# Educators' Secondary Traumatic Stress, Children's Trauma, and the Need for Trauma Literacy

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*In this essay, authors Lawson, Caringi, Gottfried, Bride, and Hydon introduce the concept of trauma literacy, connecting it to students' trauma and educators' secondary traumatic stress (STS). Interactions with traumatized students is one cause of STS; others derive from other traumatic encounters in schools and communities. Undesirable effects of STS start with professional disengagement and declining performance, include spill-over effects into educators' personal lives, and, ultimately, may cause them to leave the profession. The authors contend that alongside trauma-informed pedagogies and mental health services for students, mechanisms are needed for STS prevention, early identification, and rapid response. To benefit from and advance this dual framework, educators need a trauma-informed literacy that enables self-care, facilitates and safeguards interactions with trauma-impacted students and colleagues, and paves the way for expanded school improvement models.*

*Keywords*: trauma, adverse childhood experience, secondary traumatic stress, school mental health, trauma-informed schools, interprofessional collaboration

All children should come to school ready and able to learn. This inherited ideal underpins models for school improvement and professional education programs. In these models, barriers to student attendance, on-time arrival, engagement, classroom learning, and academic performance are exceptional. That is, they are limited to a manageable number of students who can be assigned to the student support professionals, such as counselors, school psychologists, social workers, creative arts therapists, and nurses. In many models, assessments by teachers and student support professionals provide academic and behavioral data that are used in response-to-intervention protocols (Burkhardt & Hébert, 2017). Each intervention episode is followed by the next assessment, which yields data for the next intervention. Proceeding in this iterative manner, schools tend to operate as academically focused, walled-in entities with special outreach programs for family engagement and extracurricular events. This inherited model is changing as recognition grows that increasing numbers of children and youth arrive at the schoolhouse door with formidable barriers to attendance, on-time arrival, engagement, learning, academic achievement, and high school graduation. Rising child and family poverty rates are directly implicated in these barriers to learning (Annie E. Casey Foundation, 2018; Sacks & Murphey, 2018) because family poverty is associated with parental stress and depression, employment challenges, food insecurity, housing instability, and substance abuse, which may expose children to a range of traumatic experiences and deny them the secure and stable environments they need to thrive and learn.

Students who are adversely impacted by trauma that is introduced in part by poverty's challenges merit special attention (NASEM, 2019). Children affected by poverty may face mental health challenges arising from trauma-inducing experiences, such as abuse and neglect; emotional, physical, and sexual victimization; exposure to domestic, school, and community violence; witnessing tragic events; homelessness; severe bullying; and personal experiences with natural disasters, such as hurricanes, floods, tornadoes, and runaway fires. The several causes are categorized as adverse childhood experiences (ACEs). Ideally, educators and community mental health professionals employ formal diagnostic inventories to yield students' ACEs scores.

However, children's trauma is not merely a short-term mental health challenge, since severe trauma has long-term adverse impacts on students' brains (McLaughlin, Sheridan, & Lambert, 2014). All such neurophysiological effects potentially influence every aspect of students' orientations and actions in schools, hampering their ability to attend, engage, learn, and enjoy positive interactions with others (Klabunde, Weems, Raman, & Carrion, 2017). While trauma can be treated and its effects mitigated, these trauma effects may persist in part because educators have not received specialized preparation and school assessment protocols, data systems, and intervention systems tend not to address them. In the same vein, research focusing on how schools can address students' "non-cognitive barriers" (Farrington et al., 2012) typi-

cally does not include trauma's effects on learning-related and behavioral neurophysiology. These oversights are understandable because most educators, including university professors of education, have not been prepared to assess and address students' trauma symptoms. However, this benign neglect is problematic not only for primary victims but also because untreated students may have adverse effects on other students as well as teachers, student support professionals, paraprofessionals, principals, and all other adults at school (e.g., cafeteria workers, sport coaches, choir directors, custodians, bus drivers) who want to help students.

The official diagnostic category for these adverse effects on educators and other adult personnel is secondary traumatic stress (STS). Every professional educator and school employee who interacts with and tries to help traumatized young people is vulnerable. Untreated STS looms among the hidden causes of adult disengagement, depression, mood swings, sleep deprivation, substance abuse, divorce, and problematic educator workforce turnover. These negative outcomes raise the question, Who helps the helpers? This question is timely and important as recognition grows about the adverse effects of children's trauma and educators' need to address it.

Toward this end, pioneering proposals for trauma-informed pedagogy (Pickens & Tschopp, 2017) and trauma-informed schools (Chafouleas, Johnson, Overstreet, & Santos, 2016) are being advanced in service of students. It is time to expand the agenda to include STS, a dual agenda that necessitates parallel planning. Just as early detection and rapid response systems are essential for addressing students' trauma, so are mechanisms for the early detection of and rapid response to educators' STS (Caringi et al., 2015; Hydon, Wong, Langley, Stein, & Kataoka, 2015). They are twin components in expansive, trauma-informed school systems. More than what one school or a school district can do alone, this dual agenda typically necessitates partnerships with community-based and county-sponsored mental health agencies. These organizations are more likely than schools to have the requisite mental health workforce, including professionals able to address mental health needs and substance abuse (e.g., marijuana, opioids, heroin), both of which may co-occur with trauma. Fortunately, an umbrella framework for trauma-informed care is ready for local adaptation and implementation. Developed under the auspices of the National Child Traumatic Stress Network (NCTSN), it provides professional development resources and a practice-grounded model for educators, community service providers, and policy leaders (NCTSN, n.d.b).

Unfortunately, the idea of trauma-informed schools is new to too many educators because it is not prioritized widely in preservice education, professional development programs, educational research, and state education policy. There is a need for broader awareness, strategic research and development initiatives, responsive and proactive professional education, policy innovation, and the development of STS-focused exemplars in today's schools. These innovations are especially consequential for the roles of, and preparation pro-

grams for, school counselors, school psychologists, school nurses, and school social workers, extending to university faculty charged with their preparation.

Our analysis is structured in service of these several priorities, albeit with a limited aim. Recognizing that every bold innovation starts with policy-focused agenda setting (Peters, 2018), it is a call to action. Building on emergent knowledge about students' trauma, it provides a companion agenda for educators' STS. This dual agenda is timely because student outcomes depend in part on better outcomes for the education workforce. Agenda setting begins with the gap in educators' preservice education and professional development programs, and it extends to school practice and both school district policy and state education department policy. To advance this agenda, educators— broadly defined to include all of a school's professional employees—need basic "trauma literacy" that encompasses student trauma and educators' STS.

Multiple benefits accompany this agenda, starting with an education workforce with enhanced competencies. For example, trauma-informed and STS-savvy educators gain the ability to protect and help heal themselves; are able to recognize their own and colleagues' needs for STS services; can participate as members of interprofessional teams structured to address students' trauma and its correlates; and are prepared to pioneer the development of new, safety-oriented school designs.

This new concept of trauma literacy is based on six funds of knowledge: (1) how adverse childhood experiences produce trauma; (2) primary trauma's relationship with STS; (3) STS symptoms, estimated prevalence, and exposure pathways: (4) STS-related constructs such as post–traumatic stress disorder (PTSD); (5) STS-related planning resources; and (6) trauma-related improvement priorities, such as social and emotional learning, mental health partnerships with community agencies, and public policy change.

## Trauma and Adverse Childhood Experiences

Trauma is not a singular phenomenon, whether among children or adults. While everyone agrees that trauma threatens and hampers well-being, several conceptions and operational definitions complicate the development of the basic consensus needed for collective action. An operational definition can be derived from the Substance Abuse and Mental Health Services Administration (2018, para. 3): trauma results from an event or a set of circumstances experienced by an individual as harmful (physically or emotionally), even life threatening, and untreated trauma tends to have lasting, adverse effects on an individual's mental, physical, social, emotional, and spiritual well-being. This comprehensive definition provides a conceptual umbrella that connects students' trauma and educators' STS, providing a foundation for trauma literacy.

Two frameworks provide selective enhancements to trauma literacy. One, the medical model, relies on the generative metaphor of illness/disease/cure,

emphasizing prescription drugs to mollify trauma's effects. The other, soluto-genesis (Antonovsky, 1996), emphasizes mental health promotion, prioritizing the social determinants of both health and mental health outcomes. This social emphasis is significant because it indicates that trauma's determinants are malleable, that something can be done about them. Salutogenic planning focuses on addressing their causes and minimizing adverse effects—in this case, the malleable social determinants of trauma and STS.

Like opposite sides of the same coin, these two planning frames are complementary in the emergent life course health development framework (Halfon, Larson, Lu, Tullis, & Russ, 2014), which, hailed as the newest health revolution, connects and integrates psychological, sociological, biological, and genetic perspectives on human health and well-being. A special contribution lies in its emphasis on the science of epigenetics. Freely translated, the adversity accompanying significant exposure to toxic and traumatic environmental stress has the potential to alter the expression of parental gene pools, perhaps resulting in hereditary vulnerability in succeeding generations. This epigenetic framework reinforces calls to action to address and prevent trauma-inducing adverse experiences (NASEM, 2019).

In any organizational and community context, to be trauma informed means understanding the ways in which young people's adverse experiences may have undesirable effects, both immediately and over the life course. Summary findings from a special line of research focused on ACEs is foundational for trauma literacy, as 45 percent of US young people experience at least one ACE and 10 percent experience three or more (Sacks & Murphey, 2018). Originating at the intersection of medicine and public health, this longitudinal research tracks the effects of trauma (Chapman et al., 2004; Felitti et al., 1998), with growing understanding about some of the its immediate effects on children's school experiences and outcomes (Dupéré et al., 2015; Gonzalez, Monzon, Solis, Jaycox, & Langley, 2016). Trauma's undesirable manifestations include attendance problems, academic engagement difficulties, academic remediation needs, reading challenges, persistent social and emotional needs, and behavioral problems (NCTSN, 2008; Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2016). Alone and together, these needs help explain an outcome pattern involving special education referrals, suspensions and expulsions, in-grade retention, and school dropout (Bethell, Newacheck, Hawes, & Halfon, 2014; Dupéré et al., 2015; Hunt, Slack, & Berger, 2017). Later undesirable outcomes include delinquency and crime, health-related problems caused by risky behavior (e.g., smoking, drug abuse, alcoholism), employment problems, and premature disability and death. Moreover, there is evidence of intergenerational transmission of trauma-related problems; namely, parents who remain untreated victims often are causal agents in the traumatic adverse experiences in succeeding generations of children (Alexander, 2015; Lê-Scherban, Wang, Boyle-Steed, & Pachter, 2018).

Although traumatic, ACEs can be viewed as anytime, anywhere events. A closer examination yields an understanding of where, why, and how these undesirable experiences occur. While poverty-related demography is not destiny, students' residential communities and their neighborhood schools are consequential for their risk of and exposure to traumatic, adverse childhood experiences (Graif & Matthews, 2017). And school environments are not exempt. Severe bullying, assault, sexual victimization, and persistent social exclusion are potentially traumatic (Finkelhor, Vanderminden, Turner, Shattuck, & Hamby, 2016). In turn, traumatized, untreated students have the potential to engage in acts that traumatize others. Schools are also environments where *shared trauma* can be salient when adult professionals and young people are victimized simultaneously (Hensel, Ruiz, Finney, & Dewa, 2015). Unfortunately, examples are plentiful. They include weather-related disasters, devastating fires, school shootings, and gun violence in community settings like workplaces, airports, and religious institutions (Berger, Abu-Raiya, & Benatov, 2016; Saakvitne, 2002).

## From Primary Trauma to Secondary Risks and Vulnerability

STS is a core component of trauma literacy. Since everyone is potentially vulnerable to its effects, all adults need to understand it, remain vigilant, and become active agents in the development of trauma-informed school systems. Simply put, when educators learn about a primary victim's traumatic experiences, they are at risk for vicarious trauma, which may result in STS (Borntrager et al., 2012). STS symptoms among educators may start with disengagement and withdrawal in the workplace and extend to spillover effects into personal and family lives (e.g., depression, sleep disorders, substance abuse). Ultimately, untreated STS may be among the hidden causes of undesirable workforce turnover for principals (Rangel, 2018) and teachers (Holme, Jabbar, Germain, & Dinning, 2018), particularly when STS and children's trauma are clustered in high-poverty schools.

As understanding grows about students' trauma and STS, the need for timely assessments and rapid response systems increases. Consider the sheer number of students teachers encounter every day and how many of them might be trauma victims, and how many are unidentified and untreated. Student eligibility for free and reduced-price lunch is one indicator, and it becomes more important when it combined with high student turnover, a proxy for the combination of housing instability, parental employment challenges, and family stress. Then consider the other adults employed by school systems who, like teachers, care about their students and exert extra effort in their behalf (Noddings, 2013)—student support professionals such as counselors and school psychologists, academic intervention specialists, sport coaches, drama coaches, band leaders, cafeteria workers, custodians, and bus drivers, among others.

Because students often bond with them, these caring people gain awareness of students' traumatic experiences. Principals and assistant principals likewise may be affected by STS. Especially in comparatively smaller schools, they have responsibilities for addressing student behavioral problems, some of which are rooted in trauma. In rural schools without enough student support professionals, principals and assistant principals may be particularly vulnerable. Indeed, in underresourced rural schools, principals and other school professionals routinely transport trauma-impacted students to community mental health services. In instances of wider, shared trauma, outside assistance, typically involving trauma teams brought in from other communities, are needed when a school's and a community's designated specialists are as victimized as the children in their care. Treatment team members also need STS protection and intervention, as do first responders.

Practical questions with policy significance arise as awareness grows regarding the antecedents, correlates, causes, and consequences of STS. Are principals, teachers, and student support professionals protected by emotional armor? Are some, like their students, untreated trauma victims, adding to their STS vulnerability? Do school systems need to develop STS early identification and rapid response systems, rather like mirrors of the systems developed to detect and address students' needs? Unfortunately, no one knows how many adults and children are impacted because trauma literacy has not been a priority, and assessment protocols and data systems remain in their nascent phases in the majority of school districts. One implication is clear, though: research addressing STS is an immediate priority, particularly given its prevalence among all teachers (Motta, 2012), in particular special education teachers who are likely to have students impacted by trauma (Sharp Donahoo, Siegrist, & Garrett-Wright, 2018), counselors (Rumsey, 2017), and school psychologists (Reinbergs & Fefer, 2018). Absent reliable data, estimates must suffice. By one estimate, fifteen to twenty students in a class of thirty are likely to be impacted by trauma, particularly in schools serving considerable numbers of poverty-impacted children (Perfect et al., 2016). In the same vein, several large, national studies suggest that approximately two-thirds of the US population experience at least one traumatic event before age nineteen (CDC, 2016a, 2016b; Finkelhor, Turner, Shattuck, & Hamby, 2015).

These preliminary findings signal an important pattern. The greater the number of unidentified and untreated traumatized students, the greater the propensity for trauma-related needs and problems to spread, perhaps resulting in undesirable impacts on other students and adults (Forster, Gower, McMorris, & Borowsky, 2017). Absent a community-wide agenda for trauma-informed schools, and extending to child-serving institutions and community agencies, an untold number of young people, educators, and community professionals will remain untreated trauma victims. Thus, the act of caring for or even interacting humanely with traumatized people itself has the potential to traumatize.

## Gaining a Deeper Understanding of STS

*Educator STS*

Figley (1995a, 1995b) emphasized that helpers from all manner of professions may develop STS when they are exposed to the traumatic experiences of the children and adults they strive to help. Educators' caring relationships with students, particularly their empathy, renders them vulnerable to a "trauma transfer," which may include the full range of symptoms manifest in traumatized students (Horesh, 2016). Additionally, avoidance symptoms are commonplace among all such STS victims (Caringi, Lawson, & Devlin, 2012; Horesh, 2016). For example, a teacher may strive to avoid thoughts, feelings, people, and/or situations associated with a traumatic event experienced by a student, but when these efforts are unsuccessful, negative cognitions and mood symptoms may follow. STS victims are vulnerable to patterns of self-blame and blaming of others, indicating a persistent negative emotional state.

STS effects also have the potential to spill over into personal and family lives. For example, STS is implicated in a loss of interest in activities that one used to enjoy, feeling detached from others, and difficulty expressing and experiencing positive emotions. Hyperarousal and reactivity symptoms are manifested in irritability and aggressive behavior, impulsive and self-destructive behavior, feeling constantly "on guard," a heightened "startle response," difficulty concentrating, and sleep problems due to flashbacks and nightmares. Significantly, STS is not a temporary malady, particularly when school employees are unable to block out intrusive thoughts and memories associated with students' trauma; every recollection of students' trauma may cause the adult to reexperience the same traumatic feelings (Borntrager et al., 2012; Caringi et al., 2015; Gottfried & Bride, 2018).

— Estimated STS Prevalence

Is STS widespread in school systems? Questions regarding incidence and prevalence of STS in school systems begin with attention to how it is assessed and measured. Early identification and rapid response treatment also hinge on valid measurement tools and timely assessments. One widely used screening tool is the secondary traumatic stress scale. Field tested among a wide range of at-risk professionals, it is the only validated tool in the peer-reviewed literature (Watts & Robertson, 2015). Using the scale to estimate STS prevalence rates, Borntrager and colleagues (2012) searched for indicators of STS among 229 public school educators, paraprofessionals, school-based social workers, counselors, and administrators. The adults in this sample reported twin findings: approximately 77 percent of their students were moderately, severely, or very severely traumatized; and 75 percent of these adult respondents reported STS symptoms. Caringi and colleagues (2015) employed qualitative interviews with a sample of the participants from the Borntrager et al. (2012) study, discov-

ering that 75 percent of participants were considering a career change, were actively planning to retire, or were moving to a new school district. These findings implicate STS as a hidden cause of undesirable turnover.

In a separate study, Koenig, Rodger, and Specht (2017) assessed STS prevalence in a sample of 64 educators, including 33 teachers. They found that 70.3 percent were experiencing traumalike symptoms, with 43.2 percent suffering moderate, high, or severe symptoms worthy of clinical intervention. These studies and others are more suggestive than definitive. They signal needs for research and development initiatives, education and training initiatives, capacity building in school systems, and policy change. A sense of urgency is needed because STS, like children's trauma, can be transferred to other adults.

*STS Pathways*

Are some educators especially vulnerable to STS? This question, and others like it implicates, signal an unfinished research and development agenda. Preliminary research findings demonstrate that trauma transfers from students to educators, particularly teachers who interact regularly and closely with traumatized students (Caringi et al., 2015; Russell & Brickell, 2015; Wagaman, Geiger, Shockley, & Segal, 2015). For example, educators' STS can result from listening to a student's account of a traumatic event, reading or otherwise learning about the event(s), and being repeatedly or extremely exposed to aversive details of the event(s). What is more, teachers' and academic intervention specialists' STS exposure can occur when students creatively express/externalize trauma-related feelings, thoughts, memories, and experiences (Klorer, 2017) through poetry, essays, art, and musical compositions.

— Specialist Teachers as Victims, Helpers, and Referral Agents

Art classes merit special attention in a trauma-informed framework because they afford all students with special opportunities to express feelings and cognitions in ways that many classroom experiences do not. Structured and conducted appropriately under ideal conditions, these classes have therapeutic value for students in addition to desirable educational outcomes (e.g., attendance, engagement, metacognitive development). However, a nascent line of research indicates that art classes also may pose STS risks for teachers and out-of-school time arts program supervisors. For example, Osofsky (1995) found that students expressed their exposure to violence in art classes: "children drew in graphic detail pictures of shootings, drug deals, stabbings, fighting, and funerals, and reported being scared of the violence" (p. 783). Similarly, Malchiodi (2014) found that children who were abused or who witnessed violence in their homes and were often silent in their suffering used art to express what was secret or confusing.

Viewed in this trauma-informed way, art classes can be framed and appreciated in three ways. They may have therapeutic value (Quinlan, Schweitzer,

Khawaja, & Griffin, 2016). They also have clinical importance, because these classes provide opportunities for art teachers to identify students' trauma symptoms and recruit mental health professionals as needed, particularly when art teachers have been prepared for early identification and referral mechanisms. However, a third frame is art teachers' STS vulnerability. Knowing this, future research and development with specialist teachers and the design of art classes can proceed in two ways. It can augment an established therapeutic tradition, which includes several desirable outcomes achievable via arts education, and at the same time address art teachers' STS risks, vulnerabilities, and needs, extending to preventing and quickly responding to them as part of a trauma-informed school system agenda.

— STS Transfer

The undesirable effects of untreated trauma may not end with the dominant pathway from youth victims to educators. For example, Smith-Hatcher and colleagues (2011) examined STS in 118 juvenile justice educators charged with providing instruction to youths in custodial institutions. These educators reported that some 81 percent of their students were traumatized, posing STS risks for their teachers. Additionally, a second pathway via colleagues who work with traumatized youth is also implicated in a new line of research.

Kerig (2018) describes how juvenile justice teachers working in custodial organizations in which young people are involuntary clients reported being "haunted" by young people's stories about the extreme acts of violence they had perpetrated against others. Understandably, emotionally impacted teachers want and need to share their respective stories with their coworkers. However, sharing stories is not merely routine shop talk in search of empathy and performance feedback. Traumatic stories rendered in compelling ways to close associates in the workplace may result in STS transfer effects to coworkers. STS-informed systems in schools thus are founded on two pathways. Alongside the dominant student-to-educator transmission pathway, STS also transfers when adult professionals share stories of young people's trauma with their coworkers. So who helps the helpers? While educators' STS is a special priority, other workforce maladies are essential components in a trauma literacy.

## Related STS Constructs: Conceptual Distinctions and Relationships

Several concepts are employed to characterize identical and comparable STS effects. The mere presence of alternatives signals that conceptual challenges are endemic in the work at this time. Two concepts illustrate this claim, and both may be known to educators. *Burnout* and *compassion fatigue* have been research priorities and oftentimes are topics for conversation in school districts, particularly burnout. Two additional concepts—*vicarious traumatization* and *post–traumatic stress disorder*—probably are new because knowledge about them and their treatment presently belong to the mental health community.

The presence of diverse concepts and diagnostic categories constrains shared understanding and impedes progress toward trauma-informed systems for students, education professionals, and other school employees. While specialized psychologists, psychiatrists, counselors, nurses, and social workers are trained to make fine-grained distinctions, attempts at conceptual clarity can be dizzying for educators. In terms of how much they need to know, practical necessity reigns. Because these four workforce maladies pose risks to educators, they belong in the new trauma literacy vocabulary. Education professionals need to learn more about them in service of prevention, accurate self-assessments, and recognition of treatment needs, whether for self-care or in providing supports for colleagues.

*Burnout*

Professional burnout is the state of feeling overwhelmed due to work tensions and stressors over a prolonged period of time. Burnout, a possibility in every occupation, is caused by excessive fatigue and, specifically, work-related emotional exhaustion (Seidler et al., 2014). Symptoms start with diminished personal accomplishment and cynicism. These symptoms often are referenced as "depersonalization" because burnout victims experience a sense of detachment and opt for social distancing from colleagues (Maslach, Schaufeli, & Leiter, 2001). Among the causes of educator burnout are student discipline problems, disruptive student behavior, stressful interactions with parents, time pressures, value conflicts, and lack of influence in decision-making (Skaalvik & Skaalvik, 2017). Significantly, pioneering researchers have identified a strong association between burnout and STS. In fact, in one study, burnout and STS co-occurred (Cieslak et al., 2014). Although the developmental pathways for STS and burnout remain understudied (Hoffman, Palladino, & Barnett, 2007), Shoji and colleagues (2015) found that burnout comes first and paves the way for STS. Perhaps emotional exhaustion heightens STS vulnerability.

*Compassion Fatigue*

Like burnout, compassion fatigue is indicated when educators demonstrate less interest, willingness, and capacity to invest in caring, compassionate, helping relationships with students (Figley, 2002). This characterization is reminiscent of conceptualizations of STS and burnout. In fact, some experts define compassion fatigue as a broad phenomenon that combines STS and burnout (Stamm, 2010). More conceptual precision and both research-focused and clinical practice agreement are needed for better understanding of compassion fatigue, including salient antecedents, causes, correlates, and effects.

*Vicarious Traumatization*

Vicarious traumatization draws attention to five core psychological needs, all of which are adversely affected by exposure to trauma: safety, control, trust, esteem, and intimacy (Pearlman & Saakvitne, 1995). Vicariously traumatized

educators are challenged to maintain these basic needs. For example, they may view the world as unsafe, have difficulty trusting others, and perceive that they are helpless (Gottfried & Bride, 2018). These examples demonstrate how vicarious traumatization may lead to undesirable changes in educators' beliefs, expectations, and assumptions about themselves, others, and the world, or their cognitive schemas. These cognitive structures organize and mobilize thoughts prior to and during actions and influence how educators view the world, frame anticipatory plans, and make consequential decisions about how they act and interact. They differentiate vicarious trauma from STS. Vicarious trauma impacts people before and as they act, while STS is an after-the-fact phenomenon.

*Post–Traumatic Stress Disorder*

PTSD stems from violent and tragic experiences. It is commonplace when someone is in a car accident, is abused, or is a veteran of war. The American Psychiatric Association (2013) emphasizes the following criteria: exposure to an actual traumatic event; presence of intrusive symptoms, such as nightmares; avoidance of elements of the event or reminders of the event; mood disturbance, such as depression; altered cognitions; and a hyperaroused state. To qualify as PTSD, symptoms must last for more than one month. Although educators are more likely to experience STS symptoms that mirror PTSD, they are not immune to PTSD. Lethal school shootings are as traumatic as war, and severe STS may result in PTSD (Kataoka, Langley, Wong, Baweja, & Stein, 2012).

## Agenda Setting with a Sense of Urgency: Planning and Resources for STS

Newly released data from the Annie E. Casey Foundation (2018) signal needs for trauma literacy, trauma-informed school systems, innovation readiness and implementation capacity (Nadeem, Jaycox, Kataoka, Langler, & Stein, 2011), and policy change. For example, approximately 20 percent of the nation's children live in poverty, which in itself is linked to ACEs (Hughes & Tucker, 2018). Concentrated poverty is of special interest, since poverty's prevalence helps explain why 45 percent of young people experience at least one traumatic ACE (Sacks & Murphey, 2018). Twenty-eight percent of US children have parents who lack secure employment, while more than half of today's three- and four-year-olds are not in preschool. A national opioid crisis (US Department of Health and Human Services, 2018) signals both student and parental depression, increases risks for child abuse and neglect, and helps explain the growing number of children and youth who have been removed from their families and placed in foster care. Racial inequalities in every public sector, starting with education and extending to public health and juvenile justice, remain stubborn (NASEM, 2019).

Meanwhile, profound damage and loss of life caused by hurricanes, floods, earthquakes, tornados, and massive fires have something in common with tragic homicides, suicides, and mass shootings. All were once considered unusual and even random events that fell under the purview of community- and county-sponsored mental health agencies. Consequently, educators may have neglected and ignored priorities for universal trauma preparedness—including trauma literacy and encompassing systems for prevention, early detection, and rapid response for students and the workforce. At the same time, few people imagined that interactions with traumatized young people might traumatize the dedicated adults charged with their care. Little wonder that STS was not assessed routinely and that few public-sector organizations—schools, child welfare organizations, juvenile justice agencies, and public health bureaus—needed to prioritize capacity-building discussions designed to make them trauma ready. Perhaps it was assumed that professional education and organizational environments provided the professionals with the equivalent of protective social and emotional armor.

Those days are gone. It is time to initiate and advance agenda-setting priorities for trauma-informed schools and community systems (Peters, 2018). We offer a starter list of action-oriented priorities for this new agenda. Some build on strengths, while others signal new directions and necessitate timely innovations. Mindful of place-based variability, two commonalities are important. Needs for trauma literacy, particularly among all school professionals, are omnipresent, and a systems-design agenda for trauma-informed schools necessitates adult learning (Senge et al., 2012), starting in preservice education programs and including professional development initiatives.

*Draw on the Resources Provided by the National Child Traumatic Stress Network*

While the trauma agenda is new to educators, professionals in other public sectors have been advancing it for decades. The establishment of NCTSN in 2000 was a bellwether moment because it responded to needs for national leadership. It began with a focus on child and family trauma but later expanded its priorities to include STS. NCTSN offers a treasure trove of resources for all child- and family-serving organizations and policy systems. Its resources include a description of characteristic signs and symptoms, recommended protection and intervention strategies, and STS education/training resources for educators (NCTSN, 2011). Easy-to-understand fact sheets are designed for widespread distribution among all school employees. Where educators and schools-as-organizations are concerned, NCTSN (2011) advises school personnel to start with their own unresolved personal trauma(s), past and present. Self-care practices include mindfulness-based training, cognitive-behavioral strategies, workplace self-care groups, self-care accountability buddy systems, and employee assistance programs/counseling services (Skovholt & Trotter-Mathison, 2016). Preparation, supports, and resources for self-care in schools-as-workplaces thus provide one answer to the question of who helps the helpers.

Trauma literacy is implied but not prioritized explicitly in NCTSN's agenda for prevention and early intervention. This new literacy also paves the way for new organizational designs for schools and community agencies, ones that facilitate early identification and rapid response by trauma-informed organizations. NCTSN also offers invaluable planning resources and policy priorities for an unfinished state, national, and international agenda. Many of these resources derive from pioneering developments in community-based and county-sponsored child and family services agencies. Granting their import, evidence-based, trauma-informed innovations for schools, community agencies, and governments also must be sector specific. In other words, the dual agenda for trauma-impacted students and school professionals at risk for and impacted by STS requires assessment protocols that facilitate early detection and rapid response. Current protocols appear to focus primarily, even exclusively, on students. Companion assessment systems are needed for educators' STS. Both kinds of trauma assessment protocols are policy priorities for the education system broadly defined, including school systems, state education departments, state-supported professional development and technical assistance providers, national/professional associations, and the higher education institutions charged with preservice education of practicing professionals as well as with educational research.

This agenda also has cross-sector features. For example, it encompasses school districts' community agency partners charged with responsibilities for mental health services, substance abuse services, foster care services, and health services. All are key components because, where trauma is concerned, few local education systems are able to mount and advance a dual agenda for children's trauma and adults' STS. Cross-boundary bridge-building initiatives aimed at trauma-informed communities—with school systems as a key component—can be guided by a robust research literature on school-community partnerships and collective impact initiatives (Lawson, 2016a). For example, community-based mental health services for students, with solid connections to educators and schools, are centerpieces in national frameworks for comprehensive systems of learning supports (Adelman & Taylor, 2018). These additional student services resources are especially needed in resource-strapped school districts that struggle to retain a full complement of teachers.

### Build Districtwide Capacity to Assess and Address Students' Trauma

This agenda requires student and learning support configurations aimed at maximizing school-owned and -operated and community-owned and -operated resources, starting with specialized personnel. Three recommendations structure an immediate strategy: (1) redesign the roles and responsibilities of existing student support professionals, particularly school counselors; (2) employ additional student support personnel, particularly school social workers, school psychologists, creative arts therapists, and school nurses; and (3)

develop solid collaborative relationships with community-based and county-supported mental health, social service, health, and juvenile justice agencies, with special provisions for student and educator referrals for treatment.

This agenda is rife with challenges. For example, school counselors may need to assume trauma-related responsibilities (option 1). At the same time, net new resources typically are needed to recruit and employ social workers, school psychologists, and school nurses (option 2). Furthermore, to coordinate services with community and county agencies, school districts need intermediary specialists—called "services coordinators" and "partnership facilitators" for a complicated cross-boundary agenda involving comprehensive systems of learning and developmental supports (Adelman & Taylor, 2018). Fortunately, resources are becoming available as national associations take up and help promote movement to develop trauma literacy. The American School Counselor Association (2016) stands as an important example, helping promote and define trauma-informed practice and emphasizing what counselors can do to facilitate assessment and treatment of impacted children. At the same time, awareness appears to be growing about the threats posed to counselors by STS and other mental health challenges accompanying interactions with trauma-impacted students (Parker & Henfield, 2012; Rumsey, 2017; Sommer, 2008).

School psychologists also have pivotal roles to play in the school systems that employ these specialists. In addition to direct practice interventions (Little, 2012), school psychologists continue to provide leadership for multitiered service interventions (Reinbergs & Fefer, 2018). Meanwhile, other professions and their national associations are adopting and accelerating this agenda for children's trauma and adult STS. For example, the National Center for Mental Health and Juvenile Justice is providing guidance and technical assistance for children's trauma screening while emphasizing policy supports for this agenda (Eklund & Rossen, 2016). As with schools, workforce STS appears to be the next frontier for this national organization and perhaps others whose workforces interact with educators and may be relocated at schools.

— Provide STS-Focused Training and Resources for All School Personnel

Everyone who interacts extensively with traumatized young people is vulnerable to STS. While teachers top the list, principals, student support professionals, academic intervention specialists, leaders of extracurricular activities, bus drivers, cafeteria workers, and custodians also need basic STS literacy. Saturation-like training is needed. Fortunately, ACEs-certified trainers are available in a growing number of school communities. All such training can be accompanied by awareness boosters, such as fact sheets, email alerts, blogs, and additional training. Because this agenda may be new to local leaders, and districtwide capacity suboptimal, regional providers of professional development and organizational capacity building need to be positioned and sup-

ported (e.g., boards of cooperative educational services, special education regional laboratories, regional center for rural schools). Networked improvement communities provide a companion alternative (Bryk, Gomez, Grunow, & LeMahieu, 2015).

— Emphasize Trauma Literacy in Specialized Preservice Education, Professional Development Initiatives, Doctoral Programs, and Professional Associations

"Generic" trauma literacy shared by all manner of school district employees is insufficient to protect teachers, student support professionals, principals and assistant principals, academic intervention specialists, special education consultants, and other specialists whose work entails regular, intensive interactions with victims of primary trauma. All need specialized preparation of two kinds: recommended strategies for working with traumatized students in their respective, specialized roles; and recommended strategies for STS prevention and early intervention, including self-care (Kerig, 2018).

Teachers, special education consultants, student support professionals, and academic intervention specialists are immediate priorities because of the sheer number of students they see every day and the intense interactions they have with untreated trauma victims. Veteran professionals, especially teachers, are unlikely to have been prepared for trauma-informed pedagogies (Baweja et al., 2016), new classroom designs (Pickens & Tschopp, 2017), and altered job descriptions and performance requirements in trauma-informed school systems (Chafouleas et al., 2016). Principals and assistant principals responsible for student discipline and who may be involved in transporting students to community mental health providers are special priorities. They are vulnerable to STS, and every initiative aimed at developing trauma literacy and trauma-informed school systems depends on their readiness, leadership, and resource allocations. Consequential professional development design, delivery systems, and resource reallocations are unavoidable because school systems nearly everywhere are challenged by innovation overload. Unfortunately, today's preservice leadership preparation programs for principals and superintendents are unlikely to emphasize trauma literacy, in part because state certification requirements and accreditation standards developed by national associations are silent on it.

Higher education faculty charged with the education of educators is another collective priority. Insofar as this trauma agenda is new for faculty members in ed schools, professional development programs are needed. A companion, long-term solution is to embed trauma literacy in doctoral programs charged with the preparation of education faculty and researchers. This specialized priority may be supplemented by university-wide STS training for all manner of higher education faculty, particularly those serving in community colleges and open-access colleges and universities.

— Develop Interprofessional Education and Training Programs to Facilitate Team Collaboration and Partnerships with Community/County Agencies and Families

Practical experiences with student referrals to special education services, to student support professionals, or to community agency service providers have served an important priority: educators, counselors, social workers, psychologists, nurses, and other specialized professionals must be prepared to work together. Silo-like operations give rise to a communications gap that may result in competing practice strategies. A related need accompanies the development of formal child and family service teams with firm connections to classrooms. Whether school-based or involving community mental health professionals, teams often do not include the affected child's teacher, which means that when the student returns to the classroom, the teacher inadvertently works at cross-purposes with the team's interventions. Interprofessional education and training programs are needed, because if specialized professionals must work together—communicating, coordinating services and connecting them with pedagogy, and genuinely collaborating, because these adults depend on each other—they must be prepared together (Lawson, 2016b). Shared trauma literacy and proposals for trauma-informed schools and community systems depend on it.

— Emphasize Trauma Literacy in Professional Development Organizations, State and National Professional Associations, State Education Departments, and the US Department of Education

Professional development organizations, state and national professional associations, state education departments, and the US Department of Education all influence the education system (Bryk et al., 2015). And unless they become part of the solution, they will remain part of the problem. For example, teacher unions are vigilant on workplace risks and dangers, but children's trauma and teachers' STS issues need to be elevated to at least an equal footing with class loads and sizes, salaries and benefits, and shared decision-making authority. Educators' state and national professional associations have pivotal roles to play. Their influence starts with national accreditation standards, which also influence state certification requirements. Associations' potential to build awareness and contribute to trauma literacy also is manifest in national and state journals, in other print and electronic media (e.g., newsletters), and at special conferences.

Trauma-informed state education departments are a mainstay in new systems designs. Leaders in the subunits need trauma literacy to serve effectively as policy designers and advocates for education-specific policy innovations, which may perhaps include new standards focused on trauma (Wilson, Pence, & Conradi, 2013). At the same time, trauma specialists in other state departments are needed as well, particularly professionals with expertise in educa-

tion, mental health, public health, and social services, because cross-sector policy development and integration are essential components of comprehensive, integrated school-community systems of care (Lawson, 2016a).

— Develop Early Identification and Rapid Systems in Schools with Supportive Community Partnerships

Trauma literacy paves the way for a dual system—a primary system for students and a companion system for educators' STS. Insofar as schools have been student-centered, this second priority requires more strategic innovation. Educators' and service providers' STS requires constant vigilance, particularly in schools serving considerable numbers of young people with known and hidden trauma symptoms. Self-care knowledge and workplace supports are important, and this agenda begins by removing any stigma associated with STS. This is not a one-time-only event or a short-term special project. After all, employees come and go, while the risks of STS and STS transfers remain. What is more, school employees, once affected, are vulnerable to retraumatization. These inescapable realities inform systems designs with a sense of urgency.

Secondary school students also merit attention. New York State's new requirement for mental health curricula in schools provides a timely, important example because it draws on the salutogenic approach to mental health (Antonovksy, 1996). Duly educated students, it is assumed, are able to self-diagnose and seek help, engage in self-care, remain vigilant about peers' needs, and report threatening needs requiring professionals' attention and intervention. Viewed in this way, students' mental health literacy can lead to trauma literacy. This same cluster of assumptions is a driver for trauma-informed, social-emotional learning programs, whether offered during the school day (Beyer, 2017) or in out-of-school time programs (Devaney & Moroney, 2018). Social-emotional learning programs offer combined educational and mental health benefits because they develop students' social competence, develop and strengthen resilience, and facilitate goal setting, agency, and engagement (Domitrovich, Durlak, Staley, & Weissberg, 2017). Programs with a racial equity lens (Aspen Institute, 2018) and a trauma focus represent the new frontier.

The fact remains, however, that teachers and other frontline educators are not prepared to treat trauma, nor should they be. Specialist mental health professionals are required for traumatized children and STS-impacted adults. Unfortunately, many school systems, particularly rural systems, lack these specialized personnel, and this problem is exacerbated by a shortage of qualified personnel. Strategic, place-based combinations of school-owned and -operated and community/county-owned and -operated configurations are essential components in every trauma-informed system. Fortunately, practice-tested models and strategies are available. Examples include the framework for comprehensive systems of learning supports (Adelman & Taylor, 2018), school-

linked services deriving from partnerships with community agencies and perhaps involving loaned mental health professionals who relocate at schools (Lawson & Briar-Lawson, 1997), and new school designs such as community schools, multiservice and extended-service schools, and community learning centers (Lawson & van Veen, 2016). These and other collective action projects for trauma-informed service systems (Harris & Fallot, 2001) depend in part on boundary-crossing and boundary-bridging intermediaries, or school-family-community coordinators (Lawson & van Veen, 2016).

Pioneering principals must be prepared to be in the vanguard of trauma literacy systems, and this includes their connections with learning and instructional technologies. However, even the best innovations at the school level are not likely to gain traction and achieve scale without district leadership, resources, and supports. In brief, trauma-literate superintendents and other central office leaders are needed, especially ones prepared to support the implementation of trauma assessment protocols and data systems amenable to routine use by student support professionals, teachers, principals, and mental health services providers. ACEs assessment protocols are one option. In turn, superintendents have lead responsibility for developing trauma-informed school boards and also for collaborating with leaders of community mental health and social services systems to support cross-sector resource sharing (Adelman & Taylor, 2018).

Yet, grand plans and elaborate frameworks identified in textbooks and policy briefs often neglect two antecedent and corequisite needs. One is organizational capacity, and needs for it are especially apparent in underresourced schools that often serve considerable numbers of trauma-impacted students. Many lack assessment protocols and data systems, and they also lack capacity to improve on their own, in part because they lack the in-house expertise and resources. Hatch (2009) concludes that it takes capacity to develop improvement capacity. Who will build this capacity and how? Thus the second need is a competent workforce with trauma literacy and commitments to systems building to address student trauma and educators' STS. The salient reminder here is that each innovation and every systems change fundamentally depend on adult learning.

— Mount an Expansive Research and Development Agenda
A call to action includes the priority for research and development, both discipline specific and involving interdisciplinary teams. The conventional model of research, development, dissemination, and diffusion—from laboratory-like research in the disciplines to practice in the professions—continues to have import. However, it is not a panacea, because the development of trauma-informed schools and communities entails the development, evaluation, and possible scale-up of new institutional designs in somewhat unique contexts.

Two frameworks hold special promise. One is design-based research and development partnerships (Coburn & Peneul, 2016; Lawson, 2016b; Penuel,

Fishman, Cheng, & Sabeli, 2011). The Holmes Group (1986) partnerships of the late 1980s and the 1990s were founded on the important opportunities that arise when research-oriented education schools, colleges, and departments are structurally linked to innovation-oriented school systems. These partnerships will be enhanced with provisions for the simultaneous renewal of schools and educator preparation programs (Goodlad, 1994), extending to provisions for faculty development.

The second alternative is to constitute and study networked improvement communities. This strategy, derived from improvement science for education (Bryk et al., 2015), remains untested where student trauma and educators' STS are concerned. The idea is nevertheless compelling, and it builds on two core principles: variability, both within particular schools and among clusters of like schools, is a core problem to address; and school contexts are consequential for their priorities, configurations, and strategies. Trauma-informed schools and communities in rural settings will have somewhat unique features and special dynamics, and so will schools in inner-ring suburban communities with rapidly changing student and family demographics. These examples signal other research and development opportunities in response to a manifest need. The knowledge base for practice and policy, in service of young people, families, and the professionals charged with their service, is limited in a special way. Simply put, while we know a lot about ACEs, students' trauma, and educators' STS, the kinds of action-oriented knowledge needed for design, implementation, and continuous improvement guidance are in short supply. A call to action starts with this manifest need.

## Realizing the Promise

The formidable agenda we outline can be reframed as an ideal vision. Focused on students, educators, and schools, it implicates needs for collective action to achieve multiple benefits. Immediate benefits include engaging more children in school, facilitating learning, increasing academic achievement, and providing access to people and pathways for college and career readiness. These school-related benefits might also continue later on, such as potentially alleviating some trauma-related barriers to meaningful employment and economic development (CDC, 2016a, 2016b; National Academies of Science, Engineering, & Medicine, 2019). What is more, success supporting traumatized students could interrupt the intergenerational transmission of ACEs and limit their spillover effects on students' trauma and professionals' STS.

Insofar as STS is a hidden cause of workforce disengagement and undesirable turnover, the education workforce could be better stabilized. Additional benefits could follow, extending to students and school districts, as well as to county and community agencies charged with mental health services and trauma-specific interventions. This design-oriented agenda necessitates school/community/higher education/state agency partnerships (Lawson,

2013), which have the potential to maximize scarce resources in support of cross-boundary collective action. This work is timely because child and family trauma and professionals' STS are priorities for all of the public sector systems, including education, public health, mental health, juvenile justice, child welfare, domestic violence, substance abuse, and homeless services. Many of these other systems already have embarked on pathways toward trauma literacy, trauma-informed services, and organizational designs—and with a new priority for STS in the workforce.

It is timely for the education profession and its policy allies to join this national movement. Unprecedented collective action is needed to have a broad, beneficial impact. It all starts with trauma literacy—with particular attention to the adverse impacts of children's trauma as well as the antecedents, correlates, causes, and cures for professionals' STS. This analysis contributes to this emergent national agenda, helping to build stakeholder awareness and providing a partial blueprint for collective action.

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