

# IMPLEMENTING TRAUMA-INFORMED PRACTICES IN RURAL SCHOOLS

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## Implementing Trauma-Informed Practices in Rural Schools

#### The National Comprehensive Center

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#### Introduction

Children and youth in rural areas represent a substantial proportion of U.S. students. More than 9.3 million students—or nearly one in five students in the U.S.—attend a rural school, and nearly half of those rural students live at or below the poverty line (Showalter et al. 2019). Given the increased levels of stress, anxiety, and trauma experienced as a result of the pandemic, by both children and adults, many educators are seeking guidance to support students by implementing trauma-informed (TI) practices in schools.

School communities in both urban and rural settings need TI supports; however, the adversities experienced and access to student supports may be unique to rural school communities. In addition, the contextual challenges experienced by rural schools and communities, as well as the strengths that can be drawn from them, will require adaptations of the TI approaches. Therefore, this research brief seeks to highlight the need for, and the importance of, implementing TI approaches in rural school communities, and shares recommendations for planning and implementation by schools and districts. The brief is intended for educators, leaders, and practitioners at the school, district, and state level who are in the initial stages of considering TI approaches and/or planning the implementation process.

Implementing TI approaches for public schools in rural areas could be potentially challenging for states, districts, and schools, due to resource and capacity limitations faced by some rural schools, the lack of access to behavioral health services in these communities, and the sociocultural contexts of rural settings (Communities in Schools 2020). However, while it is true that rural communities share some similarities, they also offer considerable variation in geography, economy, culture, and racial and ethnic makeup (i3 Improving Rural Achievement Community Report 2017). Therefore, TI approaches need to be tailored to the unique history, experiences, strengths, challenges, and needs of the school and community context. This requires strategic planning by mapping out current needs and resources, getting buy-in from various stakeholders, fostering cross-sector partnerships, and integrating whole-school TI approaches into the school system. This brief incorporates research and practice to provide guidance to school, district, and state leaders to facilitate TI implementation by considering various strategies, or to strengthen existing TI practices in rural school communities.

Section I provides an overview of the research on adverse childhood experiences (ACEs) and the effects of trauma on learning and development. Section II provides an overview of TI approaches and critical components. Section III highlights ACEs and trauma-related issues experienced in rural school communities, offers strategies to implement the key elements of TI approaches, and addresses some of the potential challenges.

## Section I. Adverse Childhood Experiences and Trauma: Prevalence and Impact

Adverse childhood experiences (ACEs) are acute or chronic events that threaten the child's physical or emotional well-being. Originally used in the landmark CDC/Kaiser Permanente Study (Felitti et al. 1998), the term adverse childhood experiences refers to experiences of abuse (physical, emotional, sexual), neglect (physical, emotional), parental divorce, mental health, substance abuse, incarceration and death of a parent or guardian, by children and adolescents (0-17 years of age). Using self-report data from about 17,000 adults who comprised the predominantly White middle-class urban sample, the study revealed that ACEs were common, and that these experiences were linked to several major chronic illness, shorter life expectancy, and social problems experienced in the United States.

Since the seminal study, ACEs have been expanded to other types of events not included in the list of 10 ACEs above, such as racism, bullying in schools (in-person or online), community violence, and environmental events (see figure 1).

ABUSE, NEGLECT & HOUSEHOLD DYSFUNCTION Parental divorce Domestic violence Neglect (physical, emotional) Substance use Incarceration ENVIRONMENTAL DISASTERS Abuse (physical, Household member with mental Earthquakes sexual, emotional) illness/attempted suicide Hurricanes Wildfires COMMUNITY EVENTS Bullying Systemic inequities Poverty Neighborhood violence Gender- and race-based discrimination

Figure 1. Types of ACEs

Source: Adapted from Ellis and Dietz (2017) and PACEs Connection

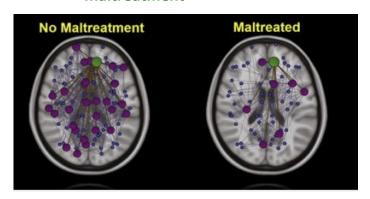
Trauma is an individual's experience of, and response to, an adverse event in the form of intense reactions that include fear, helplessness, and loss of control. The experience of trauma resulting from ACEs can overwhelm an individual's coping capacity and can affect the individual's physical, social, and emotional development and, possibly, their day-to-day functioning. Of particular importance in certain rural communities is the concept of historical and intergenerational trauma, which refers to cumulative trauma experienced by specific cultural, racial, ethnic, or religious groups across generations, emanating from major negative events, such as the relocation of Native Americans. Trauma and recovery are often mediated by culture and history, which need to be accounted for when planning the delivery of mental health services and school supports for culturally diverse groups (Brave Heart and Bird 2013).

Decades of research has shown that trauma and adversity in childhood can have short- and long-term effects on the individual's health and well-being. When a child experiences frequent and/or prolonged ACEs, the resulting toxic stress response can disrupt the structure and processes of brain functioning and the immune system, and increase the risk for stress-related disease and cognitive impairment, well into the adult years.

Figure 2 shows the results of a study comparing brain connectivity between young adults who had been maltreated as children compared to those who had not been maltreated (Teicher et al. 2014). There are fewer connections among the nine cortical regions in the young adults who had experienced trauma (maltreatment). These differences could compromise the maltreated group's basic social perceptual skills and ability to self-regulate their emotions and behavior.

Figure 2. Comparison of brain connectivity in young adults, no maltreatment vs.

maltreatment



The greater the number of ACEs, the greater the risk for negative outcomes. Several studies have demonstrated this "dose-response" relationship – as the number of ACEs increases, so does the risk for poorer health outcomes such as heart disease, stroke, obesity, as well as mental and behavioral health problems, such as depression, substance use, suicide, and even early death (Brown et al. 2009; Chapman 2004; Chartier, Walker, and Naimark 2010). The Centers for Disease Control (CDC) found that at least 5 of the top 10 leading causes of death, including respiratory and heart disease, cancer and suicide, are associated with ACEs (CDC 2019).

Even before the COVID-19 pandemic, ACEs were common. Prevalence rates ranged from 49 percent to 61 percent, depending on the definition used and how the data were collected (Bethell et al. 2017; Merrick et al. 2018). In parent reports of children aged 0–17 years, wherein ACEs were defined in terms of household dysfunction, 34 million children—nearly half of all U.S. children—had at least one

ACE (see table 1), with individual states ranging from 38.1 percent to 55.9 percent (see Bethell et al. 2017).

Table 1. National and across-state prevalence of ACEs among children and youth

Adverse childhood experiences (ACEs)	All Children	Age 0-5	Age 6-11	Age 12–17	Range Across States
Child had ≥ 1 ACE	46.3%	35.0%	47.6%	55.7%	38.1% (MN) – 55.9% (AR)
Child had ≥ 2 ACEs	21.7%	12.1%	22.6%	29.9%	15.0% (NY) – 30.6% (AZ)

Although recent national estimates for the prevalence of ACEs are lacking, experts suggest the impact of the COVID-19 pandemic and social justice issues have likely increased the incidence of trauma and ACEs in children (Leeb, 2020<sup>1</sup>; National Institute for Health Care Management [NIHCM] Foundation, 2020) and also in adults (Czeisler et al., 2020).

#### **Potential Impact of ACEs in School Settings**

Reading, writing, and solving mathematical problems require the ability to pay attention, store memories and make decisions in logical order, and regulate anxiety and interest. The trauma resulting from ACEs can impair multiple aspects of health and development for children and adolescents. In school settings, these experiences can undermine children's ability to learn, form relationships, and function appropriately in the classroom, as shown in figure 3.

Figure 3: Potential impacts of ACEs in school settings



- Delay in language and communication skills
- Interference with the ability to organize and remember new information



## Behavior

- Difficulty following classroom tasks & instructions
- Interference with the ability to process social cues



### **Relationships**

- Difficulty feeling safe and trusting others
- Interference with building secure relationships with adults and peers in school

Source: Modified from *Trauma and Learning Policy Initiative* (TLPI; 2020)

Several studies of students in grades K–12 have shown that ACEs are linked to school-related indicators such as learning difficulties, attendance, problem behaviors, suspensions/expulsions, and the need for special education (Bowen and Bowen 1999; Perfect 2016; Substance Abuse and Mental Health Services Administration [SAMHSA] 2014). Children with two or more ACEs were twice as likely to be disengaged in school compared to those with no ACEs (Bethell et al. 2014). Further, compared to students with fewer ACEs, students with three or more ACEs were 2.5 times more likely to score lower

<sup>&</sup>lt;sup>1</sup> This CDC report (Leeb et al., 2020) showed that compared to 2019, the proportion of mental health–related visits for children aged 5–11 and 12–17 years in 2020 increased approximately 24 percent and 31 percent, respectively.

on standardized tests, fail a grade, experience more suspension/expulsion, be referred to special education, and have poorer physical health (Illinois ACEs Response Collaborative 2016). A study in Washington using data from 2,707 grades K–12 students showed a decline in school attendance rates with increasing exposure to ACEs (Blodgett 2012), as shown in figure 4 below.

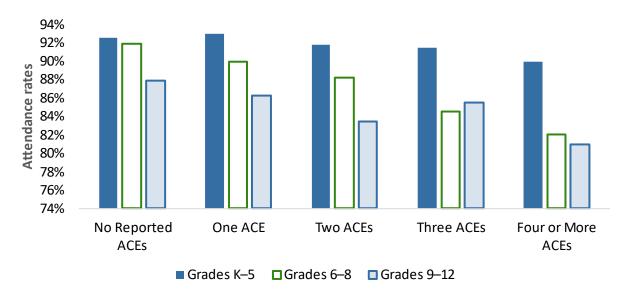


Figure 4. Number of ACEs and attendance rates in K-12 students

Furthermore, these negative school outcomes can exacerbate existing problems and can predispose the child to long-term adversities (McInerney and McKlindon 2014). For example, punitive school disciplinary actions such as repeated expulsions can set in motion a cascade of negative outcomes through high-risk behaviors such as dropping out of school and substance use, which can then set them up on a trajectory of negative economic and social outcomes (Miller and Johnson 2016).

#### Section II. ACEs in the Rural Context

Although research examining the prevalence and patterns of ACEs specifically in rural communities is limited, studies have shown that almost 60 percent of adult rural residents have experienced at least one ACE and nearly 15 percent experienced four or more ACEs (Chanlongbutra, Singh, and Mueller 2018; Keesler et al. 2020; Radcliff, Crouch, and Strompolis 2018). Studies have found mixed results with some studies showing a higher prevalence of ACEs in rural children and youth (Talbot, Szlosek, and Ziller 2016) and some showing a lower prevalence of ACEs in rural children and youth compared to urban settings (Crouch et al. 2019). Substance use and separation/divorce seem to be the most common ACEs in rural settings (Health Resources and Services Administration [HRSA] 2015; Radcliff et al. 2018; Talbot et al. 2016).

However, the presence of other critical risk factors such as chronic poverty in some rural areas exacerbates the negative effects of ACEs and the implications for the school setting (Farrigan 2017; Howley and Redding 2021). Based on rates of free and reduced price lunch, approximately 41 percent

of rural schools nationwide were classified as high-poverty schools, and 28 percent of rural children live in persistently poor counties (Izard 2016). Trauma stemming from the effects of poverty places an additional burden on schools and health-care systems in rural areas; the double stressors of both poverty and trauma have a greater impact on health and well-being (HRSA 2015).

Rural communities face additional challenges that exacerbate the negative impacts of experiencing ACEs and trauma. Rural youth have been disproportionately affected by the opioid crisis (Communities In Schools, 2020). Higher rates of opioid abuse are <u>linked to</u> increases in family disruption (e.g., children being placed in a more distant relative's or non-relative's care), which can have negative implications for well-being and development.

Childhood adversity among rural children and youth might also affect school-level factors. For example chronic absenteeism, which has been linked to lower academic achievement, more risky behaviors (Davis and Buchanan 2020), and lower graduation rates (Miller and Johnson 2016), is more common in rural schools. In addition, some rural communities have limited access to behavioral health services, especially <a href="mailto:trauma-focused services">trauma-focused services</a>.

The complex interplay between multiple stressors on individuals and communities in rural areas, the prevalence and impact of ACEs and trauma, and the limited access to critical resources and services heighten the urgent need for rural school communities to become TI.

"There's a lot of poverty, a lot of drugs, a lot of kids moving in and out. My teachers are working overly hard to improve instruction and we're just not seeing the gains I was hoping to, so it was time to try something else."...

Superintendent, Maine school district, talking about his decision to implement the Trauma Responsive Equitable Education (TREE) approach

### Section III. TI Approaches in Schools

Safe and supportive school environments can help prevent and mitigate the consequences of ACEs, given that schools provide the most direct and long-term access to children during their crucial developmental years. The school setting can provide a safe environment for children and provide opportunities to develop trusting relationships with peers and adults, which can potentially mitigate the impacts of ACEs and maximize opportunities to learn. However, schools are also potential settings where students with ACEs can have more negative experiences, such as bullying, racial discrimination, and punitive disciplinary practices. In response, school leaders and educators are starting to identify and implement TI practices to prevent re-traumatization of children who have experienced ACEs in addition to making schools safe for all students and staff (National Child Traumatic Stress Network, 2017).

A **TI approach** is an umbrella term for several different "levels" of becoming TI that share the core components of having a safe and supportive environment, supporting and teaching emotional regulation, and building relationships and connectedness (SAMHSA 2014). TI approaches in schools can come in a variety of forms such as new **policies** (e.g., district-wide mandated training on trauma), **programs** (a defined set of activities with an evidence base), or **practices** (e.g., something teachers might do in the classroom to help students feel supported).

## Trauma-informed approaches in schools shift the focus from "What is wrong with the student?" to understanding "What has happened to the student?"

A TI approach, in its most comprehensive form, involves coordination across levels to support students' needs and contexts at the classroom, school and system, and policy levels. A fully implemented TI school is not simply a school where staff know about trauma, or where there is a therapeutic classroom or additional counseling staff, but one where the TI practices and procedures are infused through a schoolwide approach. However, instead of starting out with changes throughout the system, school staff can begin implementing a few TI practices at the classroom level, then proceed to formal programs with circumscribed components, and ultimately advance to whole-school TI approaches.

"A trauma-informed school fundamentally has changed the way it works to promote healthy, resilient educators and learners capable of disrupting the cycle of trauma in their lives and communities and creating more equitable outcomes"

#### — [quote from Missouri Model of TI Care]

One of the first schools to begin adopting a trauma-informed approach was Lincoln High School, an "alternative school" in Walla Walla, Washington. School and community leaders made the connection early between the seminal ACEs study (Felitti et al. 1998) and student behavior in classrooms. Prior to the implementation of a TI approach, Lincoln High School had 798 suspensions, 50 expulsions, and 600 office discipline referrals in a school year. One year after school personnel implemented the TI approach as part of the regular school-day curriculum, there were only 135 suspensions and 30 expulsions. Within 5 years, the number of office discipline referrals decreased to 95 (see Community Resilience Cookbook, 2013; Stevens, 2012).

#### Key Components of a TI School

There are several frameworks that present different components as essential to schools becoming TI. The National Child Traumatic Stress Network outlines <u>10 core elements</u>; the Trauma and Learning

Policy Initiative (TLPI) identifies six core attributes, the National Center on Safe Supportive Learning Environments (NCSSLE) has identified six core components of a TI approach (Guarino and Chagnon 2018), and so on. At the basic level, there are three critical components that are the cornerstone of a TI approach (SAMHSA 2014), as shown in figure 5—creating a safe environment, supporting and teaching emotion regulation, and building relationships and connectedness. Although they comprise the TI approach for any school community, the manner in which they are translated and implemented in schools depends on the local context, fit, relevance, and resources.

Figure 5. Components for a TI school



Source: Substance Abuse and Mental Health Services Administration, SAMHSA, 2014

#### Creating a Safe Environment

A safe, predictable, and equitable culture and environment can be achieved by increasing knowledge and understanding trauma and how it can affect children, adults, organizations, and communities. In safe environments, there is awareness of how student behaviors in the classroom, such as perceived lack of respect for others or acting out, may stem from feeling unsafe (in the classroom or online). Establishing physical, social, and emotional safety, as well as predictability in the classroom environment, can assist teachers and students to focus on teaching and learning. For example, teachers can help students feel safe, supported, and ready to learn by creating consistent schedules and predictable classroom routines.

The North Dakota Department of Public Instruction provides trauma-sensitive school <u>training</u>. The first step of the training is to increase awareness of trauma and TI practice among educators and administrators, with the goal of creating an "environment and community that is safe, caring, and respectful, and all children can learn to their [full] capacity."

#### Supporting and Teaching Emotional Regulation

Social emotional competence involves the development of effective regulatory and coping skills (Eisenberg and Fabes 1992), which are foundational for student success (Hamilton, Doss, and Steiner 2019). Promoting <u>emotional regulation</u> and building social emotional learning (SEL) competencies fosters students' resilience and academic success. Well-executed, equity-focused SEL practices can

help improve the developmentally appropriate regulatory and coping skills that might not be fully developed in students who have experienced ACEs and trauma.

One of the many ways states have supported SEL implementation is by providing <u>SEL standards</u> to guide districts' implementation or measurement of SEL programs (Collaborative for Academic, Social, and Emotional Learning 2020). These standards (also called "benchmarks") describe the content and skills for students in grades K – 12, and they sometimes include several benchmark levels that describe what students should know and be able to do during the developmental period. Typically, benchmarks are organized into early elementary (grades K–3), late elementary (grades 4-5), middle/junior high (grades 6–8), early high school (grades 9–10), and late high school (grades 11-12).

The Indiana Department of Education provides several <u>resources</u> and tools that emphasize the importance of <u>adult SEL</u> and educator wellness, and offer strategies for educators to promote positive relationships with students and staff, create effective classroom climates, and manage a work-life balance. The <u>toolkit</u> (January 2021), intended for educational leaders, provides strategies to create a culture of wellness within their districts and school communities.

#### **Building Relationships and Connectedness**

By incorporating SEL activities as mentioned above into the classroom, and by allowing time for students to foster relationships, teachers help students build the skills they need to form and maintain healthy relationships and connectedness, especially during times of disruption. Children who have experienced traumatic events may be distrustful of adults and/or fellow students, and sometimes have feelings of not belonging. They also may suffer delays in the development of age-appropriate social skills. Providing teachers and other school staff with the skills to recognize trauma responses and individualize supports can promote children's engagement in the classroom and reduce the overall level of disruption educators must manage.

The Ohio Department of Education provides <u>resources</u> to "explore innovative ways to maintain school connectedness, build relationships, and cultivate a positive climate within the new safety guidelines." These resources are part of their <u>TI approach</u>, which aligns with the <u>social and emotional programs</u> within the framework of <u>Positive Behavioral Interventions and Supports</u> (PBIS).

The key elements of TI approaches outlined above—creating a safe environment, supporting and teaching emotion regulation, and building relationships and connectedness—have been used to varying degrees to develop TI programs. TI programs are a defined set of activities that have "translated" the TI elements into concrete practices that can be incorporated into teacher training, classroom practices, and/or schoolwide procedures and policies. However, in comparison to urban and suburban school communities, there has been considerably less research on school-based programs in rural settings. This may be because researchers are usually located in urban and suburban areas where districts are larger and in physical proximity, and therefore provide easier access to large

populations of classrooms and students for research. It is not yet clear from the available evidence whether programs and strategies from urban and suburban settings are transferable to rural communities. However, researchers and practitioners are trying to better understand which evidence-based programs work in rural schools by adapting and testing them to determine their impact.

Below, we outline 10 TI programs/approaches that could potentially be adapted or tailored for rural school communities' specific needs.

The programs and approaches vary in areas such as the level of resources needed, the extent to which they utilize a multi-tiered system of supports (MTSS) framework, and the extent to which they involve the broader school community. This list is not comprehensive but is intended to provide a few examples of different types of TI programs and approaches—e.g., whole-school approaches, programs focused on training for teachers, and community-based approaches. The programs are organized into two tables—first, Tier I TI approaches (or universal support for all students) (table 2) and then Tier II TI approaches/programs (targeted approaches for students identified as at risk) (table 3).

In order for successful and sustained implementation to occur, several <u>factors</u> need to be considered when deciding which TI program(s) to adapt and implement in specific schools. These might include:

- » current school, district, and state resources;
- » structures and initiatives that support sustainability of the selected program;
- » the specific need for TI programming in the school;
- » available grants and other funding for TI implementation and evaluation; and
- » the community buy-in into the program/approach.

Schools can leverage processes they currently have in place and weave in TI implementation requirements for greater sustainability and efficient use of resources.

MTSS is a promising model for integrating TI approaches into existing initiatives, such as Response to Intervention (RTI), Positive Behavioral Interventions and Supports (PBIS), and other SEL programs. MTSS allows for the prioritization of resources, efficient decision-making, and a focus on prevention through universal supports for all (Tier I), targeted and tailored resource for some (Tier II), and intensive, individualized services for the few students who did not respond to prior intervention (Tier III) (von der Embse et al. 2019).

The Hexagon tool from the National Implementation Research Network (NIRN) can be used for planning, and to guide selection and assess the fit and feasibility of potential programs and practices for use. This tool is designed to be used by a team to facilitate discussion of the six contextual fit and feasibility indicators.

Table 2. Tier I programs

Program	Compassionate Schools	HEARTS	Collaborative Learning for Educational Achievement and Resilience (CLEAR)	Trauma and Learning Policy Initiative (TLPI)	Transforming Rural Experience in Education (TREE)	Positive Behavioral Interventions and Supports (PBIS)
Description	A curriculum for teachers to learn and practice traumaresponsive strategies and foster a trauma-aware classroom environment. Includes modules on using compassionate strategies in school improvement planning; providing support in academic achievement; and using role plays, games, and case vignettes for collaborative problem solving. Provides training, guidance, resources, and technical assistance for schools considering adopting this framework.	A prevention and intervention approach that utilizes an MTSS framework to address trauma and chronic stress at the student, staff, and school level. Provides guidance on universal supports and supporting the most vulnerable students. Places a significant emphasis on staff wellness and support during trainings, small-group supportive discussions, and individual consultation services. Builds the capacity of school personnel to implement TI practices, procedures, and policies to effect change in school climate and culture. Implemented in both rural and urban contexts.	Uses an MTSS framework to create and sustain TI models of practice through staff development. Principally a 3-yr. coaching/consultation intervention. Provides a structured yet adaptable process to train educators in trauma management skills that can improve instruction and classroom management, change policies and procedures, and prioritize safety and role-appropriate relationships. Of the 32 schools where CLEAR is implemented, 12 are rural.	An inquiry-based process for developing traumasensitive school environments. Supports educators as they ask and think through questions that guide a journey toward sustainable changes in the school culture. Flexible framework incorporates recommendations on school mobilization, leadership actions, and a process for developing local action plans.	A whole-child, rural-facing, student-empowered, and equity-centered approach that ensures all students and families have access to the same resources and opportunities that enable students to learn, grow, and thrive, in school and beyond. Is currently being piloted in rural Maine.	A whole-school approach to address student behavior through systems change, which leads to improved social and academic outcomes. Provides advanced supports across entire student bodies, including the highest need students.

Table 2. Tier I programs—continued

Program	Compassionate Schools	HEARTS	Collaborative Learning for Educational Achievement and Resilience (CLEAR)	Trauma and Learning Policy Initiative (TLPI)	Transforming Rural Experience in Education (TREE)	Positive Behavioral Interventions and Supports (PBIS)
Source	Washington Office of Superintendent of Public Instruction (OSPI)	University of California San Francisco (UCSF)	CLEAR Trauma Center, Washington State University	Massachusetts Advocates for Children and Harvard Law School	Cobscook Institute	Center on Positive Behavioral Interventions & Supports
Link to the program	http://k12.wa.us/Co mpassionateSchools/ default.aspx	https://hearts.ucsf.ed u/program-overview	https://extension.wsu .edu/clear/about/#:~ :text=What%20is%20 CLEAR%3F,developm ent%2C%20consultat ion%2C%20and%20s upport.	https://traumasensiti veschools.org/about- tlpi/	https://treeforchange .org/	https://www.pbis.org /pbis/getting-started
Focus	Classroom-wide TI strategies, and on displinary policies and restorative practices	Whole School/Systems Change	Whole School/Systems Change	Whole School/Systems Change	Whole Child/Community Partnered Programs	Whole School/Systems Change
Tier/Approach (1 if universal, 2 if targeted, and 3 if for specific groups etc.)	Tier 1	Tiers 1, 2, and 3	Tiers 1, 2, and 3	Tier 1	Tier 1	Tiers 1, 2, and 3

Table 2. Tier I programs—continued

Program	Compassionate Schools	HEARTS	Collaborative Learning for Educational Achievement and Resilience (CLEAR)	Trauma and Learning Policy Initiative (TLPI)	Transforming Rural Experience in Education (TREE)	Positive Behavioral Interventions and Supports (PBIS)
Teacher training	Trained to use trauma responsive strategies, manage student behaviors with compassionate and effective strategies, and exercise self-care.	All-staff professional development trainings and consultation supports.	A highly structured professional development instructional component for all staff.	Provides tools and resources to help individual teachers and administrators to increase awareness and engagement of the entire school, and on changing school policies, procedures, and protocols.	Teachers and administrators work together with school-based resource coaches and mental health providers.	Staff training is a part of PBIS.
Focus on staff	Primary focus on teachers; some involvement of school counselors and leadership team.	Focus on all staff; supports and services planned and implemented in close collaboration with school leadership and key school staff (e.g., coordinated care teams).	Focus on all staff; engages leadership and staff concurrently in a co-design process.	Focus on all staff.	Provide consulting and training for teachers, staff, school leaders, and local organizations.	Focus on instructional staff.
Is SEL a component?	To some extent. Part of the regulatory components of classroom strategies.	To a large extent. Culturally responsive SEL curricula and restorative practices are part of Tier 1 activities.	To a large extent. SEL is guided through individual student supports and classroom management practices that teach and reinforce social and emotional competencies.	To some extent. Provides recommendations for alignment with SEL and other educational support strategies.	To a large extent. Prioritize student- empowered social emotional learning	To a large extent. SEL is an integral part of PBIS.

Table 2. Tier I programs—continued

Program	Compassionate Schools	HEARTS	Collaborative Learning for Educational Achievement and Resilience (CLEAR)	Trauma and Learning Policy Initiative (TLPI)	Transforming Rural Experience in Education (TREE)	Positive Behavioral Interventions and Supports (PBIS)
Extent of community engagement	To some extent; one of the 10 core principles is to "Provide access, voice, and ownership for staff, students and community."	Family members of students are engaged as a part of the students' support plans.	Unclear.	To some extent. Recommends a community-liaison team to build relationships with mental health and other service providers.	Community organizations and caregivers receive training and support around ACEs, brain science, mental health, etc.	Families, students, and school personnel set goals and work together to see them through.
Target grades	Elementary, middle, and high schools	Elementary and middle schools	Pre-K, elementary, middle, and high schools	Elementary, middle, and high schools	Elementary and middle schools	Elementary, middle, and high schools

Table 3. Tier II programs

Program	Trauma-informed Positive Education (TIPE)	Cognitive Behavioral Intervention for Trauma in Schools (CBITS)	Handle with Care (HWC)	Coping Power Program (CPP)
	A teacher training program that integrates TI principles with positive education models to improve instruction received by vulnerable students. Trainings include examining the influence of factors such as racism, poverty, peer victimization, community violence, and bullying on students. Has been implemented in rural contexts in Australia.	A group intervention to help students experiencing symptoms of trauma. Uses techniques from the field of cognitive behavioral therapy to teach students coping skills. Also includes parent and teacher education sessions.  Adapted for implementation to specific student populations and school communities including rural schools.	Involves a partnership between local law enforcement, schools, and juvenile assessment centers. Schools are given a "heads up" by law enforcement when a child has been identified at the scene of a traumatic event such as a car crash, domestic violence situation, or other stressful events that could impact the child's ability to learn. HWC has been implemented in rural and urban communities.	A preventative intervention skill-training program for students with aggressive behavior and their caregivers. Uses skills-based student training to increase social competence and self-regulation, as well as parent trainings to promote positive parental involvement in their child's education. Implemented in rural schools in multiple states.
Source	Centre of Positive Psychology and the Youth Research Centre at the University of Melbourne, Australia	Developed by researchers at the University of California at Los Angeles (UCLA) and the Los Angeles Unified School District (LAUSD).	Implemented in various school communities across the country.	The University of Alabama
Link to the program	https://link.springer.com/article/ 10.1007/s40688-015-0070-x	https://cbitsprogram.org/	http://www.handlewithcarewv.or g/handle-with-care.php	http://www.copingpower.com/re sults_outcomes.html
Focus	Teacher training to implement classroom-wide TI strategies	School social workers and mental health professionals	School social workers, mental health professionals, and community partners	School social workers and counselors
Tier/Approach (1 if universal, 2 if targeted, and 3 if for specific groups, etc.)	Tier 2	Tier 2 and 3	Tier 2	Tier 2 and 3

Table 3. Tier II programs—continued

Program	Trauma-informed Positive Education (TIPE)	Cognitive Behavioral Intervention for Trauma in Schools (CBITS)	Handle with Care (HWC)	Coping Power Program (CPP)
Teacher training	Trains teachers to reflect on the underlying causes of students' behaviors, thus supporting trauma-affected students by increasing self-regulatory abilities, relational capacities, and psychological resources for student well-being.	Includes one teacher education session.	School staff are trained on how trauma impacts development.	Three levels of training for school counselors.
Focus on staff	Largely on teachers.	Teachers receive training, but it is recommended that someone with clinical mental health training deliver the CBITS program.	School counselors assess the child's need for counseling services and make recommendations to the caregiver.	Trains school counselors to assess children's need for counseling services and make recommendations to the caregiver.
Is SEL a component?	To a large extent. Increasing self- regulatory abilities in students is an explicit focus within staff training	Minimal.	Minimal.	To a large extent. Focus on teaching social and organizational skills to students.
Extent of community engagement	Minimal.	Includes two parent education sessions.	Partnership between schools and community law enforcement and juvenile justice entities.	Includes periodic home visits.
Target grades	Elementary, middle, and high schools.	Middle and high schools.	Elementary, middle, and high schools.	Late elementary to middle school.

In Section IV, we highlight issues relating to ACEs and trauma faced by rural school communities, and offer guidance on how to implement key elements of TI approaches in rural school communities while addressing potential barriers faced by rural school communities.

"When teachers fully understand trauma and its manifestations, the mindset will shift from one more thing to do to THE thing we must do."

-An elementary schoolteacher, Nashville, TN.

#### Section IV. Implementation of TI Approaches in Rural Contexts

Adopting a TI approach requires careful consideration of which systems need to be put into place to support TI practices, policies, and procedures. Implementing TI is a process that can take several years, which will look different for different schools and districts depending on the local context. Becoming TI can be challenging for schools in any setting, but the issues outlined above in rural areas,

such as the prevalence and impact of ACEs and trauma, and the limited access to critical resources and services, can make planning and implementing TI programs particularly daunting. This might especially be true in places where schools within the same rural district may have different levels of "rurality" (i.e., some may be more or less rural), and therefore have varying levels of access to faculty professional development opportunities, instructional resources, internet and other technology supports, or administrative supports (i3 Improving Rural Achievement Community Report 2017).

However, some rural school communities also have unique strengths that they can draw on to mitigate potential challenges. For example, being small, tightly knit communities may enhance opportunities for high levels of community support and engagement, as evidenced in rural school communities in Louisiana. Additionally, rural schools are often the social and cultural centers of their communities, particularly for the most geographically remote, which might result in greater community involvement (Cross and Burney 2005). In general, families in rural areas tend to express significant support for their schools and

Schools in three rural southeastern Louisiana parishes collaborated with a local behavioral health services center over a 4-year period to implement a trauma-treatment program. Working within the school and community culture, the collaborations—facilitated by the school superintendents—proved crucial to understanding the needs of the community. The implementation began with a "three-tiered" process centered on (1) building relationships with community stakeholders including teachers, school and hospital administrators, parents, students, first responders, and juvenile court personnel, (2) educating the community on traumatic exposure and response, and (3) implementing therapeutic services to youth exposed to trauma. The result of the three-tiered approach proved effective in reducing trauma symptoms for students exposed to trauma (see Hansel et al. 2010).

school activities, engage in strong school-family-community <u>partnerships</u>, and embrace a strong sense of ownership of the community (Cross and Dixon 1998).

Taking into account the unique challenges and strengths of rural communities, and the variation between them, we identify below key strategies for planning and implementing TI approaches. These strategies suggest possible ways to address the challenges identified in the earlier sections by

The Association of Alaska School Boards, the Department of Education and Early Development, and other partners provide a statewide TI framework that "provides insight into policies, practices, and shared understandings that can create a true shift in how school staff, students, and families work together to support student learning."

drawing upon the unique strengths of rural school settings we mentioned previously. The strategies can be used as entry points in the initial implementation phase or to strengthen existing processes to integrate TI into existing initiatives. There is no one right way to implement TI approaches; schools will need to tailor their approaches depending on their specific context.



**Get stakeholder engagement, support, and buy-in:** Considering the organizational-level changes required to successfully implement TI approaches, getting leadership and staff buy-in and support at the state, district, and school levels is essential. This commitment includes the early step of developing a shared vision and common understanding of trauma and its impact among all stakeholders, allocating the necessary time and infrastructure for staff for professional development, and reviewing and reallocating resources to support the implementation of the school's action plan.

- > Schools and districts will need to determine the entry point for TI implementation. Whether to approach families first with information about ACEs and trauma, commence <a href="staff training">staff training</a> and skill building, or implement TI strategies within the general population of students or with certain groups of students (e.g., special education classrooms), or begin at the district level.
- Given the close-knit nature of some rural communities, it may be more important for rural schools and districts to take a multi-pronged approach and build support from the ground up. In addition to school staff and administrators, this includes reaching out to families and community members as well as involving key influencers from the community, such as local clergy, retirees, and council or government officials, from the beginning.
- When <u>developing a plan to</u> build early stakeholder engagement and buy-in regarding the importance of becoming a TI school or district, it is important to consider what local issues related to ACEs need to be prioritized, and what the school and community stand to gain through <u>TI practices and policies</u>. Setting up early "wins" can go a long way to encourage buy-in. Focus initial efforts on using TI to address the problems that plague your school the most (e.g., learning loss, inequities in access to resources, teacher turnover); try to produce immediate positive gains, perhaps by starting with less-demanding strategies that yield high payoffs.

If the term "trauma" is not received well in the community, or is looked upon as something that is outside the purview of the school, <u>other terms</u> and frameworks could be used. Although not interchangeable, terms such as "behavioral health," "character development," or "resilience" have been used across different school settings.



**Use a multitiered approach to trauma training and skill building:** Rural school entities should consider taking a multiphased approach to training and professional development offerings that accounts for the different roles, responsibilities, and knowledge and skills of staff. It is critical for all school staff to build trauma literacy and skills that enhance their capacity to create trauma sensitive learning environments, including an understanding of the prevalence and impact of trauma, techniques for strengthening relationships between children and adults, and alternatives to punitive disciplinary practices; but those individuals working more intensely and directly with students should receive more intensive training regarding TI approaches

- Although an initial TI training should be separate from other professional development since it will likely involve more specific and intensive staff education, trainings can also be added onto other professional development and conducted over several sessions, as a way to conserve financial resources.
- Given the teacher turnover experienced by some schools in rural areas, it is advisable to have an <u>ongoing training program</u> that occurs regularly, to accommodate new teachers or teacher substitutes. Additionally, there could be a combination of in-person and online training modules that do not require teachers to take time off.
- The well-being of staff is just as essential to the TI process as their interactions with students. Schools need to include <u>self-care</u> as part of the trauma trainings and provide training for staff to understand the signs of secondary traumatic stress and ways to prevent burnout and teacher turnover. School staff/leadership should know how to monitor their staff for the possibility of <u>compassion</u> fatigue and/or burnout. This is more imperative considering pandemic experience and related implications. While supporting educators through primary and/or secondary trauma, confidentiality among the entire school community is essential.
- While staff do not need to assume the role of therapists, they need to be able to make <u>quick</u> <u>referrals</u> for students who may need more intensive or immediate support. It is important for school staff to have contact information available for various social service organizations, or have some other efficient system in place, so that they can promptly refer students, peers, and families to the school's designated staff member (e.g., principal, counselor).
- reflect together. Partner with local community behavioral organizations or <u>university-based</u> <u>clinics</u> to either provide the trauma training for school staff, if they are specialized in trauma care, or to undergo some of the training along with the school staff. This will require fewer financial resources, increase the trauma skills in the community, and promote the feeling of "being in this together." For rural schools, this may be accomplished through virtual learning platforms/telemedicine mental health clinics.

- Although training is an important first step, the more critical step is to ensure the learning influences changes in <u>classroom practices</u> and school/district policies. Moving forward, TI work can, and should be, integrated into other professional development activities in line with the integration that will be seen in the broader school community.
- For schools with in-school resources for Tier II support, it would be beneficial to train the mental health staff serving in trauma-focused counseling, given that children in rural communities may only encounter child-serving professionals at school. This would avoid the need for students to travel into the community to seek the support they need, and may even be associated with less stigma than going to a mental health professional in the community.



**Integrate and align key elements of TI schools:** Although it is important to have a plan and vision for a whole-school framework extending into several years, rural schools might want to consider making small changes that <u>align with existing efforts</u> so the school community does not have to make a rapid paradigm shift to acknowledging and understanding trauma and change existing practices.

- > Consider how the TI program/approach will align with other ongoing initiatives and practices at the school/district. Programs will work best when integrated with practices (and leadership teams) that have similar goals, strategies, and areas of focus. This contributes to common efforts and interests, fostering greater schoolwide support and involvement.
- On the school/district/state website, synthesize local resources and online resources for trauma training, or develop materials that increase awareness of ACEs, trauma, and its impact. It will be advantageous to have a centralized, online location through which districts/schools can share their successes, resources, and lessons learned. A more coordinated, <a href="mailto:centralized repository">centralized repository</a> for this information could help catalyze change and provide support for organizations in more rural parts of the state that wish to adopt these practices.
- School entities at the beginning phases of implementation may want to consider starting screening efforts with a single grade or smaller pilot to gauge potential issues, such as capacity challenges, before undertaking a larger universal screening. It is advisable to delay trauma screening until the entire school community, including staff and families, is fully aware of the TI implementation plan.



**Build networks of support:** This may be the key strategy for rural school communities. Given the limited resources in some rural areas, schools may need to develop strong <u>relationships</u> <u>with community providers</u> to provide trauma trainings and more intensive Tier II and III level care to students who may need it. Accordingly, schools and districts should conduct a review of the services and providers that are available both within the school community and in the community at-large, as well as potential state- and national-level resources. Partners might include community mental health organizations, youth-focused groups, <u>law enforcement</u>, child welfare, advocacy groups, military family organizations, and local health agencies who can share strategies for supporting students impacted by traumatic and related stress (see figure 6).

Figure 6. MTSS framework for community partnerships to create and support traumainformed schools

## **TIER 1:** Universal (All Students/Staff)

#### **Key Strategies:**

- Promoting positive school climate
- Trauma sensitive classrooms
- Mental Health First Aid
- Equity-focused social & emotional learning (SEL)
- Bullying prevention
- School therapeutic services (STS) education staff self-care
- General wellness support & education

#### **Kev Partnerships:**

- Community mental & behavioral health organizations
- Public service organizations
- Youth development organizations
- Religious institutions (universities, advocacy groups (e.g., LGBTQ), local ACEs initiative)
- Families, PTA

#### **TIER 2:** Early Intervention/ Identifying Students & Staff At-Risk (Some Students/Staff)

#### **Key Strategies:**

- Screening students
- Group interventions (cognitive behavioral therapy, secondary traumatic stress support)
- Crisis counseling (wrap-around services, threat assessment, peer support group counseling, progress monitoring)

#### **Key Partnerships:**

- Community mental & behavioral health organizations
- Health departments (county, state)
- Youth development organizations
- Religious institutions
- Law enforcement (e.g., handle with care program)
- Families

## **TIER 3:** Intensive Support (Individual Students/Staff)

#### **Key Strategies:**

- Intensive individual & family interventions
- Trauma-specific treatment
- Wrap-around services
- Referral process

#### **Key Partnerships:**

- Community mental & behavioral health organizations
- Court appointed special advocates (CASAs)/guardian ad litems (GALs)
- Law enforcement
- Child welfare agencies / children & youth services
- Families
- Community partners such as public health departments, behavioral health providers capable of billing Medicaid, and social service agencies can provide needed supports and services for students, and strengthen <u>family</u> and community engagement with schools.
- > <u>De-stigmatization of mental</u> and behavioral health needs is critical. Schools should provide options for self-referral to reduce stigma about mental health.
- Although psychologists and counselors in rural settings may have access to a variety of interventions and professional development opportunities, they may serve more schools, have fewer years of experience, and spend significantly more time traveling. Rural schools should consider and develop protocols for <u>telehealth services</u>. Consider co-location of services. Invite community partners to offer services in-school on certain days of the week during the school day, or after school, depending on the availability of transportation for students.



**Bring in the youth and family voice:** It is essential to <a href="empower students">empower students</a> and family members as partners in the creation of a TI school as well as in the planning of TI practices. While limits exist for whom the school can engage directly within the student's <a href="family">family</a>, a TI mindset recognizes the impact of caregiver, sibling, and other important family members' life experiences in an effort to enhance a school's ability to address adverse life experiences for the student and find practical opportunities to maximally address challenges facing students.

> Consider local parent teacher organizations, groups representing the community's cultural identity(ies), LGBTQ+ advocacy and support groups, and/or Title I teams to help improve

- awareness and earn support. <u>Rural schools</u> can identify the unique pathways that make sense in their community to meaningfully engage families.
- > Evidence-based practices should to be adapted to be <u>culturally responsive</u> to the students and their families to reduce stigma and increase effectiveness of service utilization. Religious institutions can serve as cultural brokers (members of the student's community tasked with translating cultural practices for school), serving as a <u>bridge between school and community</u>, especially when a family is reluctant to engage in health and TI services. Collaborate with the different community entities (families, Elders, support services, etc.) to design community-based and culturally responsive professional learning.
- Assess current school–family relationships. School staff, administrators, and community can review family and school climate surveys, host focus groups, and review existing relationships with families. Create opportunities for families to share their knowledge and build confidence as the child's first and most important teacher. Include the role of family partnership in professional learning so staff learn principles and strategies for deepening their relationships with families.



**Leverage policy actions:** Policies go hand in hand with practices. To increase accountability and adherence to TI practices, consider updating and/or revising existing school and district policies as well as the school's academic mission to spotlight the alignment of TI practices to academic outcomes.

- School boards and district leadership can <u>review policies and procedures</u> to identify and address standard practices that compromise the safety of the learning environment and/or adversely and disproportionately affect specific groups of students and exacerbate traumatic stress.
- Review policies and procedures that are currently in place regarding student <u>discipline</u>, the extent to which they are TI, and whether it is possible to reduce the unnecessary use of exclusion and referrals to law enforcement/juvenile justice, and/or promote positive behavior (e.g., PBIS, restorative practices). Examine school/district data to assess <u>disparities in expulsions/suspensions</u> and chronic absenteeism.
- > Train Individualized Education Plan (IEP) team members in trauma's impact on key developmental domains, and evidence-based practices for supporting children experiencing traumatic stress which can then be considered in the IEP planning process.
- Understand the intersections of youth identities and trauma exposure. While trauma affects many children, students from rural communities may experience specific forms that need to be recognized at the local level. Students from racial and ethnic backgrounds who have suffered major intergenerational losses and violence can experience traumatic stress linked to that historical trauma. Similarly, students of color are more likely to experience racial trauma from witnessing or experiencing racism, discrimination, or structural prejudice. When compared with their peers, <a href="LGBTQ+youth">LGBTQ+youth</a> face an elevated risk of suicide attempts and ideation, attributed to increased stress caused by exposure to stigma, discrimination, and violence. As part of efforts to plan, develop, and implement TI schools, it is essential to recognize and meet the needs of these students through culturally responsive and inclusive policies and practices.

As described above, becoming a TI rural school community requires strategic planning and commitment, and the process evolves over time. The implementation phases and strategies will need to be tailored to the specific school community context. Despite the potential barriers noted above, many unique assets of rural communities serve to facilitate the implementation of TI practices through increased community collaboration. Although the process of identifying strengths and assets in school communities and planning to integrate TI practices into existing initiatives may require more time and thought in the beginning, it will likely foster long-term success.

"This work requires ongoing commitment and perseverance, resilience, and reflection – the same skills children need to grow and change"

—[Quote from Transforming Schools: a Framework for Trauma-Engaged Practice in Alaska]

### Section IV. Conclusion/Implications

Childhood trauma is a pervasive problem and understanding it is important in all school settings. Given the extent to which trauma impacts learning, relationships, and behavior in schools, and the short- and long-term effects on well-being and development, it is critical that schools incorporate trauma-informed practices. School-based approaches in rural areas can mitigate the impact of ACEs and increase learning opportunities for all students' rates of ACEs, child poverty, and related issues such as limited resources or access to behavioral/mental health care.

Rural communities have unique assets that may facilitate a school's approach to understanding trauma as a backdrop for some students' scholastic difficulties. Partnerships between schools and community in providing TI care may serve as a key strength to address the challenges in rural school communities, to ensure that all children have the opportunity to achieve their potential.

#### References

Bethell, C.D., Davis, M.B., Gombojav, N., Stumbo, S., and Powers, K. (2017). Issue Brief: A National and Across State Profile on Adverse Childhood Experiences among Children and Possibilities to Heal and Thrive. Johns Hopkins Bloomberg School of Public Health. Retrieved May 27, 2021, from <a href="http://www.cahmi.org/projects/adverse-childhood-experiences-aces/">http://www.cahmi.org/projects/adverse-childhood-experiences-aces/</a>

Bethell, C. D., Newacheck, P., Hawes, E., and Halfon, N. (2014). Adverse Childhood Experiences: Assessing the Impact on Health and School Engagement and the Mitigating Role of Resilience. *Health Affairs*, *33*(12): 2106–2115. Retrieved May 27, 2021, from <a href="https://doi.org/10.1377/hlthaff.2014.0914">https://doi.org/10.1377/hlthaff.2014.0914</a>

Blodgett, C. (2012). *Adopting ACEs Screening and Assessment in Child Serving Systems* (ACE Screening and Assessment in Child Serving Systems Working Paper 7-12). Washington State University. <a href="https://www.dcyf.wa.gov/sites/default/files/pdf/Complex-Trauma-Research-ACE-Screening-and-Assessment.pdf">https://www.dcyf.wa.gov/sites/default/files/pdf/Complex-Trauma-Research-ACE-Screening-and-Assessment.pdf</a>

- Bowen, N. K., and Bowen, G. L. (1999). Effects of Crime and Violence in Neighborhoods and Schools on the School Behavior and Performance of Adolescents. *Journal of Adolescent Research*, *14*(3): 319–342. Retrieved May 27, 2021, from <a href="https://doi.org/10.1177/0743558499143003">https://doi.org/10.1177/0743558499143003</a>
- Brave Heart, M., and Bird, D. (2013). *Historical Trauma and Suicide*. Indian Health Services. Retrieved May 27, 2021, from
  - https://www.ihs.gov/sites/telebehavioral/themes/responsive2017/display objects/documents/slides/historicaltrauma/htsuicide0413.pdf
- Brown, D. W., Anda, R. F., Tiemeier, H., Felitti, V. J., Edwards, V. J., Croft, J. B., and Giles, W. H. (2009). Adverse Childhood Experiences and the Risk of Premature Mortality. *American Journal of Preventive Medicine*, *37*(5): 389–396. Retrieved May 27, 2021, from <a href="https://doi.org/10.1016/j.amepre.2009.06.021">https://doi.org/10.1016/j.amepre.2009.06.021</a>
- Centers for Disease Control and Prevention. (2019). Adverse childhood experiences (ACEs): Preventing early trauma to improve adult health. *CDC Vital Signs*. Retrieved May 25, 2021, from <u>vs-1105-aces-H.pdf (cdc.gov)</u>
- Chanlongbutra, A., Singh, G. K., and Mueller, C. D. (2018). Adverse Childhood Experiences, Health-Related Quality of Life, and Chronic Disease Risks in Rural Areas of the United States. *Journal of Environmental and Public Health*, 2018. Retrieved May 27, 2021, from <a href="https://doi.org/10.1155/2018/7151297">https://doi.org/10.1155/2018/7151297</a>
- Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., and Anda, R. F. (2004). Adverse Childhood Experiences and the Risk of Depressive Disorders in Adulthood. *Journal of Affective Disorders*, 82(2): 217–225. Retrieved May 27, 2021, from <a href="https://doi.org/10.1016/j.jad.2003.12.013">https://doi.org/10.1016/j.jad.2003.12.013</a>
- Chartier, M. J., Walker, J. R., and Naimark, B. (2010). Separate and Cumulative Effects of Adverse Childhood Experiences in Predicting Adult Health and Health Care Utilization. *Child Abuse and Neglect*, *34*(6): 454–464. Retrieved May 27, 2021, from <a href="https://doi.org/10.1016/j.chiabu.2009.09.020">https://doi.org/10.1016/j.chiabu.2009.09.020</a>
- Collaborative for Academic, Social, and Emotional Learning (CASEL). (2020). *CASEL's SEL Framework*. Retrieved May 27, 2021, from <a href="https://casel.org/wp-content/uploads/2020/12/CASEL-SEL-Framework-11.2020.pdf">https://casel.org/wp-content/uploads/2020/12/CASEL-SEL-Framework-11.2020.pdf</a>
- Communities in Schools. (2020). *Community Matters: Focus on Rural Schools, Communities in Schools National Report.* Retrieved May 27, 2021, from <a href="https://www.communitiesinschools.org/our-data/publications/">https://www.communitiesinschools.org/our-data/publications/</a>
- Community Resilience Cookbook. (2013). *The Walla Walla, Washington Story*. Retrieved May 27, 2021, from <a href="https://communityresiliencecookbook.org/tastes-of-success/the-walla-washington-story/">https://communityresiliencecookbook.org/tastes-of-success/the-walla-washington-story/</a>
- Cross, T. L., and Dixon, F. A. (1998). On Gifted Students in Rural Schools. *NASSP Bulletin*, *82*(595): 119–124. Retrieved May 27, 2021, from <a href="https://doi.org/10.1177/019263659808259514">https://doi.org/10.1177/019263659808259514</a>

- Cross, T. L., and Burney, V. H. (2005). High Ability, Rural, and Poor: Lessons from Project Aspire and Implications for School Counselors. *Journal of Secondary Gifted Education*, *16*(4): 148–156. Retrieved May 27, 2021, from <a href="https://doi.org/10.4219/jsge-2005-483">https://doi.org/10.4219/jsge-2005-483</a>
- Crouch, E., Radcliff, E., Probst, J. C., Bennett, K. J., and McKinney, S. H. (2019). Rural-Urban Differences in Adverse Childhood Experiences Across a National Sample of Children. *The Journal of Rural Health*, *36*(1): 55–64. Retrieved May 27, 2021, from <a href="https://doi.org/10.1111/jrh.12366">https://doi.org/10.1111/jrh.12366</a>
- Czeisler, M. E., Lane, R. I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R., Weaver, M. D., Robbins, R., Facer-Childs, E. R., Barger, L. K., Czeisler, C. A., Howard, M. E., and Rajaratnam, S. M. W. (2020). Mental Health, Substance Use, and Suicidal Ideation during the COVID-19 Pandemic United States, June 24-30, 2020. *Morbidity and Mortality Weekly Report*, 69(32): 1049-1057. Retrieved May 27, 2021, from <a href="https://doi.org/10.15585/mmwr.mm6932a1">https://doi.org/10.15585/mmwr.mm6932a1</a>
- Davis, L., and Buchanan, R. (2020). Trauma-Informed Practices in Rural Education. *Theory and Practice in Rural Education*, 10(1): 24–41. Retrieved May 27, 2021, from <a href="https://doi.org/10.3776/tpre.v10n1p24-41">https://doi.org/10.3776/tpre.v10n1p24-41</a>
- Eisenberg, N., and Fabes, R. A. (1992). Emotion, Regulation, and the Development of Social Competence. In M. S. Clark (Ed.), *Review of Personality and Social Psychology* (Vol. 14, pp. 119–150). Sage Publications, Inc.
- Ellis, W. R., and Dietz, W. H. (2017). A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience Model. *Academic Pediatrics*, *17*(7S): S86–S93. Retrieved May 27, 2021, from <a href="https://doi.org/10.1016/j.acap.2016.12.011">https://doi.org/10.1016/j.acap.2016.12.011</a>
- Farrigan, T. (2017). *Rural Poverty and Well-Being*. U.S. Department of Agriculture. Retrieved May 27, 2021, from <a href="https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/">https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/</a>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., and Marks, J. S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4): 245–258. Retrieved May 27, 2021, from <a href="https://doi.org/10.1016/s0749-3797(98)00017-8">https://doi.org/10.1016/s0749-3797(98)00017-8</a>
- Guarino, K., and Chagnon, E. (2018). Trauma-sensitive schools training package. Washington, DC: National Center on Safe Supportive Learning Environments. Retrieved May 27, 2021, from <a href="https://safesupportivelearning.ed.gov/trauma-sensitive-schools-training-package">https://safesupportivelearning.ed.gov/trauma-sensitive-schools-training-package</a>
- Hamilton, L. S., Doss, C. J., and Steiner, E. D. (2019). *Teacher and Principal Perspectives on Social and Emotional Learning in America's Schools: Findings from the American Educator Panels.* Retrieved May 27, 2021, from <a href="https://www.rand.org/pubs/research\_reports/RR2991.html">https://www.rand.org/pubs/research\_reports/RR2991.html</a>
- Hansel, T. C., Osofsky, H. J., Osofsky, J. D., Costa, R. N., Kronenberg, M. E., and Selby, M. L. (2010). Attention to Process and Clinical Outcomes of Implementing a Rural School-Based Trauma Treatment Program. *Journal of Traumatic Stress*, *23*(6): 708–715. Retrieved May 27, 2021, from <a href="https://doi.org/10.1002/jts.20595">https://doi.org/10.1002/jts.20595</a>

- Health Resources and Services Administration, U.S. Department of Health and Human Services. (2015). *The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation 2011-2012*. Retrieved May 27, 2021, from <a href="https://mchb.hrsa.gov/sites/default/files/mchb/Data/NSCH/nsch11-12-health-well-child-rural-apr2015.pdf">https://mchb.hrsa.gov/sites/default/files/mchb/Data/NSCH/nsch11-12-health-well-child-rural-apr2015.pdf</a>
- Howley, C., and Redding, S. (2021). *Cultivating Rural Education: A People-Focused Approach for States*. Charlotte, NC: Information Age Publishing, Inc.
- Illinois ACEs Response Collaborative. (2016). *Education Brief: ACEs for Educators and Stakeholders*. Retrieved May 27, 2021, from <a href="http://www.hmprg.org/wp-content/themes/HMPRG/backup/ACEs/Education%20Policy%20Brief.pdf">http://www.hmprg.org/wp-content/themes/HMPRG/backup/ACEs/Education%20Policy%20Brief.pdf</a>
- i3 Improving Rural Achievement Community (2017). <u>Leading Education Innovations in Rural Schools:</u> <u>Reflections from i3 Grantees.</u>
- Izard, E. (2016). *Teaching Children from Poverty and Trauma*. National Education Association. Retrieved May 27, 2021, from <a href="https://www.nea.org/sites/default/files/2020-07/NEAPovertyTraumaHandbook.pdf">https://www.nea.org/sites/default/files/2020-07/NEAPovertyTraumaHandbook.pdf</a>
- Keesler, J. M., Tucker, M., Terrell, B., Shipman, K., and Osborne, R. (2020). Two Schools, One Rural County: Exploring Adverse Childhood Experiences among School-Aged Youth. *Journal of Aggression, Maltreatment and Trauma*, *30*(1): 101–117. Retrieved May 27, 2021, from <a href="https://doi.org/10.1080/10926771.2020.1747130">https://doi.org/10.1080/10926771.2020.1747130</a>
- Leeb, R. T. (2020). COVID-19 Trends among School-Aged Children United States, March 1–September 19, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69(39): 1410-1415. Retrieved May 27, 2021, from https://doi.org/10.15585/mmwr.mm6939e2
- McInerney, M., and McKlindon, A. (2014). *Unlocking the Door to Learning: Trauma-Informed Classrooms and Transformational Schools.* Education Law Center.
- Merrick, M. T., Ford, D. C., Ports, K. A., and Guinn, A. S. (2018). Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States. *JAMA Pediatrics*, 172(11): 1038. Retrieved May 27, 2021, from <a href="https://doi.org/10.1001/jamapediatrics.2018.2537">https://doi.org/10.1001/jamapediatrics.2018.2537</a>
- Miller, L. C., and Johnson, A. (2016). <u>Chronic Absenteeism in Virginia and the Challenged School</u>
  <u>Divisions: A Descriptive Analysis of Patterns and Correlates.</u> EdPolicyWorks. University of Virginia Curry School of Education.
- National Child Traumatic Stress Network. (2017). *Creating, Supporting, and Sustaining Trauma-Informed Schools: A System Framework*. Retrieved May 27, 2021, from <a href="https://www.nctsn.org/resources/creating-supporting-and-sustaining-trauma-informed-schools-system-framework">https://www.nctsn.org/resources/creating-supporting-and-sustaining-trauma-informed-schools-system-framework</a>
- National Institute for Health Care Management (NIHCM) Foundation. (2020). *Helping Children Thrive: The COVID-19 Pandemic's Impact on Health and Well-Being*. Retrieved May 27, 2021, from <a href="https://nihcm.org/publications/helping-children-thrive-the-covid-19-pandemics-impact-on-health-and-well-being">https://nihcm.org/publications/helping-children-thrive-the-covid-19-pandemics-impact-on-health-and-well-being</a>

- Perfect, M. M., Turley, M. R., Carlson, J. S., Yohanna, J., and Saint Gilles, M. P. (2016). School-Related Outcomes of Traumatic Event Exposure and Traumatic Stress Symptoms in Students: A Systematic Review of Research from 1990 to 2015. *School Mental Health*, 8(1): 7–43. Retrieved May 27, 2021, from <a href="https://doi.org/10.1007/s12310-016-9175-2">https://doi.org/10.1007/s12310-016-9175-2</a>
- Radcliff, E., Crouch, E., and Strompolis, M. (2018). Rural–Urban Differences in Exposure to Adverse Childhood Experiences among South Carolina Adults. *Rural and Remote Health*, *18*(1). Retrieved May 27, 2021, from <a href="https://doi.org/10.22605/rrh4434">https://doi.org/10.22605/rrh4434</a>
- Showalter, D., Klein, R., Johnson, J., and Hartman, S. L., and Klein, B. (2019). *Why Rural Matters 2018-2019: The Time Is Now. A Report of the Rural School and Community Trust*. Rural School and Community Trust. Retrieved May 27, 2021, from <a href="https://eric.ed.gov/?id=ED604580">https://eric.ed.gov/?id=ED604580</a>
- Stevens, J. E. (2012). *Lincoln High School in Walla Walla, WA, Tries New Approach to School Discipline—Suspensions Drop 85%.* ACEs Too High News. Retrieved May 27, 2021, from <a href="https://acestoohigh.com/2012/04/23/lincoln-high-school-in-walla-walla-wa-tries-new-approach-to-school-discipline-expulsions-drop-85/">https://acestoohigh.com/2012/04/23/lincoln-high-school-in-walla-walla-wa-tries-new-approach-to-school-discipline-expulsions-drop-85/</a>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). *Concept of Trauma and Guidance for a Trauma-Informed Approach Prepared by SAMHSA's Trauma and Justice Strategic Initiative*. Retrieved May 27, 2021, from https://ncsacw.samhsa.gov/userfiles/files/SAMHSA Trauma.pdf
- Talbot, J., Szlosek, D., and Ziller, E. (2016). *Adverse Childhood Experiences in Rural and Urban Contexts*. Maine Rural Health Research Center. Retrieved May 27, 2021, from <a href="http://muskie.usm.maine.edu/Publications/rural/Adverse-Childhood-Experiences-Rural.pdf">http://muskie.usm.maine.edu/Publications/rural/Adverse-Childhood-Experiences-Rural.pdf</a>
- Teicher, M., Anderson, C., Ohashi, K., and Polcari, A. (2014). Childhood Maltreatment: Altered Network Centrality of Cingulate Precuneus, Temporal Pole and Insula [Online image from page 16]. Developmental Biopsychiatry Research Program, McLean Hospital. Retrieved May 27, 2021, from <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4258110/pdf/nihms546881.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4258110/pdf/nihms546881.pdf</a>
- Trauma and Learning Policy Initiative (TLPI), Transforming Education. (2020). *Trauma-Informed SEL Toolkit*. Retrieved May 27, 2021, from <a href="https://transformingeducation.org/resources/trauma-informed-sel-toolkit/">https://transformingeducation.org/resources/trauma-informed-sel-toolkit/</a>
- von der Embse, N., Rutherford, L., Mankin, A., and Jenkins, A. (2019). Demonstration of a Trauma-Informed Assessment to Intervention Model in a Large Urban School District. *School Mental Health*, *11*(2): 276–289. Retrieved May 27, 2021, from <a href="https://psycnet.apa.org/record/2018-51177-001">https://psycnet.apa.org/record/2018-51177-001</a>

## **Appendix Tables**

Table A-1. Adverse Childhood Experiences (ACEs): Prevalence and impact

Suggested Resource	Туре	Description
A Guide to Toxic Stress <a href="https://developingchild.harvard.edu/guide/a-guide-to-toxic-stress/">https://developingchild.harvard.edu/guide/a-guide-to-toxic-stress/</a>	Website	This web page from the Harvard University Center on the Developing Child provides a definition and introduction to toxic stress. It also discusses the science and social causes of toxic stress and provides a toxic stress FAQs page.
Child Trends Brief <a href="https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity">https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity</a>	Brief	This brief uses data from the 2016 NSCH to describe the prevalence of one or more ACEs among children. It also outlines state variations and risk factors.
MARC Health Brief <a href="https://marc.healthfederation.org/sites/default/files/Health%20Policy%20Brief%20Dec%202017.pdf">https://marc.healthfederation.org/sites/default/files/Health%20Policy%20Brief%20Dec%202017.pdf</a>	Brief	This brief outlines the impact of ACEs on education and provides policy recommendations.
School-related Outcomes of Traumatic Event Exposure and Traumatic Stress Symptoms in Students <a href="https://www.researchgate.net/publication/304373172">https://www.researchgate.net/publication/304373172</a> School- <a href="Related Outcomes">Related Outcomes</a> of Traumatic Event Exposure and Traumatic Stress Symptoms in Students A Systematic Review of Research from 1990 to 20 <a href="https://www.researchgate.net/publication/304373172">15</a>	Research Article	This article provides a systematic review of the literature to identify school-related outcomes associated with trauma in school-aged youth.
What Is Child Trauma? <a href="https://www.nctsn.org/what-is-child-trauma/">https://www.nctsn.org/what-is-child-trauma/</a>	Website	This web page provides definitions for child trauma, describes different types of trauma, and identifies populations at risk of experiencing trauma.
Helping Children Thrive: The COVID-19 Pandemic's Impact on Health and Wellbeing <a href="https://nihcm.org/publications/helping-children-thrive-the-covid-19-pandemics-impact-on-health-and-wellbeing">https://nihcm.org/publications/helping-children-thrive-the-covid-19-pandemics-impact-on-health-and-wellbeing</a>	Infographic	This infographic describes how the pandemic is exacerbating existing challenges for children and families and provides strategies for families and caregivers to help support children.

Table A-1. Adverse Childhood Experiences (ACEs): Prevalence and impact—continued

Suggested Resource	Туре	Description
321 Insight Trauma-Informed Schools During COVID-19 https://files.constantcontact.com/519c 08f8601/ce72cd8b-5aef-467a-b5fb- d0178ad37cba.pdf	Infographic	This infographic provides suggestions on which trauma-informed practices to employ in schools during COVID-19.
Unlocking the Door to Learning: Trauma-Informed Classrooms & Transformational Schools https://www.elc-pa.org/wp- content/uploads/2015/06/Trauma- Informed-in-Schools-Classrooms-FINAL- December2014-2.pdf	Brief	This issue brief discusses how educators can begin to understand the role of trauma, its effect on children and learning, and how educators can change methods of interacting and responding to children impacted by trauma.

Table A-2. Trauma-informed practices in schools

Suggested Resource	Туре	Description
NCTSN Child Trauma Toolkit for Educators <a href="https://traumaawareschools.org/resources-">https://traumaawareschools.org/resources-</a> <a href="materials/3162/Child Trauma Toolkit Final.pdf">https://traumaawareschools.org/resources-</a> <a href="materials/3162/Child Trauma Toolkit Final.pdf">https://trauma Toolkit Final.pdf</a> <a href="materials-">https://trauma-Toolkit Final.pdf</a> <a creating-supporting-and-sustaining-trauma-informed-schools-system-framework"="" href="&lt;/td&gt;&lt;td&gt;Toolkit&lt;/td&gt;&lt;td&gt;This child trauma toolkit provides suggestions for educators on how best to assist students who have experienced trauma, as well as outlines the psychological and behavioral impact of trauma across age groups.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;NCTSN: Creating, Supporting, and Sustaining Trauma-Informed Schools: A System Framework &lt;a href=" https:="" resources="" www.nctsn.org="">https://www.nctsn.org/resources/creating-supporting-and-sustaining-trauma-informed-schools-system-framework</a>	Brief	This brief presents a tiered approach to creating a trauma-informed school environment that addresses the needs of all students, staff, administrators, and families who might be at risk for experiencing the symptoms of traumatic stress.
Trauma-Aware Schools Resource Center <a href="https://traumaawareschools.org/tsaResources/resourcecenter">https://traumaawareschools.org/tsaResources/resourcecenter</a>	Website	This website provides a list of resources related to creating trauma-aware schools. The resources include fact sheets, quick-tip videos, reference guides, and more.
Transforming Education: What is Trauma-Informed SEL? <a href="https://transformingeducation.org/resources/trauma-informed-sel-toolkit/">https://transformingeducation.org/resources/trauma-informed-sel-toolkit/</a>	Website	This web page includes a definition for "Trauma-informed SEL." It also has downloadable resources including a recorded webinar, as well as a professional development session designed for educators seeking research-based strategies to create a healthy classroom environment for students who have experienced adversities and trauma.
Trauma Learning Policy Initiative Video: Impact of Trauma on Learning Part 3: Relationships <a href="https://traumasensitiveschools.org/tlpi-video-impact-of-trauma-on-learning-part-3-relationships/">https://traumasensitiveschools.org/tlpi-video-impact-of-trauma-on-learning-part-3-relationships/</a>	Video	In this video, the presenter outlines how trauma can negatively impact a child's self-awareness and relationships with peers and adults.
Healthy Environments and Response to Trauma in Schools (HEARTS): A Whole-School, Multi-level, Prevention and Intervention Program for Creating Trauma-Informed, Safe and Supportive Schools <a href="https://vtnea.org/uploads/files/Healthy%20Environments%20and%20Response%20to%20Schools%20Dorado%20-%20Copy.pdf">https://vtnea.org/uploads/files/Healthy%20Environments%20and%20Response%20to%20Schools%20Dorado%20-%20Copy.pdf</a>	Research Article	This research study examines the effectiveness of the HEARTS program in its ability to promote school success for trauma-impacted students through a whole-school approach utilizing the response to intervention multitiered framework. Results indicate preliminary support for the effectiveness of the HEARTS program.

Table A-2. Trauma-informed practices in schools—continued

Suggested Resource	Туре	Description
Education Northwest: SEL and Equity: Current Issues and Considerations https://www.k12.wa.us/sites/default/fi les/public/studentsupport/sel/pubdocs /Appendix%20M%20SEL%20Equity%20 Paper.pdf	Brief	This brief outlines key issues and opportunities related to SEL and equity in Washington State. It also provides recommendations on considerations for future work related to SEL.
American Federation of Teachers: Trauma Care in Schools <a href="https://www.aft.org/ae/summer2019/dombo_sabatino">https://www.aft.org/ae/summer2019/dombo_sabatino</a>	Website	This web page includes information on how to create a safe environment for students with adverse childhood experiences.
Helping Traumatized Children Learn: Trauma-Sensitive Schools <a href="https://traumasensitiveschools.org/trauma-and-learning/the-solution-trauma-sensitive-schools/">https://traumasensitiveschools.org/trauma-and-learning/the-solution-trauma-sensitive-schools/</a>	Website	This web page defines the core attributes of a trauma-sensitive school. It also includes a video highlighting one elementary school's journey to create a trauma-sensitive, safe, and supportive school.
This handbook from the state of Montana is designed to give administrators, educators, and paraprofessionals a resource that will guide and support them in meeting the needs of students and families.  Trauma Informed Handbooks (mt.gov)	Handbook	Guidance and practical strategies based on the TI principles of the importance of relationships as the driving force behind increased attendance, increased graduation rates, decreased behavior problems, and increased academic achievement.

Table A-3. TI practices and programs in rural contexts

Suggested Resource	Туре	Description
NCRSMH   National Center for Rural School Mental Health https://www.ruralsmh.com/	Website	This web page presents an infographic outlining the need for mental health services in rural areas. The web page also provides links to different articles on mental health care for rural students.
Managing Classroom Behaviors Using an RTI/MTSS Framework <a href="https://www.interventioncentral.org/sites/default/files/workshop-files/allfiles/managingClassBehav%20RT_Revised_27_Jan_2017.pdf">https://www.interventioncentral.org/sites/default/files/workshop-files/allfiles/managingClassBehav%20RT_Revised_27_Jan_2017.pdf</a>	Brief	This brief suggests methods for organizing school resources to support positive behavior and strategies for effective classroom management, as well as strategies for handling students' defiant, anxious, and hyperactive behavior.
Psychological First Aid (PFA) for Students and Teachers https://traumaawareschools.org/resources-materials/3162/PFA+LPC+US+Dept+of+Ed++REMS+HH_Vol3lssue3.pdf?1387376371	Brief	This Helpful Hints publication discusses the use of PFA in schools, specifically, the U.S. Department of Homeland Security's "Listen, Protect, Connect—Model & Teach" (LPC) crisis response strategy. It explores the goals of the strategy, when and how PFA can be implemented by schools, when PFA should be implemented, and the type of training school staff need to effectively use this strategy.
University of New Hampshire: Child Poverty Higher and More Persistent in Rural America <a href="https://scholars.unh.edu/cgi/viewcont-ent.cgi?article=1265&amp;context=carsey">https://scholars.unh.edu/cgi/viewcont-ent.cgi?article=1265&amp;context=carsey</a>	Brief	This brief looks at both the incidence of high child poverty over the past three decades. The analysis shows that rural America includes a disproportionate share of children living in counties characterized as having persistent high child poverty.
The 74 Million: How Schools Can Help Bridge the Mental Health Care Gap for Rural Students <a href="https://www.the74million.org/article/bradshaw-nguyen-how-schools-can-help-bridge-the-mental-health-care-gap-for-rural-students/">https://www.the74million.org/article/bradshaw-nguyen-how-schools-can-help-bridge-the-mental-health-care-gap-for-rural-students/</a>	Article	This article outlines the need for mental health services for youth living in rural contexts. The article cites opportunity gaps related to geography, as well as a lack of extracurricular programs and non-academic supports.
Integrating Trauma Informed and Historical Trauma Informed Care in Behavioral Health Interventions with American Indians and Alaska Natives: Part 3 (ihs.gov)	Slides	Describes key elements in the use of historical and cultural TI practice and three implementation strategies to use evidence-based practices with American Indians and Alaska Natives.