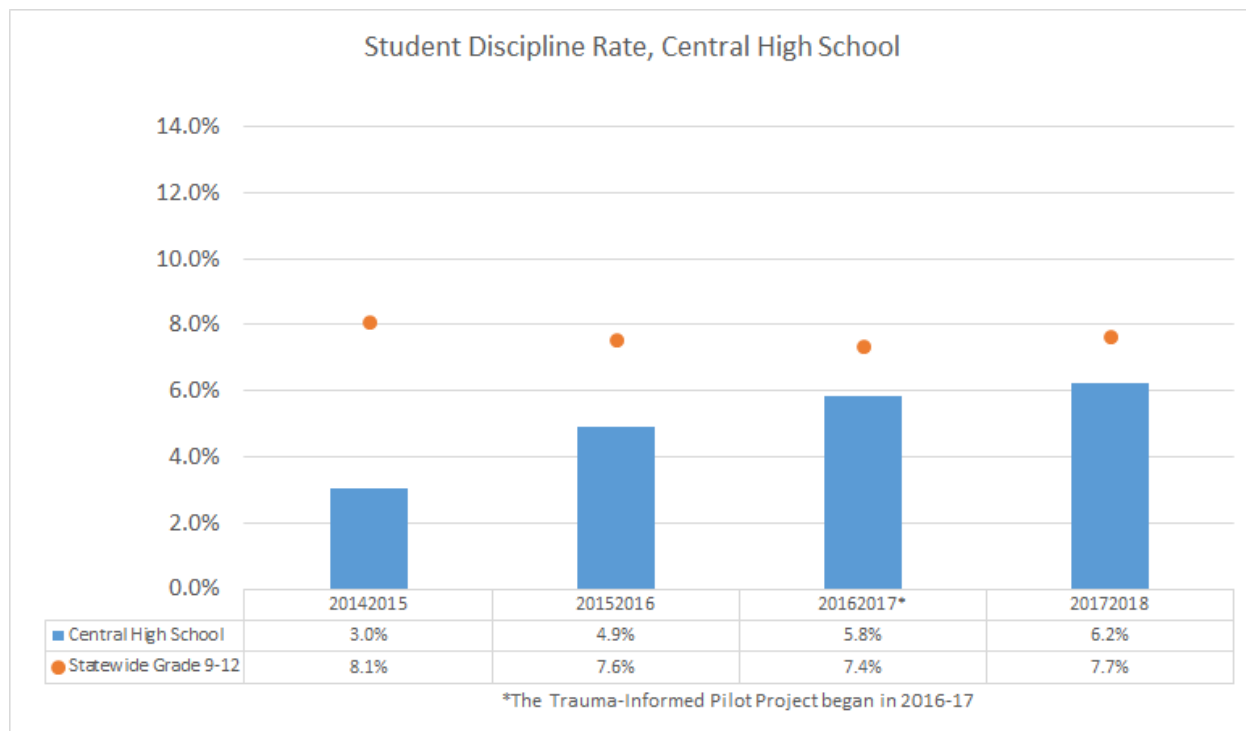
Source: Oregon Department of Education

Figure I-3. Student discipline rate for Tigard High School



Source: Oregon Department of Education. Note: The student discipline rate is the unique count of students involved in a disciplinary incident divided by the total fall enrollment for that school.

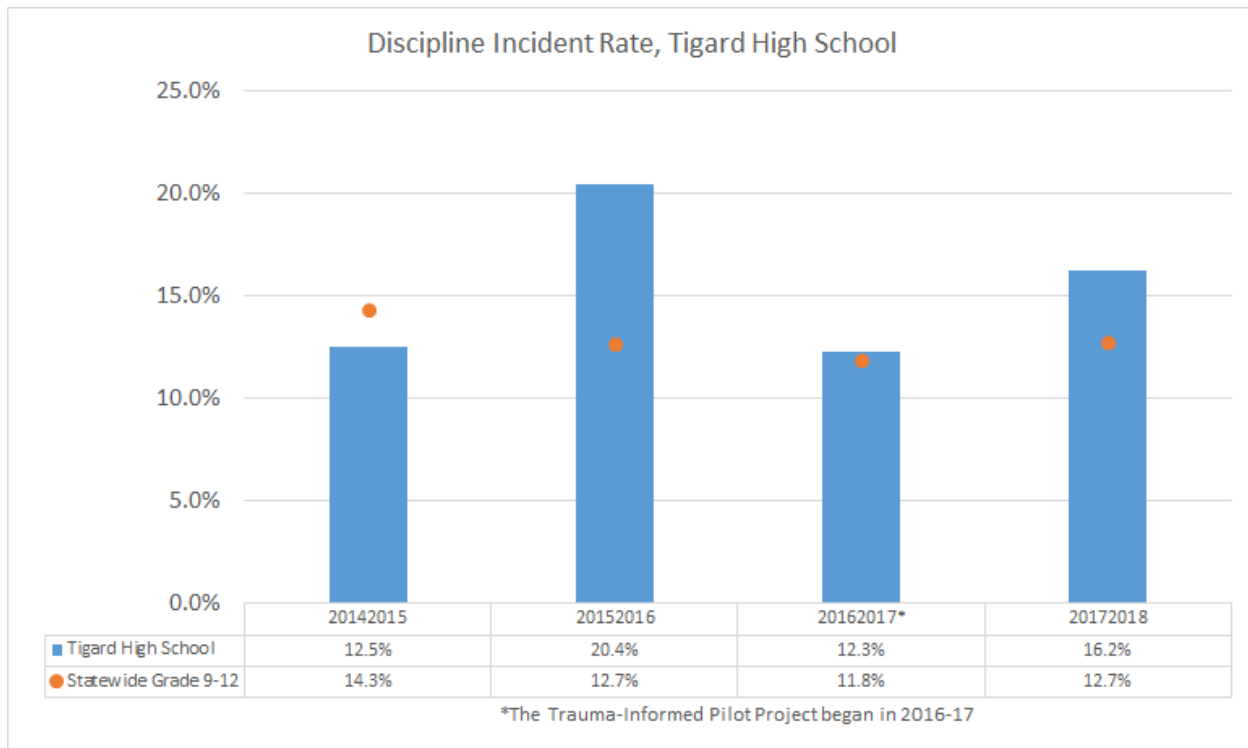
Figure I-4. Student discipline rate for Central High School



Source: Oregon Department of Education. Note: The student discipline rate is the unique count of students involved in a disciplinary incident divided by the total fall enrollment for that school.

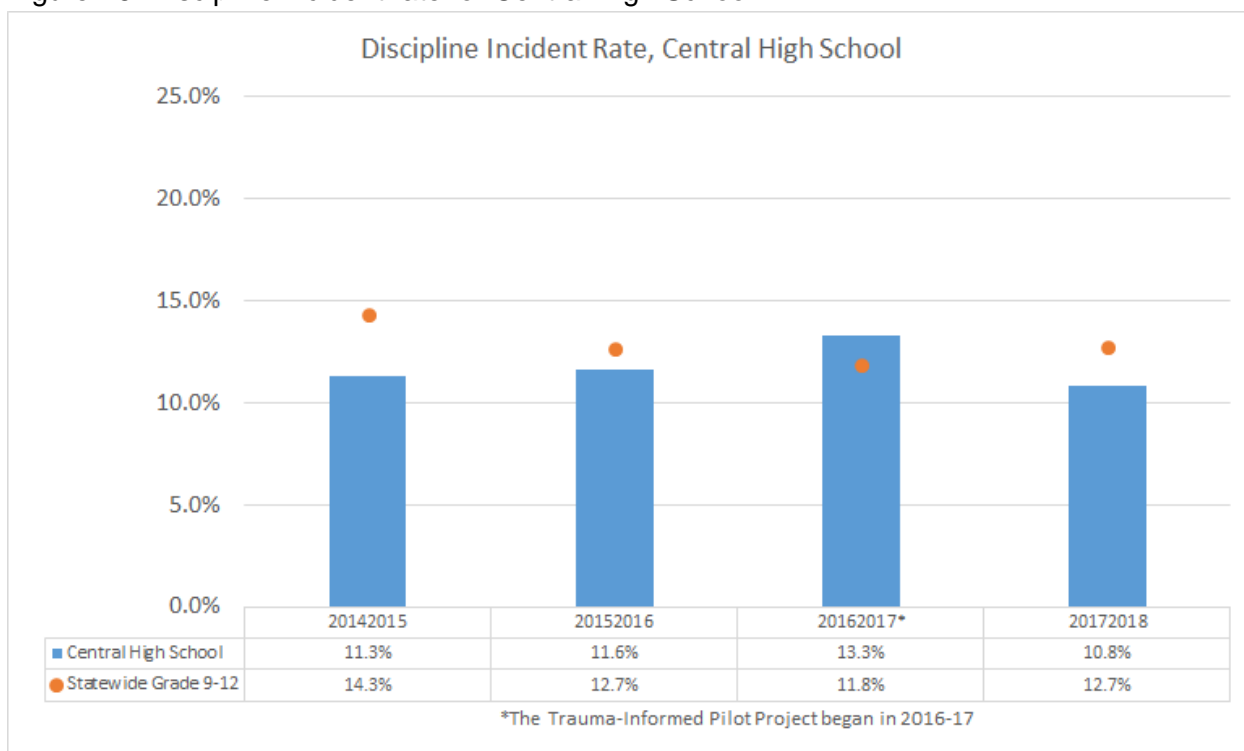


Figure I-5. Discipline incident rate for Tigard High School



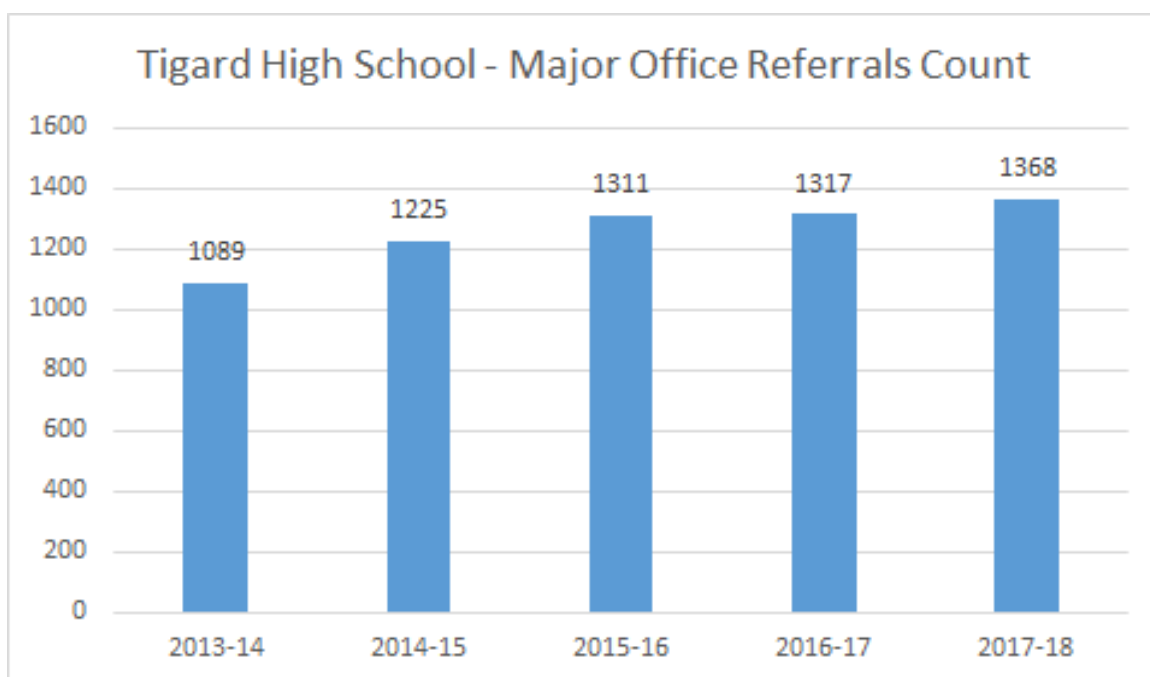
Source: Oregon Department of Education. Note: A discipline incident is defined as a code of conduct violation involving one or more students resulting in a suspension or expulsion for at least one of the students involved. The discipline Incident rate is the unique count of discipline incidents divided by the total fall enrollment for that school.

Figure I-6. Discipline incident rate for Central High School



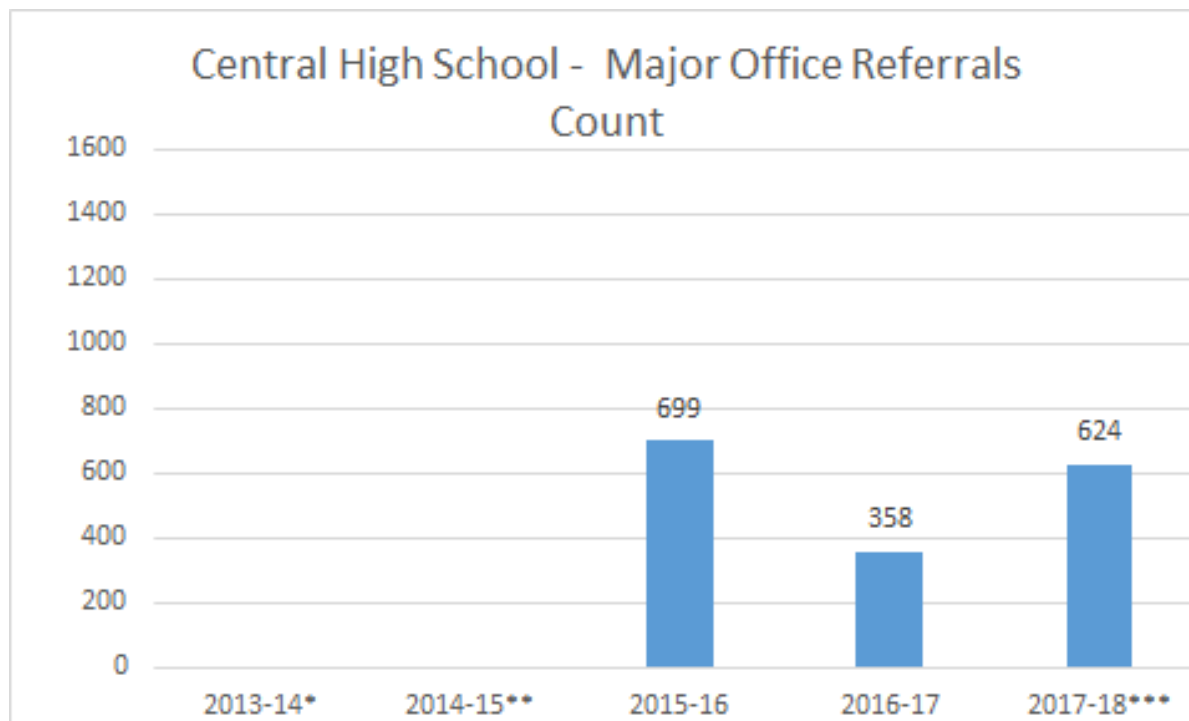
Source: Oregon Department of Education. Note: A discipline incident is defined as a code of conduct violation involving one or more students resulting in a suspension or expulsion for at least one of the students involved. The discipline Incident rate is the unique count of discipline incidents divided by the total fall enrollment for that school.

Figure I-7. Major office referrals count for Tigard High School



Source: Tigard High School

Figure I-8. Major office referrals count for Central High School



Source: Central High School. \*Data not available. \*\*Data uncertain \*\*\*Schoolwide information system was used to record referral data. Major revisions were made to referral documents.

## Appendix J. Trauma-informed school coordinator job description

### Job Summary

The trauma-informed school coordinator is responsible for providing classroom and school team consultation, leadership coaching, professional development, and coaching to implement trauma-informed practice (TIP) and ensure successful schoolwide TIP implementation. This position works with administrative, instructional, and noninstructional staff members to develop a holistic approach that emphasizes emotional wellness for staff members and students, improving the overall school climate and implementing trauma-informed systems to reduce re-traumatization, promote student and staff member resilience, and increase positive academic and nonacademic outcomes for students. The trauma-informed school coordinator provides critical thought partnership, professional development opportunities, facilitation, and consultation to school staff members to support the school's development of mindsets, systems, practices, strategic planning, interventions, and partnerships needed to effectively develop trauma-informed schools and systems that support student and staff member well-being and resilience.

### Important considerations before hiring a trauma-informed school coordinator

First and foremost, leaders must support and be involved in all implementation stages, model trauma-informed practices in their interactions with staff members, and embody the principles of TIP. Second, your school's readiness to implement TIP should be thoroughly assessed before deciding to hire a coordinator.

*Note: This position is written for a full-time position assigned at the school building.*

### Recommendations:

- We strongly recommend that your school assess the extent to which a new or existing program or practice matches the implementing site on population need, fit, and capacity. It is equally important to assess new or existing programs or practices that will be implemented for evidence, supports, and usability.
- It is critical to remember that the trauma-informed school coordinator cannot be the only staff member working on all aspects of implementing schoolwide TIP.
- We strongly recommend that:
  - A dedicated leader be assigned to supervise and support the coordinator, with routines in place to ensure seamless communication on decision-making matters
  - You determine whether the coordinator can be part existing teams or a new team that prioritize TIP implementation
- Classify the trauma-informed school coordinator position to be neutral (e.g., not an administrator) and not represented by the union.
- Gain familiarity on existing TIP and/or implementation frameworks that emphasize organizational changes (e.g., [Sanctuary Model](#), [Collaborative Learning for Educational Achievement and Resilience](#), [Stages of Implementation](#)). TIP is about a universal approach to address practice, programs, policies, and culture. It is a multiyear process focused more on the journey than a destination. This ongoing process will take three to five years for a school to apply the principles of TIP to all areas of practice, policy, and culture.

## Job description

- Coordinate professional development, including ongoing training for all school staff members (licensed and classified).
- Facilitate the alignment of school-based health programs, mental health programs, culturally specific programs, youth service, and/or other community organizations under trauma-informed principles and practices through professional development/educational opportunities, networking opportunities, and streamlining of student identification and referral systems.
- Consult on schoolwide communication that promotes trauma-informed principles, including education and messaging strategies targeted toward staff members, students, and families.
- Consult on data collection and interpretation for trauma-informed programs when necessary.

## Primary duties

### Professional development

- Work with leadership to assess and align existing and new initiatives, programs, or practices with trauma-informed principles
- Work with leadership to ensure strategic channels to deliver and disseminate TIP content and materials to **all** staff members
- Conduct ongoing/refresher/just-in-time professional development or learning for **all** staff members on evidence-based trauma-informed principles and approaches. Whenever possible, content and materials should be designed strategically and be seamlessly incorporated into existing curricula, programs, and/or approaches.

### Trauma-informed schoolwide effort

- Assist leadership in recruiting, convening, and staffing an advisory group of diverse stakeholders (including families and students) to guide project components and timelines and communicate this work to other school stakeholders
- Assist leadership in documenting and assessing the application of TIP on agency commitment and endorsement (including governance and leadership, as well as policy and finance), environment and safety, workforce development, systems change, and cross-sector Collaboration using tools (such as observations, interviews, surveys, and/or checklists)
- Work with leadership to review the physical space (e.g., external environment, exits and entrances, waiting room, offices, halls, lighting, restrooms, classrooms) for actual and perceived safety concerns that may affect staff members, students, and families

### Community partnership

Partner, collaborate, and/or coordinate professional learning and networking opportunities with health, mental health, and other community-based organizations;

culturally specific organizations; and/or social services organizations to facilitate improved integration and coordination within the school and with outside partners.

#### Other

- Monitor local, state, and national trends and best practices in the trauma-informed schools arena through participation in training, forums, and external networking groups
- Provide consultation to leadership and staff members on TIP resources, tools, and/or measurements

#### **Required knowledge and abilities**

- Knowledge of trauma-informed models, frameworks, theories, principles, and practices (includes multifaceted understanding of concepts, such as community trauma, intergenerational and historical trauma, parallel processes, and universal precautions)
- Knowledge of social justice issues in the context of public education
- Ability to facilitate change management in individuals, teams, and organizations
- Ability to connect with local health and mental health providers and their school-based service delivery models
- Ability to manage or coordinate complex projects in a public school
- Ability to develop content for and facilitate professional development to a broad range of school-based staff members
- Ability to demonstrate effective communication skills in group facilitation, managing teams/groups, organizational dynamics, and consensus building
- Ability to advocate, model, and support implementation of district-level initiatives regarding social justice issues and culturally responsive practices
- Ability to communicate clearly and concisely, both orally and in writing, to a broad range of audiences
- Ability to quickly establish and maintain cooperative and effective working relationships with a broad range of school-based staff members and community partners
- Skilled in critical thinking, problem-solving, decision-making, and leadership
- Experience in resolving conflict
- Ability to adapt to new and evolving situations
- Ability to tolerate stress

#### **Preferred knowledge and abilities**

- Working knowledge of continuous improvement frameworks/models
- Strong knowledge of differentiated instruction, scientifically based reading research, research-based teaching and learning practice, multi-tiered systems of supports (e.g., response to intervention or positive behavioral interventions and supports), and family-school-community partnering
- Demonstrated success in providing direction, coordination, implementation, control, and completion of projects while remaining aligned with the strategy, commitments, and goals of the organization

## Appendix K. Work group participants

Participant	Title, Organization	Role
Bruce Rhodes	Grant Writer/ Foundation Director, Tillamook School District	Project manager, allocate resources to support professional development and implementation of strategies.
Kendra Hughes	Professional Learning Specialist, Northwest Regional Education Service District	Lead for the Early Learning strand within the Professional Learning Network. With expertise in birth to 20 school and child care settings, equity, social justice, civil rights compliance and sheltered instruction, Kendra has helped schools and social service agencies create an inclusive culture where educators, students, families, parents, and community members can connect and be involved in the process of change in a meaningful way.  Also served as an Advisory Member of the Trauma-Informed Pilot Project.
Xochitl Esparza	Program Manager, Self Sufficiency Programs at the Department of Human Services	Leads innovation efforts in SSP that advance the SSP mission and antipoverty agenda. Involves local and state level leadership as well as partners to implement/expand local innovative programs; explore local and national cutting-edge practices related to SSP; explore public-public and public-private partnerships; implement and/or scale programs/practices at the state level that advance greater outcomes for people living in poverty.  Also served as an Advisory Member of the Trauma-Informed Pilot Project.
Maureen Hinman	Director of Policy and Strategic Initiatives, Oregon School-Based Health Alliance	Directs organizational policy work, identifies and leads strategic initiatives, including trauma informed schools, as project manager, facilitator, or consultant.  *Technical assistance provider for the pilot schools in the Trauma-Informed Pilot Project.

Participant	Title, Organization	Role
Danielle Vander Linden	Trauma-Informed School Coordinator, Central High School	Provides implementation coordination and support at the building level for the Trauma Informed Pilot Project grant.  Also served as an Advisory Member of the Trauma-Informed Pilot Project.
Alfonso Ramirez	Trauma-Informed School Coordinator, Tigard High School	Integrates trauma-informed concepts into policies, procedures and practices.  Also served as an Advisory Member of the Trauma-Informed Pilot Project.
Stephanie Sundborg	Research and Evaluation Coordinator, Trauma-Informed Oregon	Since 2014, Stephanie has been working with Trauma Informed Oregon (TIO) to provide training, consultation, and research related to trauma and trauma informed care. TIO's current research focus is to identify measures of trauma informed care to link these to outcomes and service recipient experience.
Mary Jova	Office Specialist, Data, Operation, Grants, and Management unit, Office of Teaching and Learning at ODE.	Providing office support for staff.
Carla Wade	Interim Director at the Data, Operation, Grants, and Management unit, Office of Teaching and Learning at ODE.	Carla provides leadership in the development and administration of personnel, programs, grants, activities, materials, professional learning and conferences that leads to successful implementation of OTLA's work. This work includes Every Day Matters, the Oregon Digital Learning Academy, the Trauma Informed Practices Pilot, Division 22, OTLA Help Desk, and Digital Innovations. Carla oversees systems for data collection, budget, grants and contracts, and other critical initiatives related to teaching, learning, and assessment.



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