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**THE BENEFITS OF IMPLEMENTING TRAUMA INFORMED  
TEACHING STRATEGIES TO SUPPORT STUDENTS IN SPECIAL EDUCATION**

**A MASTER'S THESIS SUBMITTED  
TO THE FACULTY OF BETHEL UNIVERSITY**

**BY  
CONNOR MALCOLM**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF MASTER OF ARTS**

**DECEMBER 2023**

**THE BENEFITS OF IMPLEMENTING TRAUMA INFORMED TEACHING  
STRATEGIES TO SUPPORT STUDENTS IN SPECIAL EDUCATION**

**BETHEL UNIVERSITY**

**BY**

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**APPROVED**

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**DECEMBER 2023**

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## **ABSTRACT**

The number of children experiencing traumatic events is occurring at an alarming rate.

According to Substance Abuse and Mental Health Service Administration (SAMHSA), more than two-thirds of children in the United States are going to or have already experienced at least one traumatic event by the age of 16. Students with special education needs are also experiencing this trauma at high rates. These students that are experiencing different types of trauma are then carrying this trauma with them into schools and classrooms. Trauma affects the brain and also influences the way that students can learn and behave in the classroom. Teachers have a major impact on the success students will experience in the classroom. There is a great need for teachers to be informed about trauma and the impact it has on all students and their ability to learn and behave in the classroom. Trauma-Informed Teaching has shown to have a positive impact on students ability to function and learn in a classroom setting. This thesis will focus on Trauma-Informed Teaching and the impact it has specifically on students with special education needs in a classroom and school setting.

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## **CHAPTER I: INTRODUCTION**

### **Focus of Thesis and Definitions**

The topic of trauma in schools is one that has been researched more often in the past 10 years than ever before. This topic is a very important topic to discuss due to the number of students that face traumatic events. The growing research in this topic indicates that Adverse Childhood experiences (ACEs) have major lasting effects on students and their brains (Terassi et al., 2017). Researchers at the American Psychological Association (APA) define trauma as “An emotional response to a terrible event like an accident, rape, or natural disaster” (APA, 2008). The APA stated that after a traumatic event, it is very common to have reactions such as shock and denial. Long term reactions can consist of unpredictable emotions, flashbacks, and strained relationships. Other reactions can include physical symptoms such as headaches and nausea (APA, 2008). According to the National Council for Mental Wellbeing, “70% of adults in the U.S. have experienced some type of traumatic event at least once in their lives. That’s 223.4 million people” (How to Manage Trauma, 2023, no page). Along with the high number of Americans experiencing traumatic events throughout their life, many are experiencing traumatic events at a young age. The National Council for Mental Wellbeing indicated that children that experience trauma at a young age have a higher chance of getting PTSD. The National Council for Mental Wellbeing also states that “Nearly all children who witness a parental homicide or sexual assault will develop Post Traumatic Stress Disorder. Similarly, 90% of sexually abused children, 77% of children exposed to a school shooting, and 35% of urban youth exposed to community violence develop Post Traumatic Stress Disorder” (How to Manage Trauma, 2023, no page).

The impact of trauma can be seen in many areas, especially in a school setting. Author Kate B. Nooner along with others wrote in 2012 that a very important thing for teachers to know is the potential risk for students in their classroom to face new trauma in their life while they are in their adolescent school years. This has influenced other researchers to look into other factors regarding teenagers and trauma. A specific journal article focuses on the risk of facing trauma throughout different age categories. This article stated that “Adolescents are at a greater risk of experiencing trauma than either adults or children, and that the prevalence of PTSD among adolescents is 3-57%” (Nooner et al., 2012, p. 153). In addition to these numbers, other researchers have stated that by the age of four, over 26% of children will experience a traumatic event. These traumatic experiences can change children's behaviors and lead to permanent changes in brain structure and function. This can impact children's ability to regulate emotions, acquire new skills, and form secure attachments. These effects on a child's brain can affect the behaviors and reactions seen in the classroom (Nooner et al., 2012, p. 154)

There are many studies that highlight the effectiveness and success of implementing Trauma Informed teaching in the classroom and this thesis writer is able to see firsthand the positive impacts it has on students and the school population. As a professional, this thesis writer has experience working in a special education Federal Setting I, II, and III. The author specifically works in an educational setting in which students are incarcerated. These students range from 10-18 years old, and the majority of the students have experienced traumatic events throughout their lifetime. This experience has made the author very passionate about working with students that have traumatic experiences.

When the author started working with students that had been incarcerated, he found that many of the students reacted in very different ways than students he had seen in the past. This



researcher remembers wondering for the first few months what was the difference between the students he was seeing now, versus students he had seen in years prior. After talking with many of the staff members, he determined that traumatic experiences were the main thing driving the students to act in the manner that they did. This writer started researching different techniques that he could bring into the classroom to help the students cope with their traumatic events and function in a school setting effectively. It is this author's belief that trauma informed teaching can regulate a student's brain chemistry, increase ideal thoughts and behaviors, increase attention, and increase academic achievement in the classroom. When teachers are trained properly to use trauma-informed teaching, the school setting will function as a whole in a more effective way, and teachers will be able to effectively develop deeper connections to students, create a safe environment for learning, and effectively manage behavior concerns in a school setting.

### **Definitions**

**Special Education-** Students in special education have a disability and are in need of specialized instruction. A comprehensive evaluation, conducted by a team from the public school, evaluates and identifies these students. For every student who needs special education services, the team develops a special document called an Individualized Education Program (MDE, 2022).

**Emotional Behavior Disorder (EBD)-** For students to meet criteria and receive special education services in Minnesota under the disability category of Emotional Behavior Disorders (EBD), students must demonstrate behavioral consistency by having an established pattern of one or more of the following emotional or behavioral responses: withdrawal or anxiety, depression, problems with mood, or feelings of self-worth, disordered thought processes with unusual behavior patterns and atypical communication styles; or aggression, hyperactivity, or impulsivity (MDE, 2022).

**Trauma-** Trauma is an emotional response to a terrible event like an accident, rape, or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships, and even physical symptoms like headaches or nausea (APA, 2008).

**Adverse Childhood Experiences (ACEs)-** ACEs are disruptions to the promotion of safe, stable, and nurturing family relationships and are characterized by stressful or traumatic events that occur during an individual's first 18 years of life (APA, 2008).

**Posttraumatic Stress Disorder-** an anxiety problem that develops in some people after extremely traumatic events, such as combat, crime, an accident, or natural disaster (APA,2008).

**At Risk Students-** Vulnerable students that are receiving special education services, part of the juvenile justice system, homeless, low socioeconomic status, emotionally traumatized, and students deemed at risk of failure in a school setting.

**Social Emotional Learning (SEL)-** Social emotional learning (SEL) is broadly understood as a process through which people build awareness and skills in managing emotions, setting goals, establishing relationships and making responsible decisions that supports their success in school and in life.(1) SEL develops cognitive social competencies, such as self-awareness, self-management and social awareness, according to the Collaborative for Academic, Social and Emotional Learning (CASEL). Developing such competencies in students fosters positive social skills, reduces conduct problems, diminishes emotional stress and improves academic performance (MDE, 2022).

**Autism Spectrum Disorder (ASD)-** a neurodevelopmental disorder that affects how an individual processes information and interprets the world. Core features of autism are persistent deficits in social interaction and communication; and restricted, repetitive or stereotyped patterns

of behavior, interests or activities. Each individual with ASD displays a unique combination of characteristics, ranging from mild to severe, requiring individually determined educational and treatment programming (MDE, 2022).

**Federal Setting I-** Instructional setting where students are spending less than 21 percent of their time in a special education setting.

**Federal Setting II-** Instructional setting where students are spending 21-60 percent of their time in a special education setting.

**Federal Setting III-** Instructional setting where students spend more than 60 percent of their time in a special education setting.

### **Further Information about Thesis**

This researcher has conducted an implementation process at the school he is currently teaching at. The implementation is aimed at decreasing negative reactions and behaviors and increasing positive, healthy teaching methods to help students learn with the effects of trauma. This writer implements the methods that are discussed in the thesis in a classroom setting where the majority of students have experienced many forms of trauma in their lifetime. This researcher believes that the positive impacts of this implementation of trauma informed teaching will allow students to feel safer in schools and learn in a more effective way.

### **Rationale for Trauma Informed Teaching**

The topic of trauma in schools is one that has been researched more often in the past 10 years than ever before. This topic is a very important topic to discuss due to the amount of students that face traumatic events. The growing research in this topic indicates that Adverse Childhood experiences (ACEs) have major lasting effects on students and their brains (Terassi et al., 2017). Along with the effect that ACEs have on students in the classroom, studies have also

shown a link between ACEs and poor adult living experiences. “In a seminal study of more than 8,500 adult patients at Kaiser Permanente’s San Diego Health Appraisal Clinic, researchers documented strong relationships between adverse childhood experiences and poor well-being in adulthood” (Terassi et al., 2017, p. 36). Teachers play an important role in helping students with these adverse experiences as it can help the students learn skills to cope with their trauma (Terassi et al., 2017).

Therefore, this thesis will focus on providing information to address the following questions:

**Thesis Question(s)**

- 1) What are the effects of trauma on a student's learning process?
- 2) How can trauma informed teaching impact secondary students' success in the classroom?
- 3) What is the rationale and procedure of implementing trauma informed practice in schools to help service the majority of students experiencing multiple forms of significant trauma?

## **Chapter II LITERATURE REVIEW**

### **Thesis Information Research Process**

The research was derived from the Bethel University Library search engines such as JSTOR, Academic Search Premier, Google Scholar, and EBSCO. In addition, articles were found using keywords such as “Trauma Informed Teaching”, “Trauma in adolescents”, and “Trauma in Schools”.

### **Defining Trauma and its Impacts on Education**

According to the American Psychological Association, Trauma can be defined as an emotional response to a terrible event like an accident, rape, or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships, and even physical symptoms like headaches or nausea (APA, 2008). Many people around the world experience different forms of trauma. This number has been especially rising in adolescents in the past few years. Author Jessica Minahan indicated that more than two thirds of children have experienced at least one form of serious childhood trauma. This includes abuse, natural disaster, neglect, or experiencing or witnessing violence. Many children experience more than one of these forms of trauma before they reach their teenage years (Minahan, 2019).

### **Experiencing Trauma**

According to The Journal of Nervous and Mental Disease, Childhood trauma has detrimental effects on adolescents mental health. Throughout America, adolescents experience trauma in many different ways. This list can include unwanted physical touch, emotional and psychological neglect, psychological or physical bullying, and participating or witnessing forms of violence. Recent studies reveal that traumatic events such as unwanted sexual touch and

neglect can cause disorders such as mood and anxiety disorders, personality disorders, and schizophrenia (Stowkowy et al., 2020). This demonstrates that adolescents who are experiencing trauma are being impacted over long periods of time. Just as trauma is experienced in many different ways, the impacts that trauma has on adolescents, and the effects they feel can also happen in many different ways. One way researchers tried to look at different ranges of trauma is by looking at ACEs or Adverse Childhood Experiences. ACEs are defined by the American Psychological Association (APA) as disruptions to the promotion of safe, stable, and nurturing family relationships and are characterized by stressful or traumatic events that occur during an individual's first 18 years of life (APA, 2008). According to authors J.P. Mersky, J. Topitzes, and A.J. Reynolds, adverse childhood experiences are proven to increase the risk of poor health-related outcomes later in adulthood. The authors work together to identify the amount of trauma someone may have experienced, and then tried to find the impact that trauma is having on their long term health (Mersky et al., 2013). Furthermore, authors have stated that "Early life exposure to adverse childhood experiences, like trauma, abuse or maltreatment in childhood has been linked to alteration of the brain structure and the neurobiological stress-response systems which have consequences for health and emotional well being" (Kelly-Irving et al., 2013, p.721). These consequences can be both physical and psychological. Researchers concluded that trauma, and experiencing traumatic events, plays a major role in brain chemistry, and brain development (Kelly-Irving et al., 2013).

### **Trauma and the Brain**

In the book, *Brain and Behaviors*, researchers studied the impacts that different types of trauma have on the brain. The authors concluded that there is a direct correlation between abuses, neglectful experiences, and other forms of trauma, and the way the brain functions in

adulthood. Authors stated that “Childhood trauma is associated with a predisposition to serious long-term mental and physical ill-health. More than 1 billion children and adolescents across the world are exposed to violent behavior. Individuals who experience adverse conditions during childhood exhibit greater vulnerability for developing mental disorders later in adulthood” (Cai et al., 2023, p. 1). Some of these disorders that are being developed are substance abuse disorders, personality disorders, anti-social disorders, anxiety disorders, PTSD, and depressive disorders (Cai et al., 2023).

In order to understand how trauma affects the brain, it is important to first understand the makeup of the brain. Jamie Mosley is a mental health professional that is also a licensed counselor in the state of Minnesota who specializes in trauma and the impact it has on human brains. In a recent conversation this researcher spoke with J. Mosley. According to J. Mosley, there are three parts of the brain that are important to look at when assessing trauma and its impact on humans. These three parts include the Prefrontal Lobe, the Limbic System, and the Brain Stem (J. Mosley, personal communication, August 30, 2023). These three components work together to control our mind, actions, and feelings.

### **Prefrontal Lobe**

According to A.F. Arnsten, the prefrontal cortex, is the brain's most evolved brain region. Arnsten said that this area of the brain “subserves our highest-order cognitive abilities. However, it is also the brain region that is most sensitive to the detrimental effects of stress exposure” (Arnsten, 2009, p. 410). The prefrontal cortex works with different parts of the brain to form connections that impact the way humans think, act, and feel different emotions. Arnsten describes this interaction as creating a “Mental sketch pad through networks of neurons that can maintain information in the absence of environmental stimulation” (Arnsten, 2009, p. 410). This

process is also sometimes referred to as working memory. This process gives our brain the ability to keep in mind events that have happened recently, bring back information from long term storage, and use knowledge to regulate behavior, emotions, and actions. When the prefrontal cortex of the brain is functioning in a healthy way, the brain is able to allow flexible regulation of different behaviors. These behaviors are reactions to the changing environment that surrounds everyday human life and behavior (Arnsten, 2009). The author went on to give an example of a reaction from the brain by saying the prefrontal cortex has the “ability to shift attentional set to new dimensions and to alter decision making as reward contingencies shift” (Arnsten, 2009, p. 411). Another task that the prefrontal cortex handles is a human being's ability to monitor errors. The prefrontal cortex gives the brain insight to see that something is incorrect and that the brain needs to shift strategies. Arnsten finished by saying “All of these abilities depend on proper prefrontal cortex neuronal network connections, which are highly sensitive to their neurochemical environment” (Arnsten, 2009, p. 411).

### **Limbic System**

The next important part of the brain to focus on is the Limbic System. The Queensland Brain Institute defines the Limbic system as “the part of the brain involved in our behavioral and emotional responses, especially when it comes to behaviors we need for survival: feeding, reproduction and caring for our young, and fight or flight responses” (The Limbic System, 2023, no page). The limbic system sits within the brain underneath the cerebral cortex, and above the brainstem. According to The Queensland Brain Institute, “The thalamus, hypothalamus (production of important hormones and regulation of thirst, hunger, mood etc) and basal ganglia (reward processing, habit formation, movement and learning) are also involved in the actions of



the limbic system, but two of the major structures are the hippocampus and the amygdala” (The Limbic System, 2023, no page).

The first major part of the limbic system is the hippocampus. The hippocampus comes in a pair, and there is one in each hemisphere of the brain. The hippocampus serves as the memory center of the brain. This is where episodic memories are made and then used as long term storage. The Queensland Brain Institute states that “Connections made in the hippocampus also help us associate memories with various senses (the association between Christmas and the scent of gingerbread would be forged here). The hippocampus is also important for spatial orientation and our ability to navigate the world” (The Limbic System, 2023, no page). The hippocampus is also a place where new neurons are made from adult stem cells in a process called neurogenesis (The Limbic System, 2023).

The second major part of the limbic system is the amygdala. The amygdala is almond shaped and right next to the hippocampus. According to the Queensland Brain Institute, the amygdala “plays a central role in our emotional responses, including feelings like pleasure, fear, anxiety and anger. The amygdala also attaches emotional content to our memories, and so plays an important role in determining how robustly those memories are stored. Memories that have strong emotional meaning tend to stick” (The Limbic System, 2023, no page). The amygdala also plays a major role in memory related to fear. “Suppressing or stimulating activity in the amygdala can influence the body’s automatic fear response, which kicks in when something unpleasant happens, such as a startling noise” (The Limbic System, 2023, no page).

### **Brain Stem**

The final part of the brain that is important to look at is the Brain Stem. According to authors J.G. Nichols and J.F. Paton, the brain stem, is critically important for the survival of

human beings and animals. It is located between higher centers of the brain and the spinal cord (Nichols & Paton, 2009). The authors went on to state that “The brain stem also regulates blood pressure, second by second, to ensure that the blood supply to the cerebral cortex is always adequate, for example, in the face of gravity, as you get up from bed, or during strenuous exercise, when much of the blood flow is diverted to skeletal muscles” (Nichols & Paton, 2009, p. 2447). The brain stem also plays a very important role in controlling the way we process information, move, and function. If injuries occur to the brain stem, it may affect the way people are able to live effectively (Nichols & Paton, 2009).

### **The Brain and Autism**

The brain in humans is a very complex system to study. The brain controls the way we think, act, and feel emotions. In students with autism, the way the brain functions is different from humans that do not have autism. According to the Minnesota Department of Education, autism can be defined as:

“A neurodevelopmental disorder that affects how an individual processes information and interprets the world. Core features of autism are persistent deficits in social interaction and communication; and restricted, repetitive or stereotyped patterns of behavior, interests or activities. Each individual with ASD displays a unique combination of characteristics, ranging from mild to severe, requiring individually determined educational and treatment programming” (MDE, 2022, no page).

According to the University of Western Ontario, research has stated that students with autism have abnormalities in many aspects of the development of the prefrontal cortex. “The brain size, which is larger in the first two years post-birth, reduces gradually from two years onwards, in normally developing children. In contrast, autistic children who are two to four years

of age have larger brain volume. Such persistence of increased brain size may indicate aberrant development within the cortex or failure to prune excessive connections" (Rao, 2020, no page). Furthermore, in students with Autism, neurons are smaller in length, and the connection between the inhibitory and excitatory systems connections may be disturbed as well (Rao, 2020). Dr. J.M. Rao stated that:

“The other problem is that the regional connection is abnormal. To explain, normally, each lobe of the brain, such as the temporal, the frontal, the parietal, and the occipital are clearly demarcated from each other. In autism, the demarcation (boundaries) between frontal and temporal lobes is poor. Such abnormal connectivity in the executive brain leads to poor processing of emotional, cognitive, perpetual and attentional inputs, as well as language functions” (Rao, 2020, no page).

To summarize, Dr. Rao stated that “the difficulty that a developmentally disabled person experiences in regulating behaviors and emotions, in communicating, and in modulating sensory inputs has a significant bearing on the person’s ability to adapt and function” (Rao, 2020, no page).

### **Trauma and Learning**

As students begin to experience traumatic events throughout their lifetime, the process of learning becomes increasingly difficult. Authors Salvatore Terrasi and Patricia Craine de Galarce state that “A typical reaction to a traumatic experience is hyperarousal (sometimes referred to as a ‘Fight, Flight, Freeze’ response). Over time, such chronic stress produces neurobiological changes in the brain, which researchers have linked to poor physical health and poor cognitive performance” (Terrasi & Craine de Galarce, 2017, p. 36). This is especially true in school aged

adolescents, and these traumatic experiences affect their physical, social, emotional, and academic developments (Terrasi & Craine de Galarce, 2017).

Researchers have studied the effects that trauma has on the brain, and how these affects impact the way that students learn. Researchers have indicated that when stress hormones enter the brain over a period of time, they have a very negative effect on the executive functioning of the brain. This in turn weakens the students ability to concentrate, process language, sequence information, make decisions, and create memory. This happens when the limbic cell communication is disrupted causing the brain to function differently than when it is regulated. Terrasi and Craine de Galarce revealed that trauma causes the amygdala to become large and the cerebellar vermis to become overactive. These reactions in the brain cause a student to lose control of normal executive functioning and their emotional responses become quick and exaggerated. This makes it extremely difficult for students to retain attention and information while the brain is dysregulated (Terrasi & Craine de Galarce, 2017).

According to authors Maura McInerney and Amy Mcklindon, physiological changes in an adolescents brain as well as emotional and behavioral responses from trauma greatly impact a students ability to learn in a school setting. They continue by stating that “most brain development occurs during a child’s early months and years when the brain is most ‘plastic,’ traumatic experiences in the early years, such as abuse and neglect and exposure to violence, can profoundly impact and limit brain development, resulting in cognitive losses, physical, emotional and social delays, all of which undermine learning” (McInerney & Mcklindon, 2014, p. 1). Further, McInerney and Mcklindon indicated that these changes in the brain chemistry as a result of trauma can make it extremely difficult for students to learn and retain information.

“Children who have experienced trauma may find it more challenging than their peers to pay attention and process new information, and evidence suggests that some of these children develop sensory processing difficulties which can contribute to problems with writing and reading” (McInerney & Mcklindon, 2014, p. 4).

In a study conducted by a pediatric clinic in California, students that were exposed to four or more adverse childhood experiences were 32 times more likely to develop learning and behavior disorders than their peers that were not exposed to traumatic experiences. Researchers also found that adolescents who were maltreated are more likely to be placed in a special education setting, have lower grade point averages, and have more absences than peers that are not exposed to trauma. All of these factors are key in contributing to a direct impact on the learning process (McInerney & Mcklindon, 2014).

### **Trauma and Behavior**

While learning in schools is impacted by trauma, behavior in school is also impacted when looking at the effects of trauma on the brain. According to authors Eldra Solomon and Kathleen Heide, traumatic events overwhelm the human brain and cause many different physical and psychological symptoms. Some of these symptoms impact the way adolescents act and behave in a school setting. Solomon and Heide continue to stated that:

“Traumatic events overwhelm the brain’s capacity to process information. The episodic memory of the experience may be dysfunctionally stored in the right limbic system indefinitely and may generate vivid images of the traumatic experience, terrifying thoughts, feelings, body sensations, sounds, and smells. Such unprocessed traumatic memories can cause cognitive and emo-tional looping, anxiety, PTSD, maladaptive coping strategies, depression, and many other psychological symptoms of distress.

Because the episodic memory is not processed, a relevant semantic memory is not stored and the individual has difficulty using knowledge from the experience to guide future action” (Solomon & Heide, 2005, p. 54).

Authors McInerney and Mcklindon stated that there is a direct correlation between trauma and the way students interact with each other, and their teachers. According to McInerney and Mcklindon, “Children who have experienced trauma may be distrustful or suspicious of others, leading them to question the reliability and predictability of their relationships with classmates and teachers. Research indicates that children who have been exposed to violence often have difficulty responding to social cues and may withdraw from social situations or bully others” (McInerney & Mcklindon, 2014, p. 4). They continued to discuss that students that have experienced different forms of trauma often feel that authority figures may be distrustful, and rules and consequences in the classroom may be looked at as punishment. Research has shown that students that have these feelings and experienced trauma are more likely to be subject to school disciplinary and exclusionary practices on a regular basis. Not only does this cause re-traumatization, but it also causes students to miss important pieces of information that is being presented to them by teachers and instructors in a school setting (McInerney & Mcklindon, 2014).

### **Trauma Informed Teaching**

The concept of trauma informed care is something that has evolved over the past 30 or so years. This is due to technology changes, innovation, and new ways of thinking. Before the term “Trauma informed” was developed, many institutions used ideologies that are similar to present day practices naturally in their work. According to Martin et al. places like rape crisis centers in the 1970’s, and child abuse centers in the 1980’s were naturally routed in trauma informed

practices. These practices were also starting to be used in Vietnam War veterans that were returning home with multiple traumatic experiences (Martin et al., 2013). These authors continue to state that:

“In the 1990s, the Substance Abuse and Mental Health Administration (SAMHSA), within the U.S. Department of Health and Human Services, recognized the role of trauma in a significant number of women’s issues and gender-specific treatments. Over the next 20 years, a huge expansion of knowledge about trauma and traumatic stress occurred. This included not only better diagnostic criteria but also the development of empirically tested treatments for PTSD and other related trauma symptoms” (Martin et al., 2013, no page).

Researchers today have stated that trauma is being experienced at a rapidly increasing rate over the past few years, especially in the range of school aged children. As these numbers continue to grow, researchers have started to stress the importance of schools playing a role in helping these students that experience trauma become successful in their learning. Teachers play an important role in helping students with these adverse experiences as it can help the students learn skills to cope with their trauma (Terassi et al., 2017).

Author Jessica Minihan stated that “Up to two-thirds of US children have experienced at least one type of serious childhood trauma such as abuse, neglect, natural disaster, or experiencing or witnessing violence” (Minahan, 2019, p. 30). With these numbers constantly rising, it is very important to understand the impact teachers have on students experiencing trauma.

Author Trynia Kaufman defined trauma informed teaching as “an understanding of how trauma can impact learning and behavior. With this approach, educators think about what student

behavior may be telling them. And they reflect on their teaching practices to find ways to better support students who may be experiencing trauma” (Kaufman, 2023, no page). Many authors have similar ideas of how trauma-informed teaching can be defined, and schools across the United States are beginning to carry out this practice in their schools in hopes to help students that are experiencing trauma (Brunzell et al., 2021). VJ Feletti and others pointed out that trauma informed teaching is an educational approach that acknowledges the prevalence of trauma in students' lives. The goal is to create a setting in which students feel safe, and are able to be effective in a learning environment. The authors went on to describe that trauma-informed teaching is effective when school staff are aware of the potential impacts that trauma has on cognitive, social, and emotional well-being. This makes it so teachers and school staff are sensitive to students' experiences and acknowledge that different students may react to stressors in different ways (Feletti et al., 1998).

Author Brain Cavanaugh indicated that “trauma informed” is not just one process in the school. Rather it is the whole system the school needs to follow to have success. Cavanaugh also stated that “Trauma-Informed practices should focus on educational strategies across a continuum of multi-tiered systems of support (MTSS)” (Cavanaugh, 2016, p. 42). Cavanaugh went on to explain different systems of support that have been used to show progress in students' ability to cope with ACEs. In a more specific setting, like a school, these ACEs are associated with social, emotional, and cognitive impairments. Students that have a higher frequency of ACEs, often have a higher frequency of the negative outcomes in the classroom (Cavanaugh, 2016).



Many authors have similar ideas on how trauma informed classrooms and schools can be carried out. Martin et al., provide researchers with a list of effective ways to implement a trauma informed teaching strategy (Wilson et al., 2013, no page).

1. Safety
2. Trustworthiness and Transparency
3. Collaboration and Mutuality
4. Empowerment
5. Voice and Choice
6. Peer support and mutual self help
7. Resilience and strengths based
8. Inclusiveness and shared purpose
9. Cultural, historical, and gender issues
10. Change process

Authors also agree the most important step in implementing a trauma informed classroom is by maximizing the physical and psychological safety. Wilson et al. stated that:

“At its most fundamental level, recovery from trauma requires a sense of safety, and trauma-informed providers must recognize safety is both physical and psychological. Removing a child from an abusive home, for example, and placing him or her in a physically safe foster home where the child will not be maltreated may achieve physical safety but does not guarantee the child will feel safe. In fact, the very process of securing physical safety may intensify the child’s fears and insecurity and feelings of being out of control, helpless, and inherently unsafe. Without a sense of safety, not only will the client not progress, but the anxiety and stress it creates will add new trauma, amplify old

trauma, and impact their behavior, often emerging as unhealthy maladaptive behaviors replayed long after the physical threat is gone” (Wilson et al., 2013, no page).

Safety in this context must occur on an emotional level, and is very critical for a student's optimal functioning as well as physical and emotional growth. When students have a feeling of being unsafe in a school setting, behaviors may occur leading to maladaptive strategies for coping with the anxiety of feeling unsafe (Wilson et al., 2013).

Authors Prashanti and Ramnarayan indicated that teachers are able to create a sense of safety by doing many different things in the classroom. These include building rapport with students, not using fear or sarcasm to establish control, don't forget students' talents and diverse ways of learning, and do not forget to establish high expectations (Prashanti & Ramnarayan, 2020).

Wilson et al. 2013 stated that teachers can establish safety by:

“not only how safe the service delivery environment actually is, but also how safe it is *perceived* to be by the clients being served; how trauma reminders and trauma triggers are managed; how the physical environment is structured to make the client feel safe; how culturally, developmentally, and linguistically congruent the service delivery system is with the client population served, and what can be done to maximize the sense of safety and security for both clients and service providers” (Wilson et al., 2013, no page).

Another effective strategy in implementing trauma informed teaching Empowerment.

According to author Helja Robinson, empowerment is “is a personal and social process, a liberating sense of one's own strengths, competence, creativity and freedom of action; to be empowered is to feel power surging into one from other people and from inside, specifically the power to act and grow” (Robinson, 2005, p. 7). According to Catherine Broom, “Empowerment

is closely related to self-efficacy, among other factors. Self-efficacy, similarly to the concept of agency, is the belief that one controls one's life and that one can make positive changes in one's surrounding environment" (Broom, 2015, p. 80). Broom continued to write about the role teachers play in empowering their students. Broom indicated that as teachers try to micro manage students, the more students are likely to resist control, making the class dynamic function in a less effective way. The best way to empower students in the classroom is to slowly stop micromanaging the students. This gives students the opportunity to take control of their own learning. Teachers also can build up students' confidence by encouraging them to work on their own and not feel managed by school staff (Broom, 2015).

"Trusting their students is important. Teachers can believe in the ability of students to guide their own learning and their ability to do the work that has to be done. By trusting their students, teachers create trusting environments, build capabilities, and empower students to manage themselves" (Broom, 2015, p. 82).

### **Benefits of Trauma Informed Teaching**

As schools have started to implement trauma informed teaching in their classrooms, research has shown that students benefit from the practice. Author Helen Stokes discussed a research project that looked at the benefit of trauma informed teaching on students' success in an educational setting. This study was conducted on three schools over a four year period in Australia. The location of these schools were in areas that have very low financial standings and very poor educational success. According to Helen Stokes,

"The research was undertaken at a school which had high levels of teacher absenteeism/turnover and low morale as well as low student outcomes (both academic and wellbeing). Leadership in the school acknowledged that teachers required a

significant shift to their instructional practice and a wholesale change in the way they worked together to improve student outcomes” (Stokes, 2022, no page).

Both qualitative and quantitative data were collected for this study. The study used the framework of Miles and Huberman (1994) to analyze data and interviews from all parties involved in the study. According to Helen Stokes, the schools participated in professional development days in the area of Trauma informed positive education from the middle of 2019 to 2021. Throughout these training sessions there were different subsections that were focused on. The process they used is **Trauma Informed Positive Education** or TIPE. These training focused on body, relationships, stamina, engagement, and character. After the professional development was completed, the schools were able to begin implementing a trauma informed approach to teaching. Stokes stated that “As a unified effort, the school featured in this case study implemented trauma-informed education with it strategically positioned within its instructional practice” (Stokes, 2022, no page).

Throughout the study, the participating school staff members were interviewed and asked about the differences they see in the classroom since they had started the trauma informed teaching approach. The teachers reported positive results early on in the study.

“In many of the interviews, staff members commented that in the past they were losing instructional time due to multiple critical incidents occurring both inside and outside of the classroom each day. These incidents were often in the form of violent outbursts or escalations that would derail the delivery of instruction and wasted precious instructional time. As a result of the TIPE professional learning and the clear direction of leaders (following consultation with teachers and educational support staff) decisions were made to implement a range of TIPE strategies adapted to their own school context. The

instructional model changed over time and contained classroom strategies and practices that assisted students to learn skills to build networks of support, feel confident as learners and manage difficult and challenging emotions when learning” (Stokes, 2022, no page).

As teachers continued to implement the TIPE, the study continued to show more positive results in learning and behaviors seen in school. This trauma informed approach also changed the way that students looked at school as a whole.

“Within the current case study, there were noticeable shifts in the ways students positively viewed their school, their teachers, and their peer-community. It is asserted that these changes were due to proactive changes to teachers’ instructional practice yielding changes in student perceptions of the school itself and thus, this cohort of students developed the ability to apply these wellbeing resources for readiness to learn” (Stokes, 2022, no page).

Students were interviewed throughout the case study and asked to expand on how their viewpoint of the school changed as the study progressed. One quote from a study in the case study stated by Stokes (2022):

“Yeah, it’s a lot better place to be. Like it used to be very – quite violent in a way. Like, mentally straining here because yeah, the teachers just wouldn’t listen to you. The teachers that we have now are just all-around nicer people. Genuine. They’re not just doing it because it’s their job. They genuinely want to see us succeed” (Stokes, 2022, no page).

The case study was conducted over a multi-year period, where teachers were being trained on the idea of trauma informed teaching. When the time came to begin implementing this practice,

teachers were initially confused how it would work, but over time they became comfortable with the idea of trauma informed teaching practices. Students reported that they saw a direct change in the way teachers were instructing, and interacting with students in the school setting. Students also reported that they saw a direct change in the way they viewed school. They felt more comfortable and safe, and they acknowledged that their teachers truly did care for them. This in turn impacted the learning process in a positive way and allowed the school to function in an effective manner (Stokes, 2022).

Authors Isaiah Pickens and Nicole Tschopp discussed the benefits of trauma informed teaching. Pickens & Tscopp revealed that trauma-informed teaching helps teachers develop a safe environment for learning, address the needs of the students, and build opportunities for meaningful connections. The emphasis of safety is in effort to make students comfortable in a learning environment.

“A trauma-informed approach in the classroom is rooted in a safe environment. While safety encompasses ensuring the physical wellbeing of students, it also extends to ensuring that psychological safety is bolstered through creating a predictable classroom environment where every member feels respected, validated, and heard. Experiences in the classroom from the outset of the school year shape whether or not both teachers and students feel psychologically safe. A classroom structure promoting psychological safety reflects clear expectations for behavior, a defined process for addressing behavioral concerns that students understand, and mechanisms for helping students communicate about experiences that undermine feelings of safety” (Pickens & Tscopp, 2017, p.10).

The authors also touched on the importance of building relationships with students in effort to make them feel safe, in turn providing an effective learning environment.

“The foundation for facilitating meaningful trauma-informed connections is striving for authentic interactions that convey respect for students’ perspectives. Students who have experienced trauma can feel disempowered and strive to regain power in behaviorally disruptive ways when perceiving threat or unfairness from others—particularly authority figures. Modeling respectful communication provides a powerful tool for students to reference when unsure about how to respond to situations. This form of communication can include reprimanding or providing guidance without embarrassing or humiliating students, acknowledging when students feel slighted or treated unfairly, and asking for clarification or repeating back what was heard when students are expressing frustration in an oppositional or unclear manner. When possible, providing opportunities for students to choose between two options after feeling threatened or possibly experiencing a trauma reminder can help youths re-engage the part of their brains responsible for decision making and reduce the control of the emotional part that is focused solely on survival. These interactions help students feel less on-guard because they feel the teacher understands them and will treat them fairly” (Pickens & Tschopp, 2017, p. 13-14).

The impact of acknowledging that students experience trauma goes a long way in the school setting. As teachers are trained on how to recognize trauma, and how to effectively serve these students that are experiencing trauma. When this is done effectively, students will notice a difference in the way the school environment feels, creating a better place for learning (Stokes, 2022).

## **CHAPTER III: APPLICATION OF THE RESEARCH**

### **Focus of Chapter**

This chapter will discuss the rationale and procedure of implementing trauma informed practices in my school in response to the majority of students experiencing multiple forms of significant trauma. I will focus on how professional development of full time staff in the area of trauma informed teaching can positively impact the learning environment in my school. Thus far, the thesis has focused on the impact of trauma on students' brains, impacting their ability to act, learn, and create memory. I have also focused on the impact that educators have on the learning process when they have taken a trauma informed approach. This section will discuss the makeup of students (low income, significant trauma, special education students) and how teachers can positively impact the learning process by creating a trauma informed school.

### **The School**

As a special education teacher and case manager, I have seen the impact that teachers have on students learning for years. As I studied special education at my undergraduate University, I was drawn to the idea of working with students that have experienced significant trauma. In 2021, I was hired as a special education case manager at a secondary school in Minnesota. I was tasked with working with students from all disability categories that are covered in the range of special education.

This school is located on the grounds of a juvenile detention center, and serves students that have been incarcerated for a multitude of reasons. These students range from 10 years old to 18 years old, with the exception of some students as young as 8 years old, to students that are in our program until their nineteenth birthday. In our program, the students are grouped together based on the reason they were incarcerated, and the length of time they are going to be enrolled



in the program, rather than the age they are. This means that a 5th or 6th grade student may be in the same classroom as a senior in high school. Our school is broken into four buildings, two of them are locked units, one functions as a shelter for students, and one is a day school. The locked units and shelter have students that reside at the school, and the day school has students that come for the day and leave when the school day is done to go back home. Three out of the four buildings have both male and female populations, with one building being all male. However, the day school is the only setting in which male and females interact with each other. When I was hired as a special education teacher and case manager at this school, I was assigned to the two locked units, and the school has another case manager that is assigned to the shelter and the day school. The population of the school changes every day due to new court cases, sentences ending, or new ones starting. Students could be in our program anywhere from one day to over a year in time. The school staff is supported by the county probation officers and county officers in the classrooms. While the majority of behaviors are handled by the county staff, the school staff has to intervene at times as well. Due to the setting of the school, the majority of students have experienced multiple levels of trauma. Many of the students have one or less parents, with the majority of students coming from low socioeconomic status. With many of the students showing signs of anxiety and post traumatic stress disorder, it is important that teachers in our setting are aware of triggers that may initiate a traumatic episode in a classroom setting.

At the time of this thesis, the demographics of this school consisted of:

- 56% Black or African American
- 36% White or Caucasian
- 4% Asian or Pacific Islander
- 4% Hispanic or Latino

- 1% Native American or American Indian

At the beginning of the school year, our school staff is trained on de-escalation tactics to use in situations where students may become dysregulated while the school staff is teaching. Our professional development consisted of learning skills that would help staff recognize what situations might lead to these extreme events, and trying to catch the warning signs to stop events before they occur. While this training is important, I believe school staff needs to implement an entire system to effectively implement a trauma informed school setting. This in turn should help students in their learning and set them up for success when they leave our program and transition back into a traditional school setting.

### **Implementing Trauma Informed Teaching**

As students that have faced multiple levels of severe trauma enroll at our school everyday, it is very important to acknowledge the presence of trauma, and create a system that provides the best environment for students with trauma. As mentioned throughout this thesis, trauma informed teaching is an entire system that should be implemented by the entire school staff to function in the most effective way. Below, I will detail the implementation of a trauma informed system at my school in phases.

#### **Phase One**

The first phase of developing a trauma informed school system starts in the professional development stage. Our teachers come back to school two weeks before student contact days begin. During this period, the school staff go through hours of professional development. Most of this professional development comes from the school district, and some of the hours are specific to the setting of the school we are in. Due to our setting and how unique it is, the

professional development that comes from the school district oftentimes is hard to apply in the setting our school staff teach in. Phase one starts by separating our staff from the rest of the district during professional development to focus on trauma informed practices. Once the staff is able to separate, the training can begin throughout the first two weeks of professional development. In phase one, it is important to build a base understanding for the teachers to understand what trauma is and how it affects the students in the classroom. The first session talks about trauma and the types of trauma students face. Once the base of trauma is identified, teachers are instructed on the parts of the brain, and how trauma impacts the parts of the brain. This background knowledge gives educators an idea of how trauma is physically impacting students, and allows the teachers to begin to think about students in their classes that may be experiencing trauma. Once teachers begin to have a base understanding of trauma and the effects it has on the human brain, the school can be ready for phase two.

## **Phase Two**

The second phase is completed during the second week of professional development with the educators and school staff. Staff should have an understanding of trauma and how it affects humans actions and behaviors from phase one. In phase two, teachers will learn what they can do in the classroom that will help the students that are experiencing trauma. Administrators along with mental health professionals will present different trauma informed teaching techniques to educators. The goal for all staff members is to create an environment in which teachers are acknowledging that trauma is present, and they are creating a space where students feel safe, and they are able to make personal connections to their teachers and school staff. Educators are instructed to create a safe place, empower students, create relationships, develop strength based learning, create resilience, and address multiple learning styles. This professional development

gives teachers different examples of how they can accomplish a trauma-informed classroom and how it will help their students when it is done in an effective way. Teachers will have time with administrators and mental health professionals to go over questions, and to plan how they are able to accomplish these things in their classrooms for the upcoming school year. The whole second week of professional development is dedicated to helping teachers learn how they can assist these students that have experienced trauma, and plan for the upcoming school year.

### **Phase Three**

After phase two is completed, the school year will be starting. Phase three is the initial implementation of the trauma informed teaching setting in the school. At the beginning of the school year, this process is going to be very new to the majority of the school staff. It is not expected that everyone is going to be an expert on trauma informed practices, however at this time teachers are able to start to implement this practice in the real setting. The initial phase of starting trauma-informed teaching will go with a system of data collection to help staff understand the impact that they are having on the students' learning. Students will fill out forms at the end of the day that ask about their behaviors during the day, how they felt, and what they experienced. Teachers will fill out surveys on student behaviors and interactions after their class periods with the students. This will give us data on how the students feel they are behaving versus what the teachers are seeing in the classroom. Twice a month for the first two months the students will be interviewed and asked about their feelings about school, if they feel safe, and how they interact with the teachers. This data allows school staff to get an idea of how students are reacting to the system that is being put into place. School staff will also meet twice a month to discuss the things that are going well, and the things that need to be changed as the school year

continues. This allows for time to make sure the teachers are implementing the most effective system to provide for the students that have experienced trauma.

#### **Phase Four**

After the school staff has implemented this trauma informed system for three months, there will be a professional development day assigned for one of the days scheduled in the school year without student contact. This day will be split into two parts. The first part of the day is a large group meeting to go in depth on the information that is being collected. The administrators will go over the student surveys and student interviews and discuss the findings throughout the first three months. The goal is to have all the information trending in a directory of students feeling safer, and having more appropriate behaviors, resulting in higher success rates in their education and learning. Once the school staff are done going over data, they will discuss further information that is needed to help them. This includes further resources that are needed for teachers and further learning that may need to happen to develop the best system possible. The goal for phase four is to provide a time for educators and staff to collaborate and talk about what might be working for staff members and what some staff members might need help with moving forward.

#### **Steps for continuing education**

After phase four is completed, the school goes back to the implementation phase. Phases three and four are repeated until the end of the school year. After each quarter is completed, the school staff will meet and discuss the data that was found throughout that quarter. As this process is repeated, the system of trauma informed teaching is changing to be the most effective version. Teachers will continue to collaborate with each other to develop tools that are useful for all staff to make sure that everyone is involved and everyone is creating an environment that is

safe for students, and acknowledges that trauma is present in the school. As this system is checked on multiple times throughout the quarter, the school staff is able to stay up to date on the data that is being taken, and change the way they are teaching to help enhance the students educational experience. This system creates a place where teachers are empowering their students, creating relationships, using students strengths, and effectively implementing a trauma informed school.

## CHAPTER IV: DISCUSSION AND CONCLUSION

### Summary of Literature

In a school setting, especially schools in which students have experienced large amounts of trauma, it is important that teachers are implementing a trauma informed teaching system. Students benefit in multiple ways from educators and school staff implementing trauma informed teaching. Effective trauma informed systems give students a higher chance of having good behaviors in the classroom, which results in higher focus levels, and increased educational success.

Author Trynia Kaufman defined trauma informed teaching as “an understanding of how trauma can impact learning and behavior. With this approach, educators think about what student behavior may be telling them. And they reflect on their teaching practices to find ways to better support students who may be experiencing trauma” (Kaufman, 2023, no page). This approach is implemented through an entire school instead of teachers and school staff deciding whether they want to participate or not. Author Brian Cavanaugh indicated that “trauma informed” is not just one process in the school. Rather it is the whole system the school needs to follow to have success. Cavanaugh also stated that “Trauma-Informed practices should focus on educational strategies across a continuum of multi-tiered systems of support (MTSS)” (Cavanaugh, 2016, p. 42).

After a school is able to implement a trauma-informed school system, students feel a sense of safety, they are able to build deeper relationships with school staff, and are able to learn in a more effective way. A school community that is able to acknowledge the presence of trauma

in students and help the students cope with this trauma is key in helping set up students for their future.

### **Limitation of Research and Implications for Future Research**

While the findings in this thesis are very important for educators and school staff to learn, it is important to also acknowledge that there are some limitations to this research topic. While the topic of trauma has been discussed for a long time, the topic of trauma informed care, especially in a school setting is a relatively new topic. This means that there is a smaller number of longitudinal studies than other research areas that have been around and studied for longer periods of time. As evidence supports the positive impact that trauma informed teaching has on students, the tracking of long term data is something that many researchers are waiting on. As researchers move forward in this relatively new field of study, it is important to check in on the early studies to begin to look at the long term findings that are coming in as time goes on. While it's been multiple years that some schools have implemented this approach, the long term data becomes very key for new research that is being developed.

Another limitation to this research is the generalization of some of the studies that have been conducted. Due to the nature of the study, the majority of the research around trauma informed classrooms are in all very similar settings. These settings include low income, urban environments where the prevalence of trauma is at a higher rate than other areas. Researchers are able to focus on large groups of students that have experienced trauma in the same particular areas. As research continues, it is very important to continue to acknowledge the areas with high levels of trauma, but also begin to expand the research to look for different settings in which trauma informed teaching could be applied. As stated in this thesis, trauma is experienced in



many different ways and it is important to be able to branch out to the different areas that schools are in to make sure that data is being collected for many different settings.

### **Professional Application**

As a special education teacher in a setting where trauma is experienced at extreme levels, it is very important to be aware of all of the data in the area of trauma informed teaching. It is important to understand how trauma is experienced in different adolescent aged students, and then how the brain is affected by the trauma. Once educators have a baseline understanding, they are able to be instructed on different ways in which they can help students in their classes that are experiencing these feelings.

I believe it is very important for teachers to use this knowledge to understand why a student may be acting out in their classrooms. Oftentimes when educators become burnt out, they become frustrated when students are misbehaving and causing distractions in the classroom. They will become frustrated with the student and react in negative ways. Under a trauma informed system, it is important for the teacher to step back and think about why the student may be acting in the way they are. The teacher is trained to think about the way trauma is impacting the three areas of the brain, and how this impact may cause the student to become dysregulated and have behaviors that are unwanted in a classroom. When this happens, it is the educators job to use the skills they learned to bring the student back to a regulated area in the brain chemicals, and help the student return to a safe level.

When educators and students are able to interact and develop these relationships, the whole school system is able to function at a higher level. This makes the students feel safe, and gives educators the opportunity to teach in a way in which students can respond well to and take

control of their own learning. Trauma informed teaching is something that can be put into place at any school, but it requires buy-in from the school staff. If any of the staff members are lacking in effort, the students can feel the difference and this can cause the whole system to become ineffective.

In my current setting, trauma informed practices are in the beginning stages of being implemented. Throughout the weeks of professional development there was a focus on brain make up, brain chemistry, and the impact that trauma has on the human body. Educators were asked about some of the behavior patterns that they were seeing in their classes, and mental health professionals were able to take the information and try to explain what might be happening in their brain to cause the students to act in the way they are. This became very effective because the mental health professionals that were instructing the educators were also counseling the students and working through their trauma with them. This gave our school staff a deeper perspective on what the students are experiencing internally, and built up empathy with some of the staff members. When these staff members returned to the classroom and the student would become dysregulated, it became much easier for the staff member to remain calm and begin to work with the student on regulating the brain to bring them back to a controlled level before they started instructing again. Throughout the school year our school staff continues to meet to discuss ways that they are trying to provide for these students and collaborate to develop an effective trauma informed system. The system is not perfect, but the staff is committed to continue to work to provide for students that have experienced trauma and allow for the best learning to take place in our school.

Since this process started at the beginning of the 2023-2024 school year, students have reported that they have seen a switch in the way teachers are interacting with them. Many

students have reported that they feel like the teachers care more this year than they have in the past. This makes the students feel motivated to do work in the classroom because they can see the effort that teachers are putting in and they want to do the same for the teachers. While this process is very new, the results have been very positive.

### **Conclusion**

Research has shown that all students, especially students in special education settings can benefit from a trauma informed teaching approach. These systems can be implemented in many different schools and settings, and are very effective in providing students with a better opportunity to learn. In order to implement an effective trauma informed system in a school, all staff members have to commit to providing this experience for the students.

Trauma is defined as “ an emotional response to a terrible event like an accident, rape, or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships, and even physical symptoms like headaches or nausea” (APA, 2008, no page). Trauma has very negative effects on adolescents' long term health. authors have stated that “Early life exposure to adverse childhood experiences, like trauma, abuse or maltreatment in childhood has been linked to alteration of the brain structure and the neurobiological stress-response systems which have consequences for health and emotional well being” (Kelly-Irving et al., 2013 p.721). These consequences can be both physical and psychological. Researchers can conclude that trauma, and experiencing traumatic events, plays a major role in brain chemistry, and brain development (Kelly-Irving et al., 2013). When students have experienced traumatic events, their actions, thoughts, behaviors, and memory are all impacted. This impacts students' ability to learn and be successful in a school setting.

Teachers are able to play a major role in helping these students with their mental health, and also their ability to learn and have success in school and beyond. The goal for educators and school staff is to create a setting in which students feel safe, and are able to be effective in a learning environment. The author went on to describe that trauma-informed teaching is effective when school staff are aware of the potential impacts that trauma has on cognitive, social, and emotional well-being. This makes it so teachers and school staff are sensitive to students' experiences and acknowledge that different students may react to stressors in different ways (Feletti et al., 1998).

Trauma informed teaching is a very important and effective tool for schools to use to help all of their students achieve success. This tool creates an environment in which students feel safe, empowered, and comfortable to use their strengths to take control of their learning. While this process can be new for most teachers, the information that is presented is very important and will create a system that acknowledges the hard things that students face, and allows the students to feel comfortable enough to work through these hardships in a setting where they can trust everyone they are working with. The number one goal for all teachers is to set the students up for success in life after school, and implementing trauma informed teaching is very effective in doing so.

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