**BMPF7013**: Independent Study (30 credits)

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# A study into the current use and effectiveness of trauma-informed techniques utilized in school-based settings.

## 1. THE PORTFOLIO

### INTRODUCTION AND RATIONALE

Currently in the US, children of all socio-economic backgrounds experience the regular, persistent traumatizing effects of the global health pandemic, a combative and volatile political environment, and reoccurring environmental disasters such as hurricanes, floods, and wildfires. As a private voice teacher of young children in the US, I feel it is incumbent upon me to address the particular needs of children at this time by investigating and then integrating trauma-informed techniques into my practice to combat the effects of these Adverse Childhood Experiences ("ACEs").

For my voice students, their bodies *are* their instruments. As a result, their minds and overall mental health are intertwined with their vocal production, as well as their confidence and ability to perform. As a teacher, I must address the mental health of my students in order to reach them as singers and performers. Fortunately, I am a private voice teacher and can focus entirely on the student at hand and do not have to address many children's needs at once. However, since I am not a trained mental health specialist, I must investigate what tools other teachers such as myself have used effectively so that I am not conflicted and "torn between playing a traditional teaching role and attempting to serve as [a] mental health clinician" (Terrasi & de Galarce, 2017, p. 37). I propose to explore the exact nature and prevalence of the ACEs, determine what the ramifications are for children, adults and our society, and delineate what "trauma-informed" techniques are being effectively utilized in schools that I, as a voice teacher for children, can

implement. In this way, I hope to delineate the appropriate ethical boundaries and determine what tasks I can carry out successfully in my job as a teacher so that I do not stray into areas more suitably dealt with by mental health professionals.

## PLANNED PROGRAM OF STUDY

### Aims and Objectives

The aims of this project are as follows:

- To examine the facts regarding Adverse Childhood Experiences ("ACEs") and the resulting physical and mental health repercussions within the United States.
- To gain a deeper understanding and subsequently delineate what "trauma-informed schooling" ("TIS") programs are being utilized successfully to combat the effects of ACEs.
- To analyze the documented effectiveness of TIS: what works, how and to what extent?
- To evaluate the overall implications of such schooling on children, their teachers and their communities.
- To distill and delineate what techniques can be transferred into a voice studio setting and utilized in my practice as a voice teacher of young children.
- To increase my knowledge of how to conduct an effective, extensive and efficient literature review in an effort to improve and elevate my skill as a researcher.

The research objectives are as follows:

- To conduct a thorough review of the studies done by researchers in the area of the implementation and effectiveness of TIS, as well as childhood mental health and brain development via a search of books, journals, conference proceedings, videos, and websites.
- To critically analyze and compare these studies through a comprehensive literature review.

- To track, compare, and record the findings of these research studies to determine their similarities and differences.
- To examine the areas of consensus and departure within the literature to determine common practices and outliers.
- To determine whether there are gaps in the current research and what future research needs to occur.

**Timeline**

The chart below shows the proposed timeline for this independent study project.

| Task | 8/2020 | 9/2020 | 10/2020 | 11/2020 | 12/2020 | 1/2021 |
|---|---|---|---|---|---|---|
| Discuss and agree upon topic with Tutor | | | | | | |
| Determine and write up aims and objectives | | | | | | |
| Conduct literature research and review; compile data | | | | | | |
| Create first draft | | | | | | |
| Conduct reflective review to reflect on learning experience; incorporate reflective model in written analysis | | | | | | |
| Further reflect on learning process and rewrite drafts; conduct more research as necessary to fill in any gaps | | | | | | |
| Submission | | | | | | |

## LITERATURE REVIEW METHODOLOGY

A good literature review should critically assess and challenge both previous and current research findings, examine and identify weaknesses and poorly understood phenomena therein, and uncover new problems and questions (Boell & Cecez-Kecmanovic, 2014, p. 258). This review should ideally assist in delineating and articulating methodology, creating the research plan and design, and interpreting the results (Boell & Cecez-Kecmanovic, 2014, p. 258; Boote and Beile, 2005). In order to advance collective understanding, a "sophisticated" literature review must understand what has come before, as well as examine and interpret areas of strength and weakness (Boote & Beile, 2005, p. 3). An important element to the literature review is the actual process used to identify, analyze, assess, and synthesize this earlier research (Boell & Cecez-Kecmanovic, 2014, p. 258). However, regardless of whether the literature review helps in the planning of the research, this does not mean it is separate from real research; instead, the process of reading, researching and writing are interwoven and as such integral to a creative scholarly method (Boell & Cecez-Kecmanovic, 2014, p. 260; Dellinger, 2005). In fact, "these aspects highlight the fact that engagement with the literature is not a routine task, but an intellectual development process" (Boell & Cecez-Kecmanovic, 2014, p. 260).

As a researcher, I favor an interpretive hermeneutical process during which I can draw out the meaning of a text "through dialectical use of question and answer when engaging with the literature" (Smythe & Spence, 2012, p. 13). As a reflective learner, I can return and revisit it continually, engaging and deepening my understanding of a body of literature (Boell & Cecez-Kecmanovic, 2014, p. 259; Kakkori, 2009, p. 22; Heidegger, 1982, p. 29; Gadamer, 1989). Within this, my goal is to sort the "trivial" from the "genuine" so that I can engage with the literature from my unique vantage point, allow it to expand or contract my narrow perspective so that I can learn new things and identify any gaps in my knowledge, enabling me ultimately to create a "fusion of horizons" (2014, p. 262; Smythe & Spence, 2012, p. 14; Barrett et al., 2011; Kakkori, 2009, p. 24).

Within this process, I must be aware of my own biases so that I can gain proper distance and fully appreciate each text in its "otherness" (Jahnke, 2012, p. 35; Gadamer, 1976, p.

272). Using this “metaphorical deliberation” can “open up the ‘world’” or meaning of the text so that instead of projecting myself into the text, I can, according to Ricoeur, *expose* myself to it (Jahnke, 2012, p. 35). The text is “something that is ‘thrown into the world’ as a proposal to be interpreted, and thus it holds the capacity to open up new worlds” (2012, p. 35). In this way, I can open myself up to the process of evocative uncovering (Huttunen & Kakkori, 2020, pp. 609, 611), allow for further expansion of my horizons, and promote increased opportunity for insight (Boell & Cecez-Kecmanovic, 2014, p. 263). Within this hermeneutic circle, truth is “a dynamic happening, not static way of affairs” (Huttunen & Kakkori, 2020, p. 610). As a researcher, it is not my task to “make a copy out of something original but…to bring about a new way of seeing and thinking” (Huttunen & Kakkori, 2020, p. 611). Although Ricoeur's hermeneutic spiral may provide a more accurate picture of the hermeneutic process, for the sake of clarity I will utilize a circle to illustrate my research process (Janke, 2012, p. 36).

Within the below diagram of the hermeneutic circle, there are two sections: “search and acquisition” and “analysis and interpretation.”

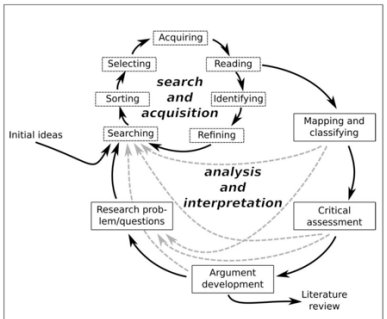


**Figure 1. A hermeneutic framework for the literature review process consisting of two major hermeneutic circles**

(Boell & Cecez-Kecmanovic, 2014, p. 264).

Within this circle, the quality of a literature review depends on the analysis and interpretation -- bringing parts together into one whole “proper” understanding (Debesay et al., 2008, p. 59) – but relies first and foremost on the literature search that is done before that critical analysis stage is reached (Boell & Cecez-Kecmanovic, 2014, p. 268).

## The Search

In my hermeneutical paradigm, the “search and acquisition” of literature is also a part of the circle.

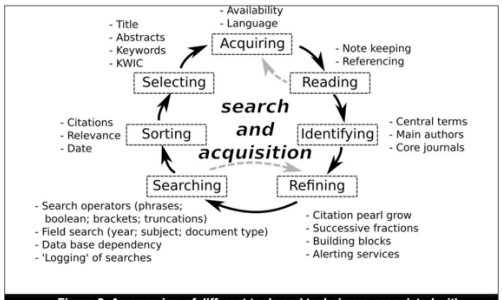


**Figure 2. An overview of different tools and techniques associated with individual steps of the hermeneutic circle of literature searching and acquisition**

(Boell & Cecez-Kecmanovic, 2014, p. 269)

This literature search broadens my knowledge and orientation, increasing my vocabulary and my scope. It enables me to move from the “general to the particular” (Boell & Cecez-Kecmanovic, 2014, p. 270). In my study, I will be focusing both on “primary literature” that delves deeply into my subject matter, as well as “secondary literature” that provides an overview of that which has come before. In this way, I can gain both a micro and macro orientation, as well as an overall knowledge of terms and concepts from a wide range of publications, and examine how they relate to different lines of research and determine the shortcomings so that I can gain ideas for future studies and development (Boell & Cecez-Kecmanovic, 2014, p. 270).

During my search, I became “more familiar with specialized terms, expressions, research approaches, names of important authors, journals and conferences” (2014, p. 270). As a result of my increased understanding of my area of study, I became aware of different terminology and search terms. There were a large number of articles and texts from various angles. Initially I considered limiting my scope to US studies but reversed course when I realized that few recent studies examined multiple programs from a school-based approach and that I needed to open up to any study that fit my criteria. Because of the exponential growth and change in trauma-informed schooling, I decided to narrow my search to comprehensive studies that had been published during 2019 and 2020, while also using some older studies for foundational and orientational research.

When conducting my literature review, my initial search term was: “trauma-informed techniques.” I utilized search engines like *Google, Google Scholar* and the *University of Wale’s* online library database to track down articles. I came across many “first-person” reports regarding specific teaching techniques in isolated classroom settings. Some of these techniques dealt with improving relationships (Minahan, 2019b), while other employed trademarked techniques such as “Move this World” (Move this World, 2019) and “Bounce Back” (http://bouncebackprogram.org, 2020). These “first-person” accounts led me to a pivotal presentation (Crnobori, 2019) regarding the success of a trauma-informed system implemented in the school system of Nashville, TN. This document enabled me to increase my research regarding Adverse Childhood Experiences (“ACEs”) by searching for “child trauma” (Child Trauma Academy, 2020) and “ACEs” (CDC, 2019) and techniques such as “Sharpen the Saw” (Covey, 2020), leading me then to “SAMHSA” or the Substance Abuse and Mental Health Services Administration and their report about adopting a “Trauma-Informed Approach” (SAMHSA, 2014). I added this to my bastion of search terms and vocabulary. I began to search for articles containing “trauma-informed teaching,” “trauma-informed approach,” and “trauma-informed studies in schools.” I learned about training programs such as “Risking Connection” and the National Child Traumatic Stress Network’s training programs (Purtle, 2020), as well as the TIES program (Tabone et al., 2020). Citations within the Purtle (2020) study led me to a HEARTS school study that referenced an article about cortisol levels during puberty (Landhuis, 2020). I revisited the hermeneutic circle to consider what I had learned about adolescent brain development and MPA and to question whether I should alter my course and objectives slightly.

Additionally, during my study, I became aware of the terms “trauma-informed” and “trauma-sensitive” were utilized differently. Since those practitioners who practice a “trauma-sensitive” approach are practitioners who, like myself, want to utilize this approach but are not formally trained in a mental health specialty, I focused further searches accordingly. To sort my literature, I concentrated on recent comprehensive studies but also referred back to back articles wherein the wealth of historic and informative literature was able to bolster my knowledge about my subject. When it

became apparent that I was not getting enough details about these programs to create a template, I began to use my trauma search words with “model,” “template,” and “blueprint” attached. However, this search was not successful. Eventually, the hermeneutic circle led me back to studies I had initially read at the beginning of my search regarding relationship-based techniques (Minahan, 2019b) and the power of resilience (Brooks, 2003). It became clear that fostering “resilience” would be a key goal in this template, so I added that to my search as well, which led to “positive mental health” and “self-compassion.” In so doing, I was able to begin to put together ideas for a template should entail.

## Analysis and Interpretation

Within the dual hermeneutic circle of literature review, the larger circle involves analyzing and interpreting what occurs after a thorough search has begun. This circle involves: analytical and orientational reading, mapping and classifying relevant findings and contributions, critically assessing knowledge acquired, argument development and delineating future research directions, and identifying research problems or questions (Boell & Cecez-Kecmanovic, 2014, p. 265).

### *Analytical and Orientational Reading*

Within this circle, I began with an orientational reading that increased my overall perspective. The citations within these publications led me to other articles. I explored these publications for relevance by skimming and examining the abstract to determine if these texts were relevant to my study. Some were too old (by 4-5 years) and outdated because of the fast progress that has occurred in this field. For those current and relevant texts, I obtained and read the complete texts and took notes on relevant passages, quotes, and citations.

### *Mapping and Classifying*

My next aim was to map and classify my reading so that I could analyze “connections and disconnections,” delineate “explicit or hidden” contradictions, and identify gaps and missing explanations in order to “synthesize the relevant literature into a compact classification that describes major views/approaches, contributions, authors and sources”

(Boell & Cecez-Kecmanovic, 2014, p. 266-267). I endeavored to use my imagination to "develop a distinct, innovative and interesting way of mapping and classifying the literature" (2014, p. 267). Within this mapping of the "geography" of my research, I first determined and delineated my research approach and methodology to account for the fact that my "epistemological stance" directly affects my choice of research methodology and methods (Feilzer, 2010, p. 7; Morgan, 2007, p. 49). Pragmatism, as a paradigm, enabled me as the researcher "to be free of mental and practical constraints" (Feilzer, 2010, p. 8) and released me from the prison of a particular method (Feilzer, 2010, p. 8; Robson, 1993, p. 291). The pragmatic approach allowed me to mix both objective and subjective points of view with the end research goal of being useful (Feilzer, 2010, p. 8; Rorty, 1999, p. xxvi). This reflexive pragmatic approach was in sync with my hermeneutic process and perspective.

Utilizing Boell and Cecez-Kecmanovic's (2014) guide for mapping, I examined relevant particulars about myself and my study. My "discipline": a teacher of vocal pedagogy. My "unit of analysis" and "major entity" of research: trauma-informed schooling programs. My "unit of observation": the *meso* level of organizational school-settings, since I am a teacher and this is my primary area of focus. The "major concept" of my research: determine what these programs entail and their overall effectiveness and delineate what exactly makes them effective. I considered my "theoretical lens" and determined that I come from an open perspective as a teacher of children. My conceptual framework as a hermeneutic pragmatist is inherently flexible; hence, I will endeavor to let the findings and critical assessment create my framework.

*Critical Assessment*

A critical assessment examines a body of literature, as opposed to a critical reading of every study, to determine the current state of knowledge and to determine the gaps in that knowledge and, hence, the possibilities for future research in that area (Boell & Cecez-Kecmanovic, 2014, p. 267). As a novice researcher and teacher of vocal pedagogy who possesses a hermeneutical pragmatic constructivist perspective, I must be aware of

my paradigmatic limitations. In using this constructivist paradigm, I plan to utilize and assess studies that incorporate qualitative dialectical and hermeneutical methodologies as well as quantitative methods that provide "proof" in the form of facts, figures and increased context. To cover more ground more efficiently, I intend to use studies that examine and compare a multitude of studies, as opposed to reading through individual studies and comparing each of these. However, I can then go directly to an individual study to explore it more in-depth. By covering a wider array of studies, I hope my orientation will favor an increased perspective and ability to critically assess the literature.

*Argument Development and Research Problems*

> The logic of the argument from the mapping and classification, to critical assessment and the construction of a gap, to the motivation for further research has to be consistent, well-articulated and convincingly documented.
> (Boell & Cecez-Kecmanovic, 2014, p.268)

It is necessary for me not only to lay out my argument but also to address any gap that has been discovered (Boell & Cecez-Kecmanovic, 2014, p. 268). Additionally, I must consider who I am addressing in my research and what community I am trying to contribute to. In my case, I am a vocal pedagogue and seeking to contribute to the community of other teachers such as myself. Additionally, coming from a dialectical hermeneutical perspective, I anticipate that my research "problem" and/or focus may change as I go about my research process and grow and change with it. My literature review has the purpose of establishing, synthesizing and critically assessing a body of literature but, in so doing, I hope to be able to create and propose a "novel understanding that broadens the horizon of existing knowledge" (Boell & Cecez-Kecmanovic, 2014, p. 268), while simultaneously recognizing that, within the hermeneutic circle, that "understanding cannot be final" (Debesay et al., 2008, p. 65).

As a teacher, the possibility of adding to a new horizon of knowledge, not only for myself but my fellow teachers and my community, creates the prospect of yet another hermeneutical circle into which I can both add and receive value. Because I do not come from a positivist or realist perspective, the ethical stance within my pragmatic

constructivist paradigm does not include an “ultimate” truth; instead, the truth that I pursue is one that is created out of reflection and dialogue (Lincoln & Guba, 1989). Within my epistemological stance, I have no “underlying premise that there is a ‘way things really are’ or a ‘way things really work’” (Lincoln & Guba, 1989). I have no “angle,” but am instead interested in “uncovering the various constructions held by individuals”; “intentional or unintentional deception” would be contrary to my purpose of expanding my knowledge and perspective and finding out what exactly my students need (Lincoln & Guba, 1989). As a voice teacher, I am interested in how I can help my students in this specific capacity, not in that of a mental health professional, as this would not aid in my practice. Since I work collaboratively with my students, I do not have the desire or the ability to treat them as objective “subjects.” My relationship with my students is one of “mutual respect, dignity and trust” (Lincoln & Guba, 1989). I realize both the limitations and the benefits of my position and wish to work within those boundaries.

The downsides to my naturalist paradigm revolve around my emic perspective: the intense face-to-face contact, challenge to maintaining trust, privacy and confidentiality, control and responsibility, and the challenge of constructing an objective overview of the “reality” of the relationship without including presuppositions and judgments (Lincoln & Guba, 1989, p. 440). This perspective and subsequent involvement is heightened now that I am working “virtually” in my students’ homes. I am privy to the inner workings of their families and households. Not only must I be sensitive to this, but I must endeavor always to present a truthful and “authentic presentation” of myself within these interactions (Lincoln & Guba, 1989). It is incumbent upon me as a teacher to attempt to step back on occasion to attempt an etic perspective, while also knowing that I am truly on the emic side.

## CRITICAL REFLECTION -- THE LEARNING PROCESS

When I initially embarked upon this independent study project, my aim was to examine the most effective trauma-informed techniques that could be implemented by teachers such as myself. In doing my research, I realized that there are widely differing techniques

and methods of trauma-informed practices that are implemented in a multitude of ways. There was no set template or set of exercises that I could apply to my practice. Additionally, most interventions in my research relied on the utilization of trained mental health professionals applying techniques such as cognitive behavioral therapy (CBT). As a voice teacher, I am not qualified to administer such therapies. At this point in my research, I felt I had fallen down a rabbit hole full of fascinating studies of techniques that were proven to be helpful to children who suffer from ACEs but not applicable to my practice. This was disheartening, to say the least. However, I thought about Ghaye's strength-based positive approach to "Reflection-on-Action" which enables me to turn these reflective loops into a more positive direction by "identifying and playing to" these strengths as opposed to leading with "deficit-type questions" that lead to "deficit-based conversations" (Ghaye, 2010, p. 10). This led me to think about what I could focus on and improve as a teacher within my own scope and abilities.

Using the questions in Ghaye's reflective "Big R," I decided to explore my own "intentions" utilizing his four questions:

1. Appreciate: What's successful now?
2. Imagine: What do we need to change to make a better future?
3. Design: How do we do this?
4. Act: Who takes action and with what consequences?
   (Ghaye, 2010, p. 18).

At first it was difficult to "appreciate" the research I had done because I thought it was all for nothing. However, upon increased reflection, I realized that my research addressed what I initially set out to demonstrate: that, regardless of the type of trauma-informed interventions, its effectiveness had been proven to be helpful. In analyzing my gifts, talents, limitations, identity, responsibilities and developing a deeper understanding of my own learning agenda, sense of self and purpose (Ghaye, 2010, p. 17), I could first acknowledge the merits of my initial research and then reframe the direction or scope.

Upon reflection, I realized that above all else, I value my relationships with my students. I feel able to connect with them in a fully focused way that is valuable. I am able to do this

because I feel I have an intuitive sense of how they are feeling but perhaps cannot articulate. However, I am limited in that I am not a trained psychologist, which I often see as a “deficit.” However, in my role as a voice teacher whom these children know and trust, I am in a unique position to observe and serve them in their quest for self-realization, confidence and happiness. In fact, the music, as a sort of distraction for them, serves as a vehicle for me to further help these children to become more resilient through fostering their feelings of self-efficacy and self-esteem. In many ways, accomplishing this has been my goal all along. I do feel that increasing my knowledge of child brain development will help in this regard but that, overall, my intuitive sense and ability to listen to what they both say and do not say helps me in my goal to help children explore their thoughts and worries, triumphs and mistakes in a safe environment.

Using Ghaye’s next question in the “Big R,” I then examined how I could “imagine” my practice “with fresh eyes” (Ghaye, 2010, p. 18) so that I could determine what works and what needs to change and in what ways. “Reflection provides the basis for improvements in our espoused theories as well as our theories-in-use” (Ghaye, 2010, p. 25). This research has caused me to look more closely at the relationships I have with my students; it has revealed the ways that I am already aiding children by attempting to be that “charismatic adult” (Brooks, 2003) who sees and accepts them unconditionally. But I can make my actions within my lessons more intentional by applying some of the methods discussed in this essay to improve my relationships and, in doing, create a safe environment for children with known trauma histories.

Working next in Ghaye’s “design” stage (Ghaye, 2010), I asked myself, “How do I do this?” In an effort to expand my teaching to those children with known trauma, I decided to create a trauma-sensitive model or template that could be used by teachers such as myself. I created an acronym for ease of remembering the relationship and resilience building techniques that I had learned about in my research. Though, in doing this, I will need to be continually mindful of ethical considerations so that I do not “overstep my bounds” as a teacher by wading into mental health territory.

Ghaye's next step involves deciding how to proceed: by taking immediate action or none at all (Ghaye, 2010, p. 18). In this age of the global pandemic, I have been teaching "virtually." However, I believe that my template can be applied in my virtual lessons. After doing this, I will be able to reflect on how effectively I have been able to implement the relationship-building template created in this essay.

## 2. THE WRITTEN ASSIGNMENT

**A study into the current use and effectiveness of trauma-informed schooling techniques utilized in school-based settings.**

### INTRODUCTION

The purpose of this independent study is to examine the ramifications of Adverse Childhood Experiences and assess what techniques are currently utilized successfully in schools to combat these effects, so that I can determine what techniques I, as a voice teacher for children, can implement in my own practice to prevent the early but lifelong effects of Adverse Childhood Experiences.

### ADVERSE CHILDHOOD EXPERIENCES ("ACEs")

According to the CDC (2019), an Adverse Childhood Experience ("ACE") is a potentially traumatic event that occurs in children aged 0-17 (2019). Examples of ACEs include: experiencing or witnessing violence (both personal and ecological), abuse or neglect in the home or community, the social effects and ramifications of poverty and homelessness, the attempt or suicide of a family member, and environmental factors such as substance abuse, mental health issues or instability due to separation from parents (CDC, 2019). In a typical American public elementary school classroom: 45 percent of students are likely to have at least one ACE, 22 percent are likely to have multiple ACEs, and greater than 6 percent are likely to have four or more ACEs. By high school, 13 out of 30 students have likely experienced three or more ACEs (Crnobori, 2019). In a survey of adults in the US, 61 percent surveyed across twenty-five states had experienced at least one type of ACE, and nearly 1 in 6 had experienced four or more types of ACEs (CDC, 2019).

## The Detrimental Effects of ACEs

The effects of trauma from Adverse Childhood Experiences ("ACEs") represent possibly the largest public health issue facing our children and our society as a whole (CDC, 2019; Minahan, 2019b, p. 30). The toxic stress from ACEs can change a child's brain and overall development (see Appendix A), reduce a child's ability to cope with normal stress and catapult that child into a constant state of high alert affecting the ability to self-regulate, make decisions, gauge appropriate social interactions, trust adults, form stable relationships, and learn (CDC, 2019; Minahan, 2019b, p. 30; Terrasi & de Galarce, 2017; Lacoe, 2013). ACE traumatized ("ACET") children prioritize "trauma-associated stimuli" over normal stimuli (Aupperle et al., 2012, p. 11), and it is difficult for them to disengage from these stimuli, feel safe, and engage in learning (Minahan, 2019b, p. 30; Alisic, 2012; Ko et al., 2008). Hence, steps need to be taken to combat and possibly reverse the effects of this trauma at the primary school level. However, because ACET children have not learned how to express emotions and "show their distress through aggression, avoidance, shutting down, or other off-putting behaviors," this can cause teachers to misinterpret these behaviors, ineffectively respond, and fail to utilize the appropriate strategies to teach them (Minahan, 2019b, p. 30). By training teachers and schools to be "trauma-informed" by incorporating small adaptations in the classroom that "foster a feeling of safety," these students can have the opportunity to learn more effectively and educators can thereby potentially reverse the spiraling effects of ACE trauma (Minahan, 2019b, p. 30).

## Adopting a Trauma-Informed Approach

Research shows that "children are resilient, and their brains are flexible" (Terrasi & de Galarce, 2017, p. 37). When a teacher fully understands a child's needs, he or she can provide the physical and emotional space to support the neuroplasticity so the brain can form new neural connections and "rewire" itself (Terrasi & de Galarce, 2017; Davidson & McEwen, 2012; Kempermann & Gage, 1999). At the heart of a "trauma-informed" approach is the belief that a student's behavior is a direct result of his or her experience.

Hence, it is important to ask these students “what happened to you” rather than “what’s wrong with you?” (McInerney & McKlindon, 2014, p. 2). By doing this, teachers can “break the cycle of trauma, prevent re-traumatization, and engage a child in learning and finding success in school” (2014, p. 2).

Additionally, Psychobiologist Megan Gunnar discovered that there is a window for increased resilience in children in late puberty when she examined those with trauma histories and discovered that their elevated cortisol levels provided a unique opportunity for the brain to reset to normal “pre-trauma” levels provided these children are in a supportive environment (Landhuis, 2020, p. 37). As a singing teacher of children, this window of opportunity during puberty is particularly important since many of my students will go through various stages of puberty while they are studying with me. Puberty is known as being a time in which experiences can imprint themselves on the amygdala and affect the rest of that child’s life, causing performance anxiety as the result of one traumatic performance event (Kenny, 2011, pp. 70, 269). Hence, puberty can be a time for reset, according to Gunnar (Landuis, 2020), or for the onset of a new traumatic event (Kenny, 2011). As a teacher, I must be aware of both of these possibilities. Since each child’s response to puberty is different, I must be sensitive to each possibility: one student could be ready for a “reset,” while another could be ripe for a traumatic event. Keeping an eye out for cues of various sorts is crucial: does one student suddenly begin to shy away from performing while another cannot get enough? Is a student suddenly seeming to “reinvent” him or herself or, on the contrary, trying to hide him or herself away?

**Trauma-Informed Vs. Trauma-Sensitive**

As a teacher, I need to be mindful of differentiating between the techniques I can utilize in my practice from those applied by mental health practitioners. Jennings (2018) differentiates between the clinical “trauma-informed” and non-clinical “trauma-sensitive.” The term “trauma-sensitive” should be utilized to “refer to educational practices and approaches that are intended to cultivate a safe learning environment and mitigate the impact of trauma symptoms on student learning” (Jennings, 2018, p. 3). An essential

mitigation tool is the creation of an environment that enables the students to feel safe, build caring relationships, self-regulate, and thereby thrive academically (Jennings, 2018, p. 41). Although teachers cannot play the role of mental health specialists, they can play an essential role in helping traumatized children learn, but they require a template to use in their classrooms (Jennings, 2018, p. 3).

### Delineating a Template for Trauma-Sensitive Teaching

According to my research (Appendix B), there seems to be no "gold standard" technique utilized for trauma intervention (Purtle, 2020; Tabone et al., 2020; Berger, 2019; Herrenkohl et al. 2019). Instead, each program, to some extent, reinvents the wheel and relies on the thorough but expensive assistance of mental health professionals. While these types of interventions are optimal when possible, reliance on them is not ideal in the real world of budget shortfalls and politics or if you are simply a teacher struggling to meet the needs of your students in the classroom. One element that the studies did not sufficiently address was the fundamental impact of the *relationship* between the teacher and student. It is evident from the literature that this relationship is of primary importance and crucial to the creation of a teacher-driven trauma-mitigation template.

## FOSTERING RESILIENCE THROUGH RELATIONSHIPS: USING BCES TO COUNTERACT ACES

Benevolent Childhood Experiences ("BCEs") include supportive relationships with teachers and caregivers and can impact and counteract the effects of ACEs (Crandall et al., 2019; Narayan et al., 2018). BCEs help in providing the foundation for a positive self-image and, hence, the likelihood for improved resiliency for those who experience early adversities (Narayan et al., 2018, p. 20). Even just one supportive relationship -- one person who accepts the child "unconditionally, regardless of temperamental idiosyncrasies, physical attractiveness, or intelligence" -- has the ability to impact a child's "resilience" and thus enables them to have "more advanced problem-solving and decision-making skills, cognitive-integrative abilities, and more adaptive coping strategies" (Brooks, 2003, p. 1). Resilient children "maintain a high level of self-esteem,

a realistic sense of personal control, and a feeling of hope" (2003, p. 1). Fostering self-esteem aids in the creation and maintenance of resilience (2003, p. 1).

Psychologist Julius Segal identified that the presence of a "charismatic" adult "with whom they identify and from whom they gather strength" increases the ability of traumatized children to overcome obstacles; more often than not, this person is a teacher (2003, p. 1). A Massachusetts Department of Education report also concluded that a "close and nurturing relationship with at least one caring adult…someone within school whom they know, to whom they can turn, and who will act as an advocate for them" is the most critical element to success for a child (2003, p. 1). Positive peer and teacher relationships and supportive community relationships help build up resilience in children that can help them withstand adverse experiences later in life (Crandall et al., 2019; Narayan et al., 2018; Poole et al., 2017; Sege et al., 2017). Studies done in the aftermath of two different traumatic events show that teacher-driven resilience-based interventions are successful in combating the effects of trauma (Wolmer et al., 2011; Wolmer et al., 2003); the resulting 2011 evolved protocol is discussed below.

## The Evidence: Student-Teacher Relationships Combat the Effects of ACEs

### *Teacher-Based Resilience-Focused Intervention ("TBRFI")*

The teacher-based, resilience-focused intervention ("TBRFI") was implemented successfully and shown to be a "universal, cost-effective approach to enhance the preparedness of communities of children to mass trauma and to prevent the development of PTSD after exposure" (Wolmer et al., 2011). TBRFI utilized trusted teachers who were able to act as a source of factual information regarding the traumatic events and provide a sense of security for the children (Wolmner et al., 2011, p. 310; Vernberg et al., 1996). The evolved protocol (2011) consisted of fifteen 45-minute teacher training modules (one per week) within a "coping-enhancement framework" and focused on "working through positive and negative experiences, stress management and control of bodily tension, affective regulation and processing (i.e., dealing with sadness and anger), attention

control, identification and correction of negative thoughts, using humor as well as other coping and social-emotional competencies" (Wolmner et al., 2011, p. 312). Through the letters of an imaginary character named Adam, the children learned about how Adam coped with and verbalized his complex feelings. This figure of Adam enabled and guided the children through a "process of elaboration" and involved them in "activities to learn and internalize the skills learned" (Wolmner et al., 2011, p. 312). By normalizing the psychological responses within a safe environment and introducing generalized adaptive coping skills "to facilitate the mitigation of reexperiencing (attention, image control), avoidance (active coping), and hyperarousal (stress management)," the children were able to process their traumatic experiences and move forward with their development (2011, p. 315). The resulting conclusion of this study was that although teacher-delivered intervention with the "psychological casualties" of a traumatic event is relatively new, it is effective and valuable, but the specific intervention components, as well as the "various resilience functions," needed to be more clearly identified (2011, p. 315). More recent studies have also shown the importance of the student-teacher relationship and the efficacy of combatting the effects of trauma through Child Teacher Relationship Training ("CTRT") (Post et al., 2020).

*Child-Teacher Relationship Training ("CTRT")*

The Child Parent Relationship Therapy ("CPRT") (Landreth, 2006) protocol was modified to create a comprehensive school curriculum specific to the relationship between the child-teacher and renamed as Child Teacher Relationship Training ("CTRT") to reflect the teacher-adapted model (Morrison & Bratton, 2010, p. 1005). This model relies on a collaboration between teachers and school-based play therapists but centers around and utilizes the pre-existing student-teacher relationship to facilitate child-centered play therapy and utilizes "tracking, paraphrasing, responding to feeling, esteem building, returning responsibility, limit setting, and choice giving" (Post et al., 2020, p. 126; Landreth, 2012). This model was shown to be effective but, within it, there is not a specific template that I can replicate as a teacher because its implementation is driven in large part by mental health counselors. Hence, this model could be cost-prohibitive for some

schools and it also neglects to address organizational changes that need to take place in order for sustained outcomes, as was shown in the following TIPE study.

*Trauma-Informed Positive Education ("TIPE")*

School leaders must support the wellbeing of teachers and improve their ability to teach the students who are struggling with "resistance, defiance and refusal" (Brunzell et al., 2016a in Stokes & Brunzell, 2020). The pedagogically-oriented and tier-driven trauma-informed positive education ("TIPE") model from Australia is grounded in a strengths-based perspective and takes a three-pronged learning tier approach based on Keyes' (2002) two-factor theory of wellbeing, which suggests that by decreasing the "deficits" of mental health, one can increase good mental health (Stokes & Brunzell, 2020, p. 72). In Tier 1, teachers are instructed on how to utilize "sensory integration, co-regulation, rhythm within routines and mindfulness" within the classroom *environment* to aid in de-escalation and self-regulation (2020, p. 72). In Tier 2, teachers incorporate the techniques of "attachment…attunement, unconditional positive regard, emotional intelligence and…play and fun" to build stronger *relationships* with their students (2020, p. 72). Within Tier 3, teachers anchor the curriculum in character strengths "to draw out curiosity, gratitude, kindness and love of learning…and…intentionally teach mindsets for learning (e.g. growth-, resilient- and hope-mindset)" (2020, p. 72) to foster classroom *positivity* (Norrish et al., 2013; Waters et al., 2017). Based on the TIPE study, the following areas that can fall within the realm of a teacher within his or her classroom: positivity, environment, relationship. This fully-informed, integrated "pedagogical lens" model was able to influence all classroom interactions and produce consistent and long-lasting improvements in academic outcomes and student wellbeing (2020, p. 74). The full-scale organizational implementation of this type of program is more easily done at the primary school level (2020, p. 74), but because it is reliant on the expertise of teachers as opposed to outside counselors, it also seems more fiscally achievable.

As a private voice teacher who works one-on-one with her students, fostering a supportive relationship in an effort to increase resilience is an area that I can have direct influence

over and improve in order to make my practice more trauma-sensitive. This knowledge will enable me to work with students of all tiers, regardless of known history of trauma. This is particularly important right now because most children in the US are being exposed to several traumatic environmental factors in 2020. Because of these factors and the ricocheting implications for the families and lives of children, it would be difficult for a child to escape without being affected by recent traumatic events.

## A Template For Creating Trauma-Sensitive Relationships To Combat ACEs

Initially my objective in this independent study was to investigate what techniques were utilized in the area of trauma-informed schooling so that I could implement them in my practice as a teacher. My research has shown that while these programs are effective, there is no set template that teachers can use to mitigate the effects of trauma. Additionally, I learned that I must be mindful of the fact that I am not qualified to practice trauma-informed techniques; instead, I must utilize those that are trauma-sensitive. In uncovering the proven effectiveness of student-teacher relationships in combatting the effects of ACEs, I can use this premise and foundation for the creation of a trauma-sensitive teacher template and in an effort to create, fortify and solidify a strong student-relationship. This template is structured around the relationship-based techniques in Minahan's (2019b) trauma-informed teaching guide.

### Increase the Context

Building a relationship can mean different things to different people. Hence, specific guidelines must be provided to create the strong scaffolding required in order for this relationship to be successful (Minahan, 2019b, p. 32). Using a "two by ten" rule to interact "casually" about non-academic topics with a student for "two minutes a day for ten days in a row," inside or outside of the classroom, provides a consistent, simple method for maintaining a relationship, widens the context for the teacher and strengthens the bond with the student (2019b, p. 32). This technique is more effective when shared and used by all who have regular contact with this student, i.e. the teacher, psychologist, nurse,

etc. and enables a teacher to stay within his or her ethical boundaries while also encouraging a “widening of the frame” to incorporate health professionals who interact with this student on a daily basis and who can assist in increasing the context from a medical perspective (2019b, p. 32).

At the beginning of each lesson, I conduct a stretching warm-up in which I am able to face each child and ask him or her how they are doing. I ask them about things they might have told me about in the last lesson to show that they were heard and that I have remembered. They use this time to update me about interesting things that happened during the week or things that have upset them. In my recent lesson with a five year old girl, she told me she had been hit in the face with a stick by the boy who lives next door. During a lesson with a child will sometimes interrupt with, “Miss Maura, can I tell you something?” Early in my practice, I thought of these “interruptions” as distractions, but now I realize they are essential to knowing and working with a child who has his or her own needs, wants, and worries. I now always allow time for these interjections. I do not counsel the children, but I simply listen to them.

**Promote Predictability**

Traumatized students need predictability; they need to know what comes next in a day and be notified in advance if there are schedule changes so that they feel more in control of their surroundings (Minahan, 2019b, p. 32). An ACE traumatized (“ACET”) student also needs to know exactly when the teacher intends to focus on him or her by telling that student, “I’ll meet with you after you finish your math” or by providing the student a timer with the directive “I’ll be back to check on you in five minutes; could you remind me the time is up?” (2019b, p. 33). Another strategy that avoids embarrassing the student with verbal check-ins is to give him or her a note that indicates when the teacher will check in with the student (2019a, p. 59; 2019b, p. 33). All of these strategies serve to make interactions scheduled and predictable and put the student in control of the situation (Minahan, 2019a).

My voice lessons follow a distinct pattern. Each child knows how the lesson will progress: body warm-up, vocal warm-up, homework review, song review, new song, homework for next week. I allow the child to control some of the direction within these different elements depending on how they are feeling that day, but they can be confident in knowing what to expect from the lesson. Additionally, I state their homework for the next week so they know what to expect then as well.

## Build on the Power of Positivity

There is strong evidence that positive mental health "functions as a resilience resource and protects against both physical and mental illness and disease" and that "high levels of positive mental health are associated with heightened recovery and survival despite physical illness" (Trompetter et al., 2017, p. 459). Creating a positive environment can be the first step to promoting positivity.

### *A Steady Diet: Positive Greetings, Feedback and Expectations*

> To succeed in school, students with mental health challenges tend to need a steady diet of positive interactions with their teachers. (Minahan, 2019a)

The initial interaction between a student and teacher should involve a personalized, positive greeting, whether in an actual classroom or virtual classroom (PBIS, 2020, p. 11). The more personalized within the context of the relationship (Minahan, 2019b, p. 32), the more effective this interaction will be. Defining, teaching and prompting positive expectations can be done by maintaining a 5:1 ratio of five positive comments for every negative comment (PBIS, 2020, p. 11). When working on an assignment together, smiling and reiterating that the child is doing a good job is helpful. Because the traumatized child has a "negative amplifier," if a teacher's facial expression does not match her words, the student will interpret this as criticism (2019b, p. 33). Additionally, word choice and construction are extremely important. Saying, "Please correct problem number five," can be interpreted as "You did everything wrong" (2019b, p. 33). However, by utilizing a "positive sandwich," a teacher can "sandwich" a specific comment for improvement

between two specific positive comments (2019b, p. 33). This “positive” approach also echoes that of the TIPE (Stokes & Brunzell, 2020) study above.

As a Suzuki Voice practitioner, I have been trained always to offer what I liked best about how they sang a song before I offer a constructive comment. The idea of “sandwiching” this area of improvement between two positive comments is effective in that it reinforces the positive elements and enables the child to focus without fear on the area of improvement. Additionally, both in my virtual and actual lessons, I always begin by asking the children how they are doing and how their week was. I do this because I actually want to know and connect with them. Upon doing this research, I realize that this helps to solidify my relationship with my students as people, not just as singers.

*Acknowledge and Validate Feelings*

Bringing positivity into the classroom or voice studio setting does not mean ignoring the true feelings of the child. In fact, it is very important to validate those feelings (Minahan, 2019b, p. 34). Instead of sending a traumatized children for “regulating breaks” that can unintentionally cause them to “ruminate” on the negative and trigger feelings of abandonment, a teacher should instead utilize empathy to acknowledge what they are feeling by saying, “I’m sorry you are feeling angry” so the child feels heard and the interaction can serve to strengthen the child’s trust and the relationship (Minahan, 2019b, p. 34). This technique also reinforces for the child that the relationship is not contingent on “good behavior” and, instead, promotes the idea that they are liked simply for who they are regardless of their behavior (Minahan, 2019b, p. 34).

When my students are exhibiting signs of excess energy or not being in control of their bodies, I try to point that out to them in a matter-of-fact way and then utilize that in my next teaching segment. For instance, I say, “Let’s now sing our song by jumping up and down.” Parents who are sitting in on the lesson and trying to get their child to “behave” see that I incorporate this behavior and that the behavior is not “bad” but normal.

*"Change the Channel"*

When a child is stuck in a negative loop, that child can be taught to use his or her "remote control" to "change the channel" by switching activities, thus initiating a cognitive distraction or "thought break," which enables ACET children to learn strategies for self-regulation and overall enhanced self-control (2019b, p. 33; Minahan & Rappaport, 2012). A listening or hidden picture activity can be useful for younger children, whereas more abstract activities such as counting objects in the room, reciting the alphabet backward, or naming five favorite movies can be helpful for an older student (Minahan, 2019b, p. 33). Knowing what the student is interested in (utilizing the "two by ten" method above) can further assist in the creation of child-specific activities (Minahan, 2019b, p. 33).

In my own practice, when a child is fixated on an object or thought, I attempt to incorporate the object into the lesson or completely switch lines of thought by asking the child a specific question. For instance, for one of my young male students, I will ask him to name five dinosaurs. Then I will use one of the dinosaurs to direct the next song or teaching segment. When one of my young students was recently fixated on "hot lava" during her lesson, we incorporated that theme into our warm-up, expelling the "hot lava" into the air with our breath. Then I had an imaginary helicopter zoom in and save us from the "hot lava," but the helicopter got injured and we had to sing songs to heal the helicopter. Incorporating a child's ideas into a lesson helps to promote their self-efficacy and self-esteem.

**Promote Self-Esteem**

Self-esteem deals with a person's feelings of "competence and worth, about their abilities to make a difference, to confront rather than retreat from challenges, to learn from both success and failure, and to treat themselves and others with respect" (Brooks, 2003, p. 2). In order to help children develop self-esteem, "we must focus not only on their areas of vulnerability, but also on their strengths" (2003, p. 2).

*Create "Islands of Competence"*

When an ACET student engages in negative thinking, these negative thoughts weigh more heavily than positive thoughts (Minahan, 2019b, p. 34). To identify and reinforce a child's strengths and more "accurate self-concept," teachers can provide "'islands of competence' for students swimming in a sea of inadequacy" that will then motivate the child "to venture forth and confront the tasks that have previously been difficult" (2019b, p. 34; Brooks, 2003). To create these islands, the teacher can point out and reiterate moments of success: "You were the first to complete that test" or "You really helped me when my photocopier broke!" Additionally, these "islands" can be reinforced by giving students the opportunity to help their peers, households, or communities in areas of competency, which can promote a more positive "self-narrative" and open up future possibilities for that student (2019b, p. 34; Brooks, 2003).

In my practice as a voice teacher, I do this by having older children help the younger children on their parts when we songs together in rehearsals and recitals. This not only gives the children an enhanced sense of ownership within the recital format, but a sense of pride in that they are doing something of value. This also enhances the subsequent solo performance for this student because they feel an overall sense of confidence from their assignment in helping these younger children. In order to foster these islands of competence when we have group singalongs, I will ask students to help out with their younger peers by saying, "Oh, Rachel, since you know this song so well, can you please help little Mia with her part."

*Empower Children to Make Decisions and Solve Problems*

> An essential ingredient of high self-esteem and resilience is the belief that one has control over what is transpiring in one's life. (Brooks, 2003, p. 2)

In an effort to foster a sense of empowerment, it is essential that a teacher enables a child to make decisions and solve problems, thereby enabling them to grow more confident in their own judgment and skills (Brooks, 2003, p. 2). In my practice as a voice teacher, I can foster this decision-making ability to allow them to make choices about what songs

to work on next in their lessons, as well as utilizing their spontaneous suggestions within a group setting to illustrate its value.

In one of my body warm-up exercises, I have an exercise that I previously called “fairy wings,” in which the elbows are bent at the mid-torso level and the arms move back and forth to warm up the diaphragm and all related muscles. Years ago, one of my students said that she didn’t think that was a good name for the exercise and so I asked her to suggest something. To this day, some four years later, I use her name for the exercise, and she is very pleased about this and often refers to it as “her exercise.” With this in mind, I can seek to give the children I teach the ability to create and name exercises.

Within the “problem-solving” category, it is important that I, as a teacher, seek to help my students become more confident in knowing and trusting in their vocal instrument and mechanism, as well as the body that houses that instrument. I can do this by enlisting them in “problem-solving” how sounds feel when they are correctly produced as opposed to incorrectly produced.

*Offer Opportunities for Accomplishment and Appreciation*

When adults engage in the “realistic” appreciation of children by spending special one-on-one time with them, writing them appreciative notes, or formally acknowledging them in an assembly or recital, this helps children feel special and nurtures their self-esteem and resilience (Brooks, 2003, p. 2). In my own practice as a voice teacher, I hold regular recitals in which all music is memorized. I enable the children to choose how many songs they would like to sing. When they have completed a full volume of songs, they receive special recognition for their accomplishment. At this time, I also single out other students for their accomplishments throughout the semester and realize I need to do this more consistently and more often in these instances so that all children can feel special. Although, I do think that the accomplishment of singing their pieces memorized and in front of a supportive family audience helps them feel special and loved. Additionally, in my weekly lessons, students practice their performance technique performing for me one

or two well-known pieces from start to finish and incorporating a performance bow and applause at the end. In this respect, I endeavor to give these children a weekly sense of accomplishment, appreciation, and boost in confidence.

*Self-Compassion: Make Mistakes a Natural Part of Success*

The fear of making mistakes is one of the "greatest obstacles to developing self-esteem and resilience" (Brooks, 2003). Mistakes are an essential part of the learning process but traumatized children, in particular, fear "looking foolish" and this prevents them from taking necessary risks and making mistakes (Brooks, 2003). Hence, when mistakes do happen, teachers must reflect and teach self-compassion, promote overall positivity, and thus further curate the shield of positive mental health. Self-compassion is a "warm-hearted, caring, empathic and nonjudgmental orientation towards the self during times of suffering and failure, accompanied by a gentle motivation to alleviate this suffering" (Trompetter et al., 2017, p. 460; Gilbert, 2009a; Neff, 2003a). Studies have shown that "self-compassion is positively associated with factors related to positive mental health such as positive affect, life satisfaction, optimism, happiness, wisdom and personal initiative" (Trompetter et al., 2017, p. 460; Zessin et al., 2015; Barnard and Curry 2011; Neff et al., 2007). When students make mistakes, teachers must help them incorporate and internalize the three aspects of self-compassion: 1) self-kindness as opposed to self-criticism, 2) pride and comfort in their shared humanity of which failure is a natural part, and (3) an ability to step outside of themselves with nonjudgmental "mindfulness" to assess these failures (Trompetter et al., 2017, p. 460; Neff, 2003a, 2003b).

Even just "placing the issue about the fear of making mistakes out in the open typically serves to lessen its potency, thereby increasing opportunities for learning" (Brooks, 2003). In my practice as a voice teacher, in preparation for my studio recitals, I make it clear that everyone makes mistakes – even "professionals" (and I will show them YouTube videos if necessary) – because we are all human. I point out the times when I have made mistakes or how advanced students that they have seen in recitals have made mistakes. Jokingly, I can say to them, "Mistakes are what sets us apart from robots! We are human!

Aren't we lucky?!" Most kids do not think they are lucky to make mistakes, but they feel more comfortable knowing everyone makes them.

In my lessons, I try to help my students develop a nonjudgmental and "self-kind" assessment of their performances and their mistakes by making a game out of having them guess or identify their mistakes. They usually know exactly what mistake they have made, and we are then able to laugh about it and correct it. Since everyone makes mistakes and it isn't that big of a deal, it is more how they handle the mistake that is important. I tell them that the key is to make the mistake seem like it is a seamless part of their performance, just like it's part of who they are as a human. I even encourage them to laugh about it (on the inside), just like we do in the lesson. Additionally, it is important for them to feel like they are in control when they are performing, so I tell them that they "own" the show and they can decide what the audience sees or does not see – including mistakes. I also ensure them about the safety of their environment and that it is my job as their teacher to be there for them and to help them out.

## Employ Enhanced Sensitivity

Working on the resiliency of a child is, as I have shown above, of paramount importance in fostering their self-esteem, sense of personal control and hope. But because of the effects of ACEs in early childhood, there are obstacles to accomplishing this with traumatized children. These obstacles need to be acknowledged and a teacher needs to adapt and incorporate additional techniques to reach these children.

### *Expect the Unexpected*

When dealing with ACET children (which could include most children in today's volatile world and environment), teachers need to "expect the unexpected" and not take a student's behavior personally (Minahan, 2019b, p. 30). Students with histories of trauma can react in unexpected ways, such as having an angry outburst during a favorite activity or suddenly crying after laughing and seemingly having a good time (Minahan, 2019b, p.

30). These types of reactions can cause a teacher to be in a “constant state of hyper-alertness” and result in a teacher’s fatigue (2019b, p. 30). However, to avoid this, a teacher can envision the student as “a shaken soda can” – on the outside everything appears normal, but opening that can will trigger an “unexpected, messy reaction” (2019b, p. 31). In my own practice as a teacher of young children, I have learned always to “expect the unexpected.” Children are unpredictable and hence need flexibility. Oftentimes I must completely change my lesson plan because of how that child is feeling and, in turn, acting on that given day. This involves careful observation regarding whether the child is fully engaged.

*Employ “Interaction Strategies”*

Since traumatized children struggle to control their environment and their interactions with adults, these students may react adversely and defensively to teachers who are in an inherent power position (Minahan, 2019a; Minahan, 2019b, p. 31; Jennings, 2018; Minahan & Rappaport, 2012). Hence, how a teacher interacts with this student can make a world of difference in that child’s behavior. When that child feels safe and protected, his or her behavior will reflect this. Interaction strategies are “nonverbal and verbal ways of interacting and developing a relationship with a student” that provide a student with a sense of control and include “tone of voice, proximity, use of humor, de-escalating responses…and gentle ways of giving constructive feedback” (Minahan, 2019a). These “interaction strategies” often go “unnamed and unwritten,” but since “the teacher is 50 percent of every interaction,” they are a crucial element in enabling traumatized children to feel safe and be able to relax and learn (2019b, p. 31; Minahan & Rappaport, 2012). These strategies include providing an “embedded choice” in directions and a reason or “context” for directions (“Can you pick up that broken glass? I’m afraid someone might step on it.”), and using “private nonverbal direction” (such as a note or private conversation) so that the interaction does not put the teacher at odds with the student in front of his or her peers and lead to confrontation (2019b, p. 31). Additionally, it is necessary to embed any request with a cushion of time to allow the student time to

maintain the feeling of control, digest and accommodate the request within his or her timeframe (2019b, p. 31).

In my lesson with a five year old girl recently, she adamantly declared that she did not want to warm-up with her review song of “Twinkle, Twinkle.” Her mother tried to coax her by saying, “But that’s what we practiced.” I said, “What song would you like to start with?” The girl wanted to start with her newest and most exciting song. So we started there and I worked backward for that day. By giving her the power, she felt more in control and happy. When I feel a child is intent on changing the framework of the lesson, I make every effort to enable that child to “call the shots.” If, for instance, a child cannot stand still and is jumping around (much to her mother’s dismay), I try to incorporate that “decision” and involve that activity in the next singing exercise.

## CONCLUSION

My initial objective was to study the current use and effectiveness of trauma-informed programs utilized in school-based settings. In so doing, I determined that not only are these programs effective, but that there is a great variation regarding what programs and techniques are used and how exactly they are implemented. A majority of these programs utilize mental health practitioners outside (or just outside) of the normal curriculum setting and though they have been found to be effective, they are not necessarily easy to implement, nor are they efficient, cost-effective and sustainable for the long-term (Tabone et al. 2020; Berger, 2019; Herrenkohl et al., 2019). Additionally, my study found that integrated, curriculum-based programs – especially those that are implemented organization-wide -- which utilize teachers who have pre-existing relationships with students are sustainable, as well as more effective (Post et al., 2020; Stokes & Brunzell, 2020). However, templates for this teacher-based implementation are varied, not universal and, hence, not completely self-evident. Based on this conclusion, I decided to create my own template or model to aid teachers in using trauma-sensitive techniques in their classrooms to improve their relationships with their students.

The relationship between a teacher and child can make a world of difference in that child's life. Because this relationship is for the most part without cost constraints, it is literally a "free" way for each teacher to implement these techniques with his or her own students. It does not rely on policy makers or special funding. Instead, it relies on *intention*. In this time of Covid-19 "bubbles," I, as a teacher, can step out of my own virtual "bubble" and use my unique set of skills in relationship-building to help other children.

My template, as detailed above, focused on five areas within a teacher's control, namely: Context-Predictability-Positivity-Self-Esteem-Sensitivity ("CPPSS"). I hope that my CPPSS model proves useful to teachers such as myself who wish to implement effective techniques during this particularly stressful time for children (PBIS, 2020). However, in doing, I acknowledge that this area of study is vast and continually in flux. I am sure that, even as I write this, new techniques and information are being discovered and experimented with that can further improve on these relationship-strengthening techniques and can hence greatly expand on my model. I hope that, at minimum, my model serves as a starting place for future studies and proposed templates.

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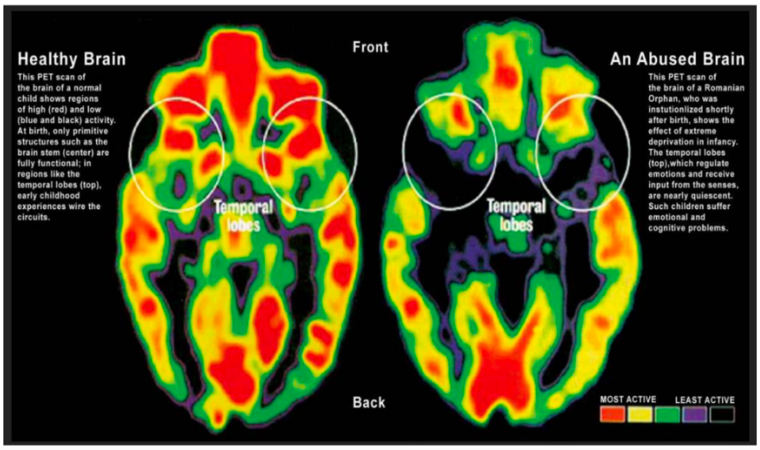
## APPENDIX A

### The Effects of ACEs on Brain Development

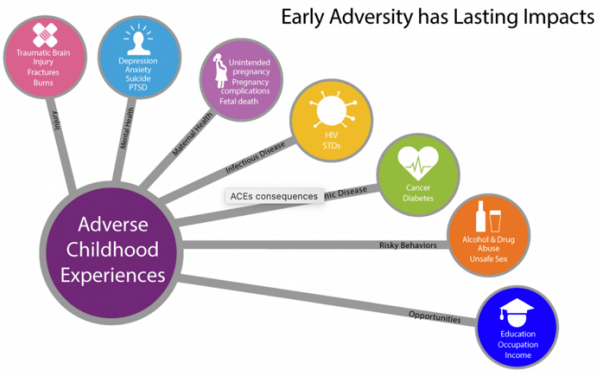
Whereas typical brains are calm, the traumatized brain stays in the hyperarousal "fight or flight" state in which hypervigilant attention and concentration are activated, resulting in the inability to focus on normal environmental stimuli (Crnobori, 2019; Perry, 1994). When a real or perceived threat is sensed, a series of "interactive neurophysiological reactions occur in the brain, the autonomic nervous system, the hypothalamic-pituitary adrenocortical (HPA) axis and the immune system" (Perry, 1994). Essentially, this response causes the brain to function at a more primitive level causing the normal functions of the cortex and executive functioning to be effectively hijacked and the brain cannot make good decisions (Crnobori, 2019; Perry, 1994, p. 4).

Usually, the neurophysiological activation that happens during acute stress is reversible, but when a stressful event occurs in a developing brain and is of sufficient duration and intensity, the changes are not reversible; instead, the tremendous increase in neurotransmitter activity can have a significant, lasting impact (Perry, 1994, p. 5). The neuroplasticity enables the brain "to form and reorganize synaptic connections" is the most "plastic" or impressionable in early life. As a result, it changes as a result of our experiences: "positive experiences build healthy, adaptive brains [whereas] negative experiences can negatively impact brain development" (Crnobori, 2019). The picture below shows the physical effects of trauma on a brain.




(Crnobori, 2019; source: CDC)

ACEs not only negatively impact education and job opportunities, but are linked to chronic health problems, mental illness, suicide attempts, and substance abuse in adulthood (CDC, 2019; Felitti et al., 1998). The connection between ACEs and negative health outcomes can be explained by the "physiological responses to stress and the tendency to adopt risky behaviors in order to cope with stress" (Crandall et al., 2019; Felitti et al., 1998).




(CDC, 2020)

All of these effects can then be passed onto the children of these individuals (CDC, 2019). Preventing ACEs from occurring could potentially reduce a large number of health conditions such as: sexually transmitted diseases, maternal and child health problems, teen pregnancy, involvement in sex trafficking, and chronic diseases such as cancer, diabetes, heart disease, as well as depression leading to suicide (CDC, 2019; Terrasi &

de Galarce, 2017; Holmes et al., 2015; Spinazzola et al., 2005; Dube et al., 2001; Felitti et al., 1998). Preventing ACEs will hence reduce the “economic and social costs to families, communities and society” totaling hundreds of billions of dollars every year (2019).

## APPENDIX B

## An Analysis of Trauma-Informed Studies

### Tiered Studies

Within the Response to Intervention ("RTI") multi-tiered approach, based on the public health model, there are three tiers of trauma-informed intervention (Herrenkohl et al., 2019, p. 375). Tier 1 programs are intended "for all students regardless of their levels of risk" and focus on "enhancing school climate and promoting skill development for the entire student population" (2019, p. 375). Tier 2 and 3 programs are "oriented to the needs of vulnerable children with trauma histories" who are "already manifesting signs and symptoms of mental and behavioral health disorders" (2019, p. 375).

*Assessing the Evidence of Trauma-Informed School Programs*

Herrenkohl et al. (2019) examined thirty programs that were classified as trauma-informed school-based interventions and included research findings in order to determine the efficacy of the programs. These intervention programs were separated into three categories: individual and group-based, classroom-based and school-wide (2019, p. 376).

In the individual and group-based interventions, the majority of students had been pre-selected because they had shown signs of trauma and were enrolled at both the individual and group level. These programs were administered by mental health professionals or school professionals trained in cognitive behavioral therapy, typically outside of the standard academic curriculum (Herrenkohl et al., 2019, p. 376). These programs aimed to "lesson the symptoms of trauma by attending to the emotional, psychological, and behavioral challenges of students" (2019, p. 376). As a result of these programs, almost all produced positive outcomes in terms of reduction in trauma, depression or PTSD and some resulted in the improvement in grades (Herrenkohl et al., 2019, pp. 377-378).

Within the category of classroom-based interventions, two of the programs studied were administered by teachers with specialized training and focused on creating safe and supportive learning environments by increasing awareness of trauma and helping students "manage stress, regulate emotions, and lesson conflict with their peers" (2019, p. 382). The other two studies examined were administered not by teachers, but by mental health professionals (Herrenkohl et al., 2019, p. 378). Some models also worked to help students "deepen their understanding of trauma and develop empathy for trauma survivors by providing case examples and illustrating the various manifestations of traumatic stress and the ways one can assist to lessen stress reactions" (2019, p. 382; SAMHSA, 2014). Within the classroom-based interventions, there was a reduction of PTSD symptoms, improvement in resilience for students, and increased awareness among teachers regarding the impact of trauma on children (Herrenkohl et al., 2019, p. 379).

The school-wide intervention programs extended beyond the classroom environment, were multi-component, multi-tiered, and involved outreach into the parent and provider-community. These programs involved psychoeducation, teacher training, and targeted services for students who had experienced trauma. These interventions resulted in increased understanding of trauma by school staff, reduction in the need for disciplinary actions and suspensions, and an overall increase in teachers' confidence levels in their ability to help and possibly redirect traumatized students (Herrenkohl et al., 2019, p. 379).

*Evaluation of Multi-Tiered Trauma-Informed Interventions*

Another tiered study aimed to "evaluate the evidence and address the strengths and limitations of research regarding multi-tiered, trauma-informed interventions in schools" (Berger, 2019, p. 651). This study aimed to gain clarification around the methods for integrating trauma and positive behavior approaches in schools by evaluating the alignment of school approaches in an effort to improve staff knowledge and confidence, increase overall efficiency, enhance students' engagement and academic achievement,

and improve the recovery of traumatized students with the goal of making recommendations for both trauma research and the implementation of trauma-informed programs within schools (Berger, 2019, p. 651).

Out of 1,018 unpublished and published studies found on electronic databases (PsycINFO, Ovid MEDLINE, ERIC, A+ Education, Web of Science, Google Scholar, ProQuest Dissertations and Theses Global), these articles were narrowed down to thirteen studies that examined multi-tiered trauma-informed/sensitive approaches in schools (Berger, 2019, p. 651). Ten studies included three levels of trauma intervention which were varied in both their application and evaluation of the tiers (Berger, 2019, p. 653). They included "training and/or consultation for school staff and parents, social-emotional curriculum with all students and group-based intervention with at-risk students" (Berger, 2019, p. 653). The three remaining studies included intervention across four tiers of a *trauma-sensitive* model and incorporated "community and parent engagement, emotional/behavioural intervention for students, identification of students, and referral of students to mental health services" (Berger, 2019, p. 653).

The conclusion of this study was that the trauma-informed programs were successful in increasing academic achievement, reducing depression and PTSD, as well as increasing perceptions of knowledge and confidence among the staff. However, it also concluded that increased accuracy in measuring staff and student outcomes was required. Additionally, more teacher training and evaluation of that training was needed, especially since teachers are recognized as the popular choice for mitigating the effects of trauma on children since they are on the frontlines and willing to help (Berger, 2019, p. 661). In order to do this, however, teachers desperately need guidance so that they can confidently deal with the effects of trauma not only on the children but on themselves as well (Berger, 2019, p. 661; Alisic, 2012).

This study concluded that there should be a framework of tiered training for teachers: Tier 1 would include universal training for all school staff, Tier 2 would involve the opportunity for consultation between teachers and school mental health staff; and Tier 3 would

incorporate the consultation between school mental health staff and external mental health professionals (Berger, 2019, p. 661). However, what exactly should be included within this training was not addressed in this study.

*Trauma-Informed Elementary Schools ("TIES") Study*

The goal of the Trauma-Informed Elementary Schools ("TIES") (Tabone et al., 2020) study was to prove the effectiveness of the TIES programs across a wider spectrum and sample size than previously studied (ACEs Coalition, 2018). The TIES program is "built on a foundation of ACEs research and the Attachment, Self-Regulation, and Competency (ARC) framework" (Tabone et al., 2020, p. 2; Blaustein & Kinniburgh, 2010). This program primarily targets children who "exhibit symptoms of chronic stress or trauma in the classroom" (2020, p. 2). As seen in the model below, the TIES program incorporates the ten core building blocks of the ARC model. The *attachment* building blocks "address factors needed to build a healthy and safe relationship between the child and caregiving system that can buffer the impact of traumatic stressors" (2020, p. 2). The *self-regulation* building blocks "target a child's awareness and understanding of internal experience, ability to modulate that experience, and ability to safely share that experience with others" (2020, p. 2). The *competency* building blocks "address social connection, community involvement, and academic engagement" (Tabone et al., 2020; Blaustein & Kinniburgh, 2010).

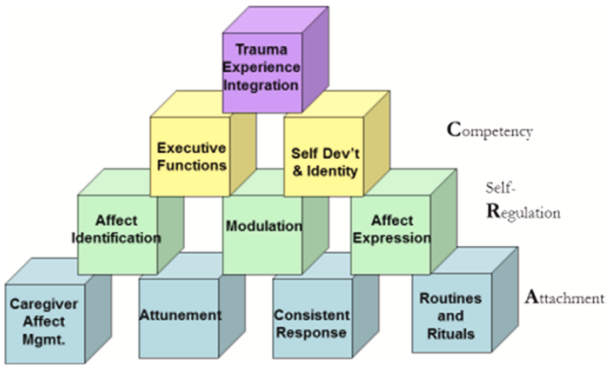



**Fig. 1.** ARC-10 Building Blocks. Blaustein and Kinniburgh (2010), Reprinted with permission.

(Tabone et al., 2020, p. 3; Blaustein & Kinniburgh, 2010)

This 2020 TIES study brought trauma-informed services to a total of ninety-four pre-K, Kindergarten, and first grade classrooms in eleven schools over three school years (2015–2019) in a section of Northern West Virginia that has been ravaged by the opioid crisis (Tabone et al., 2020, p. 2). Teachers were provided with experienced, licensed therapists classroom "resource liaisons" who had multiple years of working with at-risk families (2020, p. 2).

The Classroom Assessment Scoring System ("CLASS") was used at both the beginning and end of the school year to assess outcomes in the following areas: Emotional Support, Classroom Organization, and Instructional Support (2020, p. 3). Within these three areas were the following ten subcategories: "positive climate, negative climate, teacher sensitivity, regard for student perspectives, behavior management, productivity, instructional learning formats, concept development, quality of feedback, language modeling" (2020, p. 3). This study concluded that the TIES program was successful in "cultivating a trauma-sensitive school climate and culture" (2020, p. 6). Specifically, it found that there were "significant beneficial effects" for traumatized young children and that the unique classroom-level intervention approach "has the potential to affect all children, families, and school personnel involved, not only those who experience trauma directly" (Tabone et al., 2020, p. 7).

*Trauma-Informed Organizational Study*

Purtle's (2020) study included twenty-three studies throughout a wide range of sectors: child welfare agencies, psychiatric hospitals, general medical settings (e.g., emergency departments, primary care clinics), a juvenile justice facility, and only one school. Even in these varied and challenging environments, trauma-informed interventions were found to be effective and even more so when the intervention included overall organizational changes (Purtle, 2020, p. 736). It was not just one-time staff training that ranged from one hour to multiple days that helped reduce the trauma of the "clients," but overall organizational changes such as changing classroom environments and implementing a trauma-informed oversight committee (Purtle, 2020, p. 738). Two specific training

programs (“Risking Connection” and the National Child Traumatic Stress Network’s training program) were used in only seven of the twenty-three studies; the majority of studies developed and used “in-house” training (Purtle, 2020, p. 727). Among these “in-house” training programs which ranged from hours to days, there was “substantial variation in the amount of information about the content of their trainings” (Purtle, 2020, p. 727).