

## **Optimum Learning Environments for Traumatized Children:**

### **How Abused Children Learn Best in School**

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#### **Introduction**

A great deal of attention has been given to our educational system and much of it has not been complementary. Issues such as student progress, drop out rates, competencies in math, science and geography have all been the source of criticism and concern. National initiatives have been implanted with reviews that have been more negative than positive. Some have gone as far as to say that our public educational system in the United States is in chaos. However, one area that has received little or no attention has been the ability of our educational system to meet the needs of children who are living with the effects of trauma in their past or present. Some might say that the attention given to special needs children through special education services should address these children. However, special education attempts to cover a host of causes related to learning difficulties and most of the time services focus only on the symptoms rather than on the problems themselves.

Handicapping conditions that are observable such as blindness, physical disability, deafness, autism, and even dyslexia are much better understood in educational settings than emotional disturbances and learning disabilities that come from trauma in the child's life. For these children the answer is often a referral to the school counselor for the emotional issues that cannot be addressed in class. But this separation of the emotional and the academic challenges faced by traumatized children is not getting the job done. A child cannot compartmentalize emotions, thoughts, and behaviors as some adults can. The whole child comes into the classroom and either succeeds or fails based upon whether all aspects are engaged in the learning process rather than impeding it.

Some might say that a focus on traumatized children is spending valuable resources on a small group of children. However, it is important that we learn from disciplines outside of education to get a better sense of the magnitude of the problem of trauma in our society. It makes logical sense that the majority of children presenting for mental health concerns have histories of trauma. After all, psychological problems must have some cause. It may also be commonly known that the majority of incarcerated teens and adults have been abused and traumatized in their past. Once again, it makes sense that an anti-social disposition toward other people and society as a whole must come from some damaging experiences in life. It is less known that no less authority than the Center for Disease Control has determined that the primary cause for physical disease in America is early childhood trauma. According to the CDC, trauma is the primary cause of: obesity, addictive behavior, suicide, chronic employment problems, and the ten leading medical conditions leading to premature death in this country. It seems that when one stands back and looks at all the representations of failure and not reaching one's full potential in our culture, trauma stands out as the most significant common factor across settings.

To those who consider the population of traumatized children in our educational settings too limited to receive significant attention, another look at the data is indicated. Trauma comes in many forms from child abuse, life threatening car accidents to any serious life event that overrides the child's ability to cope with the experience. Every year it is estimated that 5,000,000 new children are added to this list of significantly traumatized children. Of these children, up to 50% will develop long-term debilitating after-effects of the trauma, including learning problems in school. Some of the most serious effects of trauma come from child abuse, or betrayal by adults who a child must rely upon for basic needs and even survival. Of the children who are abused, 94% know the abuser and generally have to rely on the person for protection, producing what some have called the 'ultimate betrayal.' When all forms of abuse are considered (physical, sexual, emotional, and neglect) perhaps 1 in 3 children are victimized by abuse during their childhood years. Not only is the population of traumatized children in educational settings not a small number, trauma may constitute the greatest cause of underachievement in schools.

What is needed in education, when it comes to traumatized children, is to bring together the substantial new information on trauma, brain development and the causes and solutions to emotional disturbance that exists in psychology and psychiatry and to weave this information into learning theory and progressive academic strategies. We need conceptual and practical applications of learning approaches and environments where traumatized children succeed rather than fail. This document will attempt to provide a conceptual framework leading to practical implementation in our experimental learning settings.

### **How traumatized children perform in educational settings and why**

Trauma and learning in school do not mix well together. This is not to say that trauma does not result in significant learning for the child. The child learns not to trust, learns to be anxious around adults, and learns to be vigilant of the motivations of others. What a child learns from trauma negatively impacts learning in an academic setting. If the goal is for a child to come into an academic setting ready to learn, ready to emotionally experience the enjoyment and excitement of discovery, then the effects of traumatic experience will hinder learning in a variety of ways.

Many traumatized children fail in school, and failure can take many forms. Children can externalize their difficulties in emotions/behaviors and find themselves in constant trouble and the subject of behavioral restrictions. Extreme examples of this are children who attempt to get expelled from school thus eliminating the problem of having to face the many challenges of going to school. Some children sit quietly and can dissociate (day dream) in the classroom and not learn. An extreme example of the internalizing child is the one who pretends to be ill, doesn't come to school, or when they are old enough drops out of school altogether. There are many impacts of trauma that often block a child's ability to learn in the classroom.

Trauma produces hypervigilance in children. This is a survival skill to the child in a setting where basic needs are not provided, but it is not a functional skill in school. Hypervigilance is often viewed as distractibility. In part this is due to the child focusing on aspects of the environment that are not part of the learning plan. The child in science

class who is watching the non-verbal messages of a larger boy, wondering about safety during the coming recess break, is not hearing the science lesson.

Trauma produces serious self-regulation deficiencies. Often viewed as the most pervasive result of trauma, the lack of self-regulation causes these children not to have the inner understanding, inner strength, or desire to monitor emotional and behavior reactivity to events around them. This is often observed as intense emotional expression due to challenges in the classroom.

For reasons that will be explained in the next section, many traumatized children have difficulty putting what they learn into context. An example of this concept can be seen in the child who can connect the dots that are numbers but cannot see that the dots eventually form a horse. Being able to put learning into context is an essential aspect of educational advancement. It means little if the child learns that slaves in early American history were sad and oppressed if they do not understand that slavery was wrong and a violation of human rights. The common expression 'not seeing the forest for the trees' suggests that the many facts, figures and ideas in school must be able to be integrated into understandable and usable information for learning to be sustained.

Trauma impacts the ability to trust others. A lack of trust often results in a child misreading the motivations of others, both other students and adult teaching staff. Some children believe that a difficult learning task was specifically designed to harm them. Other traumatized children believe that when they are chosen second rather than first, this as a statement of how the teacher values or believes in them. With peers, these children often presume negative motivations when this is not the case. Misreading the intentions of others makes it very difficult to find social success.

In some ways the most important success a child needs in school is social success. School is the first place out of the family that a child begins to develop self-image and understands others and how to interact with the larger world. A great deal of success in school comes down to the ability to get along with others and to form relationships that can help provide support. If this first journey into the larger world outside the family ends in failure and conflict, the child's view of the world can be quickly established in a negative context. With this in mind, some of the most important learning opportunities in school are at recess, lunch, and in the hallways. It is in these settings that traumatized children have the most difficulty in school.

Expecting a child to give their full attention in the classroom is like asking someone who just received a very disturbing phone call to go on with their day unaffected. The problem with both situations is the affects of anxiety on our ability to focus on the task at hand. Our emotions are ready to provide us with critical information to inform our decision-making process. However, our emotions can also run wild with fear and anxiety in situations we either do not understand or believe we cannot handle. School can produce debilitating anxiety for the traumatized child resulting in the child's lack of focus and inability to learn.

Traumatized children often expect the worst and many times experience just what they expect. In part this comes from the child's experience that events seldom go the way the child would like and many times the child is powerless and victimized by events and people. This can produce a negative expectation of experiences in school and a self-fulfilling prophesy of failure. As the saying goes, 'If you think you can or can't, you are right.' Negative expectations develop into negative self-esteem and the internal belief that internal personal power and interpersonal skills are insufficient to influence one's life for the better.

## **How the traumatized brain functions**

Each of the above issues that are the result of trauma develop and persist in the brain. Since the primary function of the brain is to maintain and protect the survival of the person, the brain is seriously altered by trauma. Because trauma by definition is a situation that is beyond the ability of the individual to cope, the brain views traumatic events as a threat to its primary function of survival. The brain has mechanisms to address threat and these parts of the brain will directly affect the traumatized child in the educational environment.

The most primitive part of the brain is the brain stem located at the base of the brain. The brain stem handles basic life support functions such as respiration, circulation and temperature regulation, and all of these bodily systems function without the need for our conscious oversight. The brain stem also controls the autonomic nervous system which impacts all the other life support systems of the body (heart rate, blood pressure, rate of respiration, etc.). Input from the environment can increase life support functions of the brain stem, which can adversely affect both personal comfort and a state of relaxed openness to learning. The brain stem functions can be deescalated, but only when overridden by the neocortex, which will be addressed shortly.

It can be argued that the section of the brain that is most impacted by trauma is the limbic system in the middle of the brain. The limbic system has several physical components, but overall it controls emotions, arousal, sexuality, and attachment. The limbic system includes the amygdala, the fear center or the 'smoke detector' of the body. Whenever the individual perceives a threat of any kind, the amygdala sends out an internal shrill warning signal. A traumatized child will have such an experience multiple times in a school day, and at times, multiple times in an hour. The limbic system also plays a major role in distractibility by letting in too much sensory information causing a processing overload. Trauma impacts on the limbic system also come into play because trauma memories are stored in this part of the brain. After trauma, all future sensory input will be filtered through memories of trauma. Such sensitivity can have ominous implications in a school setting.

The top of the brain and most complex structures are in the neocortex. This is the region of the brain that educational instruction most often targets. Here is where the brain not only analyzes information but controls receptive and expressive language development and use. Most students will come to school ready to process what they learn in this region of the brain. Traumatized children can have serious neurological roadblocks to processing in the neocortex.

One of the most important neurological deficiencies after trauma is the impact on mental organization or neuron-integration. All of the above brain impacts of trauma affect the ability of the frontal lobes of the neocortex to organize input into useable and meaningful information and decisions. In particular one region of the brain is responsible for overall integration of information and decisions from all parts of the brain and this is the orbitofrontal cortex. Trauma can significantly degrade the ability of the brain from collecting, analyzing and using information the child learns either in the classroom or on the playgrounds of school.

### **Elements to avoid in school settings**

Understanding the above impacts of trauma on a student coming to school more concerned about safety and survival than learning math facts, can help us redesign the learning environment for these children. It is time to get practical and address the do's and don't's of a school that provides an optimal educational experience for the traumatized child. The first place to start is what to avoid in the learning environment for these special children.

- ◆ **Stress and anxiety** – research has determined that for most individuals either too much or too little stress do not promote optimal results. This is somewhat different for traumatized individuals, but the question becomes how much stress can a traumatized student handle. The answer is very little without substantial support. The optimal environment would eliminate as much anxiety as possible because of how anxiety triggers hyper-arousal in the brain, decreasing focus and attention.

- ◆ **Teaching to the bell shaped curve** – traumatized children will be on the low end of the curve and efforts to 'reach as many as possible' will generally mean these children will not be reached. Teaching these children means a specific focus on just those children who are not gaining from traditional teaching methods.

- ◆ **Serious atmosphere where laughter and enjoyment are rare or discouraged** – adults generally view learning as serious work, children view the best learning situations as fun and enjoyable. Since adults run schools, they tend to be serious atmospheres with excitement, laughter and high energy kept in check. Serious settings give traumatized children the wrong message that there is reason to be fearful.

- ◆ **Unsupervised communication among peers** – children can be brutally honest and can also be intolerant and hurtful. Unless adults monitor what traumatized children hear from their peers, the setting will not feel safe to the child.

- ◆ **Learning through criticism** – people do learn from direct criticism but this is not an optimal strategy for the traumatized child. Criticism is often amplified to give the child the message that they are incompetent or worthless if the child has received this message from adults in the past.

- ◆ **Uneven competition** – competition plays a major role in our culture and in our schools. Competition can be a good experience for all concerned but special attention must be given to traumatized children. Fair competition is

not always even competition. If the child is bound to lose, regardless of whether the rules are fair, it is not even competition and will not have a positive result for the traumatized child.

- ◆ **A constricting environment** – what many adults view as methods to maintain order, structure or decorum, many children experience as constricting. Traumatized children respond to restrictive and constricting settings by fight (acting out) or flight (shutting down) and daydreaming. Constricting environments are experienced by these children as a message that there is no room for you to be yourself in this setting.

- ◆ **Rigidity** – similar to constricting settings, rigidity is experienced by traumatized children as an authoritarian, inflexible and ‘mean’ atmosphere. Rigidity is interpreted by these children into negative messages.

- ◆ **An environment that can be easily disrupted** – if a classroom is easy to disrupt, it will ultimately fail to meet the needs of traumatized students. If by being expressive, questioning, or even acting out the classroom grinds to a halt, the child will either attempt to exert inappropriate power and control over others as a distraction or the child will be fearful that adults can be overcome by children in the setting.

### **Elements to enhance in school settings**

- ◆ **Expressive learning** – children best learn by doing, not listening or even watching. Traumatized children bring into the classroom many fears and emotions as well as poorly self-regulated excitement and activity levels. Expressive learning channels mental, emotional and behavioral energy into learning.

- ◆ **Predictable structure** – while avoiding rigidity, the optimal learning environment for the traumatized child must have comforting structure that signals to the child that safety is assured, adults are appropriately in charge, and students can focus full time on being interested learners in their own childlike fashion.

- ◆ **More successes than failures** – when people try something new they fail many times before they master the task. Traumatized students give up long before the mastery stage and therefore decline or even refuse to take the risk to do something new. The child must experience many more successes than failures in small and large ways.

- ◆ **Adult mediated peer interaction** – adults must monitor what is going on among the children because while ‘kids will be kids,’ the traumatized student will experience a lack of physical or interpersonal safety with ‘normal’ communication among children that is negative, teasing, bullying, or demeaning.

- ◆ **External cognitive structure** – instructors must overcome the brain deficits of traumatized children by providing the meaning, planning and connections from outside the child’s brain. The adults must help the child understand the mental processing steps as well as the end result of higher order reasoning.

- ◆ **The ‘unschool’** – most traumatized children have been in school before and many times it was a negative experience. Since their brain filters new experiences through past negative memories, it may be helpful to shed the trappings of “school.” The unschool looks different, feels different and is different. What does the child experience walking into the environment? Is there color, energy, interesting things, and space to be expressive, or is there rigid order, regimentation, posted rules and regulations and constrictions on movement and activity?
- ◆ **Encouragement through relationship** – traumatized children need social support but seldom know how to ask or how to accept such support. Adults cannot wait until the child is receptive to relationship, the adult must meet the child much more than halfway. Relationship with a safe adult addresses much of what the child needs in order to begin to open up to the risks of learning and trying new tasks.
- ◆ **Teaching to the child’s individual learning style** – children learn differently and the specific learning style of each traumatized child must be identified to help overcome the many hurdles to learning identified above. Multidimensional instructional approaches that include auditory, kinesthetic, and visual components can be very effective.
- ◆ **Even competition** – as mentioned earlier, competition can be a learning tool if not overdone and if it is even. Even competition ensures that any of the competitors have a good chance to win. If the outcome is predictably determined, it may be fair competition but it is not even and will not be a positive learning experience for the traumatized child.
- ◆ **Internalized goal setting** – although mental reasoning must come from the outside at first, efforts must be put toward the child setting reachable internal goals. The adults must insure that goals are not only reachable but are also successfully reached before the child can set additional goals. When children with a losing attitude either win a competition or reach a goal, they seldom know how to handle this experience and initially can be tiresome and demanding of constant attention. This is attention they need to make up for the past and they will need help to be a good winner and appropriately proud of an accomplishment.
- ◆ **Enjoyment and fun** – if learning is not fun then it will not be sustainable for the traumatized child. The two primary jobs of a child are to learn and have fun. It is optimum to do both at the same time when possible. The optimum learning environment is learning in an enjoyable and fun setting.
- ◆ **Variety of activities and help with transitions** – the opposite of a constricting/rigid learning setting is one that has a variety of interests and activities. Traumatized children are often poor at self-regulating high energy so they will need outside help even with positive emotional expression. These children will also need adults to help them prepare for and initiate transitions from one activity to another.
- ◆ **Choices in areas of the child’s interests** – children will have more investment in learning things they are interested in and have some role in choosing. With creativity, nearly any subject area can be learned through

nearly any topic or interest the child has. An optimum learning environment has room for the child to pursue chosen interests.

♦ **Group/cooperative efforts promoting teamwork** – because traumatized children live in a solitary world, positive social experiences are critically important. These children will not initiate or even willingly participate initially in group learning, but this is a very potent and important way to gain social success and support. Group efforts must be monitored closely by adults, encouraging of all participants and resulting in a successful outcome for the child to receive the optimal gain.

### **School as the doorway to social and personal success in life**

For the traumatized child success in school carries more weight than for other students. For these children school will either confirm that the world is filled with unresponsive, threatening adults and peers or these children learn that there are places that are safe, stimulating and even fun. With the vast numbers of traumatized children in our society, it is time that we take a very close look at how to facilitate learning for these children. One size does not fit all in education, particularly for traumatized children. The time and effort put into developing an optimal learning environment has the potential to reap huge rewards for children who deserve the very best education we can provide them. We may need to start small in this endeavor with limited experiments in centers of learning that show educational success with traumatized children. Simultaneously, our educational system will need to take a critical look at the numbers of children who are being left behind with the educational system currently in place.