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## **Are You Talkin' to Me? A Bibliotherapeutic Realization of Intelligence and Self-efficacy in Traumatized Adolescents**

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Intelligence is not fixed but waiting to be developed.

-David Shenk

### **Objective**

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Using a bibliotherapeutic approach, this unit will utilize current research in the domains of intelligence, brain structure, neuroplasticity, trauma, and brain-based learning in an effort to address what NCLB did not: the emotional underpinnings of reading deficiencies in traumatized adolescents.

### **Introduction**

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In my experience, a child's lack of positive performance both in class and on the state tests often has little to do with intelligence or cognitive capability and more to do with an emotional bulwark built from either a singular or ongoing traumatic incident.

For several years now, I have been contemplating the idea of a practical, common sense, street-smart type of intelligence and its role in the academic setting. The idea came to me while watching a middle school basketball game. Two of the boys were in my class. Both boys were excellent basketball players, especially for their age. One of them I am convinced will continue playing basketball in college and even possibly progress to the NBA; I do not hold out so much hope for the second boy. Why, you ask? I asked myself the same question. Both boys had a stable home, with an active and supportive mother and father still married and in the home. I saw both sets of parents on a very regular basis. The first boy was a straight A student; his parents would not have it any other way. At the end of every year of school, the second boy barely passed. His parents did not seem to know how to help him; they were providing him with the best support they knew how to provide. Yet, on the basketball court, the boys were evenly matched. I came to the conclusion that the first

boy had developed both an academic and a practical intelligence while the second boy had only developed a practical intelligence. When the second boy played basketball, I could almost 'see' the wheels in his brain turning; he thought his way through the game. The decisions he made on the court convinced me positive cerebral activity was occurring. Yet, somehow, he could not translate that thinking into the classroom. I did some research and found that a Yale Professor, Robert Sternberg, and some of his colleagues had conducted some extensive research during the 1980s and 90s into the idea of a practical intelligence.

As I am chewing over the research by Sternberg and associates, I meet a third young man. This young man is very large so I try to recruit him to the football team (I am the athletic director). He resists me at every turn. I try to get to know him only to learn he is a reticent young man who does not want any unnecessary attention focused upon him. I learned he was a bowler (actually a very good one as he has won the state bowling title for his age). As much as I tried to pull this young man out of his silence, my efforts were in vain. During his seventh grade year, this young man was in my tribe (You will learn more about tribes later in this unit). The community atmosphere of our tribe began to work wonders on this young man. By wonders, I mean, he actually laughed and began to participate, even though somewhat reluctantly, in our tribe activities. During his eighth grade year, he was in my class for reluctant readers. It did not surprise me he did not pass the state test, but I knew there was something in there; meaning, he was smart, but something was causing this young man to 'clam up'. He slowly began to open up to me. I learned his father had abruptly left him and his mom. This forced him and his mom to move in with his grandparents. In conversations with his grandmother and mother, I was informed I was the only teacher he felt comfortable talking with. This revelation was a surprise to me since our conversations were largely one-sided with his responses coming in short, simple sentences. This situation got me to thinking about emotional upheavals and in what manner the consequences affected a child's academic development. This third young man was 'stuck', mentally and emotionally; the trauma of his father leaving was so incapacitating to him, that he had stopped growing, academically and socially.

Through this unit, I want to afford my students the opportunity to address and begin to deal in a safe and secure setting with whatever emotional upheaval or trauma has befallen them, while also allowing the students the emotional freedom to investigate who they truly are and who they want to be. This will all be in an effort to begin filling in the academic gaps that have occurred during their 'stasis' period.

## Academic Rationale

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Every August or September, adolescent children in the United States hailing from all manner of socioeconomic and ethnicity groups begin the next school year, yet significant numbers of them "do not read and/or write at levels needed to meet the demands of the 21<sup>st</sup> century." <sup>1</sup> The passage of the No Child Left Behind Act (NCLB) in 2001 was billed as a panacea to the achievement disparity. NCLB was passed based upon the premise that all children can learn but despite their ability to learn many were not performing or achieving at proficient levels and thus were being left behind academically. <sup>2</sup> NCLB passed as a reauthorization of the original Elementary Secondary Education Act of 1965 <sup>3</sup> and the Improving America's Schools Act of 1994. <sup>4</sup> Now, ten years later, states have put in place state standards, created criterion-referenced state assessment tests to measure achievement in relation to the standards, and hired highly qualified staff. Data is now being disaggregated by racial, ethnic, socioeconomic, and gender subgroups. In theory, all students should be achieving Adequate Yearly Progress (AYP) by the year 2014.

Why then, according to the latest data from the National Center for Education Statistics have the national NAEP reading scores for eighth graders in public schools remained relatively static since the advent of NCLB? (Average score in 2002 was 263 and in 2009 was 262). In addition, the percentage of eighth-grade students reading "below basic" on the NAEP reading assessment from 2002 until 2009 has remained at 26%.<sup>5</sup> Why is over one quarter of the eighth-grade students continuing to be left behind in terms of reading level? In addition the lack of reading growth is not commensurate with the increase in per pupil expenditures. Again, according to the NAEP, current expenditures per pupil rose from \$9,309 in 2001-02 to \$10,441 in 2007-08.<sup>6</sup> This obvious reading deficit dilemma leads one to ask: With a decade's worth of emphasis, why are not more children reading at a Basic level? I am frustrated with the one-size-fits-all model of instruction that has become the norm during the NCLB reign of conformity yet has achieved little to no marked student improvement. It is apparent to me, as a teacher of reluctant readers, I need to pursue another avenue if I want to effect authentic academic change.

## Curricular Plan

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Through the novel *Freak the Mighty* by Rodman Philbrick, and the children's books *Amelia Bedelia's First Day of School* by Robert Parish, *Dream Big Little Pig* by Kristi Yamaguchi, *How Full is Your Bucket for Kids* by Tom Rath and Mary Reckmeyer, *No Excuses! How What You Say Can Get In Your Way* by Dr. Wayne W. Dyer and Kristina Tracey, and *I Can Read With My Eyes Shut* by Dr. Seuss, I seek to provide a bibliotherapeutic avenue for my students to reflect safely upon their own traumatic experience(s), examine their emotional and behavior choices post-trauma, and alter their self-paradigm to one of belief in self as an intelligent being of worth.

I chose to utilize children's books as a 'way in' past the student's learned reluctance towards reading. Children's books are non-threatening. The students are comfortable with the size of the book and the amount of reading required. In addition, children's books provide a palatable forum through which to deliver a message. Students are familiar with children's books and feel the children's books are for children - meaning anyone younger than them. Lastly, the reading of the children's book and subsequent activity can all be accomplished within one class period.

*Freak the Mighty* was chosen as the bibliotherapeutic vehicle because of the relatability of the story and the primary character, Max. Before the book begins, Max witnesses his father killing his mother. While the murder itself is not directly relatable for the students, the domestic violence and incarceration of a parent is familiar. Also, Max lives with his grandparents. An alarming number of my students have grandparents as custodial guardians. After the traumatic violence, Max withdrew into himself. As he has gotten older he has found he does not fit in with his peers due to his physical size and his reserve - a reaction to the violent trauma. In addition, Max mentally and emotionally has shut down, basically sleepwalking through his life. When the book begins, it is ten years after the murder, ten years of not actively participating in his life. This non-participation has led to a reading deficit. Max has even begun referring to himself as a "butthead moron". By the time they reach middle school, a large percentage of my students have experienced several years of academic failure, like Max. As Max makes friends with Kevin (another boy who has difficulty fitting in due to a skeletal disease) and learns how to read better, he is guided through a whole new world of knights, quests, and damsels in distress. By the end of the book, Max has begun to find his voice. His voice becomes evident when the

students realize Max has written the very book they have been reading. The goal is for the students to reflect upon Max's quest for identity and voice and use it as a model for their own.

## Context

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### School Composition

I teach at Thoreau Demonstration Academy in Tulsa, Oklahoma. Thoreau is currently composed of sixth, seventh, and eighth graders. Thoreau is a school of choice. The students apply to the school but admittance is not determined from an entrance exam, grades, or teacher recommendations. Admittance is based upon a lottery system. The city is divided into four quadrants. An equal number of students is drawn from each quadrant. This method provides for a student body derived from a wide range of ethnicity, race, and socioeconomic status. While part of Tulsa Public Schools, we operate quite differently from the other middle schools. We harmoniously utilize three programs as the seminal structure of the school: Tribes TLC ® by Jeanne Gibbs, Integrated Thematic Instruction (now known as Highly Effective Teaching) by Susan Kovalik and Associates, and MicroSociety, Inc. by George Richmond.

Each day begins and ends with a tribe meeting that takes place while sitting in a community circle. Each tribe consists of a teacher and twelve to fifteen students randomly chosen from each of the three grades. The teacher acts as a facilitator of the tribe. The purpose of the tribe is to provide a safe, non-threatening place for the children where they feel included and appreciated not only by the teacher but also by their peers, and where they are respected for just being themselves. Thoreau utilizes tribes as the vehicle for character education. There are four agreements honored in the tribe circle: attentive listening, mutual respect, appreciation/no put downs, and the right to pass. These same agreements permeate throughout the day as the intangible thread through all aspects of the child's experience at Thoreau. <sup>7</sup>

Integrated Thematic Instruction (ITI) (now known as Highly Effective Teaching) was developed by Susan Kovalik and Associates. It is a method of teaching that emphasizes classroom management based in the teaching of the lifelong guidelines and lifeskills. ITI utilizes cross-curricular instruction based upon Howard Gardner's Theory of Multiple Intelligences and brain-compatible learning based upon Leslie Hart's work in *Human Brain, Human Learning*. Instruction at Thoreau is grounded in scientifically research-based strategies, and accentuates the brain's natural pattern-seeking tendencies by organizing all curricula into conceptual units. <sup>8</sup> Each core teacher at Thoreau teaches two subjects, either Language Arts and Social Studies or Math and Science. In addition, the Language Arts/Social Studies teacher and Math/Science teacher are paired and share the same students. The teachers meet several times per week to collaborate and execute cross-curricular planning.

Every day for the seventh period, Thoreau becomes Emerald City. Emerald City is a fully functioning "micro society" complete with its own currency (the Emerald), city council, justice system (both a police force and a court system), treasury, bank, and entrepreneurial endeavors. Each student must apply to, interview with, and work for a business. Students may work for an established business and draw a paycheck, start their own entrepreneurial business, or work on commission. Every week each child gets one day off to spend their earnings in the Emerald City market place.

## Personal and Classroom Composition

This will be my thirteenth year teaching. Twelve of those have been at the middle school level. I have taught all manner of learners from barely functioning to extremely gifted. I have taught world history to juniors and seniors and for nine years have taught language arts and geography to seventh graders. I now teach reading to sixth, seventh, and eighth graders who did not pass the state reading test.

In order to address the student's reading difficulties, I first have to address what led to the deficiency, much like a doctor treating the whole patient and the source of the infection versus just treating the fever. I have to consciously develop a trust-based relationship. In a strange way, I have to get the students to trust in me before I can help them trust themselves. I am going to have to employ daily the tribes circle and tribal agreements as our anticipatory activity in order to facilitate the giving and receiving of trust between the student and the teacher and from student to student. By the time these students have reached my class, they have experienced several years of frustration and failing. They are not going to trust easily. Once they begin to trust, we can begin addressing the emotional impediments which leads to addressing the reading difficulties and deficiencies.

## Background Research

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### Perceived Intelligence Impediment

Before I can begin establishing trust with the students and addressing the skill deficiencies, I have to look under the hood, so to speak. When I take my vehicle to the mechanic to be repaired, I expect the mechanic to know how the vehicle is supposed to function so he/she will know how to diagnose and fix the problem, and I can get going on my merry way. Before I can 'look under the hood' of my student's academic difficulties, I need to investigate the components of the brain and how those components function so I can properly diagnose and treat the malfunction.

The reading issue does not stem from a lack of intelligence, however much the students and others want to believe it so. The students are born with their own unique blend of intelligences<sup>9</sup> and possess a certain level of practical intelligence.<sup>10</sup> In 1983 Howard Gardner, a professor in cognition and education at the Harvard Graduate School of Education, proposed a radical change to the beliefs about general intelligence: the Theory of Multiple Intelligences.<sup>11</sup> Robert Sternberg and associates also weighed in on the debate with a series of experiments investigating the presence of practical intelligence derived from achieving proficiency in a particular domain. These views were radically different from the prevalent view of intelligence acquisition held since 1869 when scientists in the fields of psychology and education first had grappled with classification, origination, and measurement of intelligence (IQ). Since 1869 the prevailing view of intelligence acquisition was based upon the notion of heritability proposed by Francis Galton which asserted the brain is immutable;<sup>12</sup> therefore, IQ is an inheritable mental acuity; it is fixed.<sup>13</sup> This view was used by Lewis Terman as the foundation of the original Stanford-Binet Scale of Intelligence. Terman believed, "revealing each person's [innate] intelligence would...help individuals find their rightful places in society and help society run more efficiently."<sup>14</sup>

The fifth edition of the Stanford-Binet is still in use today as an educational tool. While the first edition was

only designed to measure general intelligence and the fifth is designed to measure general intelligence in addition to knowledge, fluid reasoning, quantitative reasoning, visual-spatial processing, working memory, nonverbal IQ, and verbal IQ, <sup>15</sup> both editions are predicated upon the same idea: intelligence is genetically given, not acquired. <sup>16</sup>

However, with his theory of multiple intelligences, Gardner confirmed the presence of an innate intelligence. <sup>17</sup> He put forth the view instead of there being one overall, all-encompassing intelligent quotient, there are seven different forms of intelligence. Gardner categorized the seven forms of intelligence as: musical, bodily/kinesthetic, logical/mathematical, verbal/linguistic, spatial, interpersonal, and intrapersonal. Within a decade from the original publication of the seven intelligences, Gardner added an eighth, naturalist, and is currently researching a ninth, existentialist. <sup>18</sup> The major assertion of the multiple intelligence theory is that each person possesses all of the intelligences in a unique combination (even twins are not exactly alike), and to be considered intelligent, the domain in which the person is operating must be considered as well as the field of those knowledgeable about said domain. <sup>19</sup> He defined intelligence as the "ability to solve problems, or to create products, that are valued within one or more cultur[al] settings." <sup>20</sup> In other words, my students are smart! Their lack of reading skill or performance is not reflective of their intelligence level. A key component of my job is to convince them of their unique combination of intelligence.

### **Authentic Trauma Impediment**

It was not until I moved from the regular education classroom to teaching reluctant readers that I began to discern a common pattern among the underperforming children: the majority of them have 'a story'. In our tribe circle and small group discussions, I began to pick up on threads of commonality. The students had experienced some sort of traumatic event such as the death of a loved one, the absence of a parental figure, divorce, domestic violence, or neighborhood violence. The children would speak quite matter-of-factly about the incident or incidents in the case of a few of the students. It was as if they had dissociated themselves from the incident(s), just telling a story rather than having been a direct or indirect participant. I cannot pinpoint the exact moment I became aware their difficulties in school were directly connected to the trauma; the illumination occurred over time. I slowly began infusing more self-reflective activities into the lesson plans and taking more advantage of organic conversations to steer the students towards introspection. This experience led me to seek an opportunity to provide a well-thought out and planned curriculum unit specifically aimed at aiding the children in dealing with their trauma(s) so they could move on and be the tremendous people they are meant to be.

Upon investigation, I found research substantiating my observations. Graham et al <sup>21</sup> and Levine and Kline <sup>22</sup> found a large percentage of underperforming children have suffered some type of trauma (i.e. divorce, domestic violence, abuse, abandonment, natural disaster) <sup>23</sup> that has seriously impeded or stunted their cognitive development and self efficacy. <sup>24</sup>

### *Trauma Defined*

I sought out as much information about trauma's effects on children from as many sources I could find. I sought out both books and journal articles. I sought current research coupled with information of a metaanalytical nature. In addition, I sought information from a variety of science disciplines. Trauma can be defined as something seemingly innocuous that has nevertheless caught us unawares and left us stunned, fearful, helpless, and disconnected, <sup>25</sup> or trauma can also be in the form of an overt life-altering experience

such as divorce, a natural disaster, family violence, community violence, or the death of a significant relation.  
26 "Trauma is the antithesis of empowerment." 27

### *Trauma and the Body*

In terms of trauma's effects on the body, trauma dwells in the nervous system of the body. 28 When trauma is experienced, the amygdala is activated. The amygdala enlists many areas of the brain to help deal with the situation. Unfortunately, the cortex is unable to process the 'fear' signal and therefore is left a virtual captive to the amygdala, "hijacked by emotion". 29

In terms of the energy generated by the traumatic event, it is actually a simple law of physics, the Law of Conservation of Energy: the total amount of energy in the universe remains constant. The energy can change forms but can not be created or destroyed. The energy generated during the traumatic event must go somewhere. If the unresolved energy is allowed to 'linger' in the body, it materializes in a variety of internal manifestations heightening the central nervous system affecting attachment, affect regulation, and information processing. 30 Some of the effects of the unresolved energy manifest as hyperarousal, disorganization, over-reaction, social ineptness, rage, confusion, resistance to change, withdrawal, mental immobilization, aggression, lack of focus, inability to process information, guilt, or oversolicitation. 31 The child feels no one could possibly understand her/her circumstances and does not possess the skills to navigate through the frustration, disillusionment, and pain.

### *Trauma and Academic Achievement*

The extent of the effects of the trauma depend upon the age at which the trauma occurs, the frequency (acute or chronic), and treatment of the traumatic effects upon the child. 32 It must be noted that not all children exhibiting these behaviors have experienced a traumatic event; however, research has established a strong causal connection between trauma and caustic conduct. 33

You recognize these children. Several of the more memorable children have mentally stayed with you. They come to mind, and you pause and wonder if they were able to ever get their act together. They are often viewed as the 'trouble children'. 34 Being a rocket scientist is not necessary to discern the causal connection between the PTSD (post-traumatic stress disorder) type symptoms and their possible impact on the student's academic achievement. When children are unable to direct their attention towards the task at hand, they miss out on important (some would argue crucial) skills being addressed in the academic venue. The issue compounds each successive school year as the children virtually sleepwalk through school without having the trauma addressed. In terms of the effects upon the brain's actual structure, research shows that if left untreated, trauma has "lasting alterations on the HPA (hypothalamic-pituitary-adrenal axis) system and the norepinephrine systems as well as dysregulation in the prefrontal cortex, hippocampus, and amygdala." 35

For many of the children by the time they reach middle school, the effects of the trauma (being either acute or chronic) have so pervaded their cognitive development, foundational skills are incomplete or missing altogether and their self-efficacy is pitifully dismal. All of this manifests itself in low to failing grades, behavior problems, absenteeism, disassociation, and ultimately, low test scores. 36 It is as if the trauma has pushed these children into a river. The river is so deep the children can not touch ground and so wide across they cannot see to the other side. The children begin to give up and just float along the river not realizing they are being damaged a little bit at a time by debris in the river and are slowly drowning. By middle school, they are emotionally and academically stunted. Passing a state test is the least of their worries.

## New Brain Research

Remember the public service announcement (PSA) showing a hot, sizzling frying pan with a voice over equating the pan to your brain? The next image is of an egg frying in the pan and the voice-over analogizes the egg to your brain on drugs? The macabre message was one of eternal brain cell death: once some of one's finite number of cells were killed that is all that are available and not any more. This PSA was consistent with the hereditarian view of intelligence and brain development that had held firm since 1869 when Francis Galton's *Hereditary Genius* was published<sup>37</sup> asserting brain development<sup>38</sup> and intelligence were static.<sup>39</sup> What a person was genetically gifted with was all a person had to work with. As summarized by Begley, this long standing view held that "the adult brain is hardwired, fixed in form and function, so that by the time we reach adulthood, we are pretty much stuck with what we have."<sup>40</sup> In addition, the research maintained cognitive development occurred only during certain biological windows and once the window for a skill was closed, the opportunity was forever lost.<sup>41</sup>

However, research from the late 1990s assures us that to a large extent, the public service announcement and hereditarian based science had it wrong. The late 1990s saw a revolution in the area of neurobiology in the areas of neurogenesis, neuroplasticity, and epigenesis. The science of neurogenesis discovered that new neurons can be produced in the dentate gyrus of the hippocampus and olfactory bulbs of the brain.<sup>42</sup> The brain can grow new neurons. In order for the brain to keep a healthy balance of neurons, a natural pruning takes place disposing of brain cells long left dormant (supporting the use-it-or-lose-it rationale), but the process is natural and is not dependent upon any overt or conscious action of the owner of said cells.<sup>43</sup> The changing of the brain's wiring is the result of experience and mental activity.<sup>44</sup> Learning can literally alter the brain's structure.<sup>45</sup> In addition, the science of neuroplasticity found the brain is somewhat plastic (it is as yet undetermined as to how open or plastic the brain will remain throughout the entirety of a lifespan)<sup>46</sup> and can actually be rewired through thought, feelings, and experience.<sup>47</sup> Plasticity is defined as the brain being amenable, modifiable, and malleable.<sup>48</sup> We now know our brains were custom built for plasticity, for lifelong adaptation through action or inaction.<sup>49</sup> Epigenetics concentrates on the information stored in the epigenome in the proteins and chemicals surrounding the DNA. The epigenome is the traffic conductor instructing certain genes to turn on or off and what to do where and when. Epigenetic scientists ascertained that feelings, thoughts, actions, and environment oversee the epigenome in deciding which genes are expressed or suppressed.<sup>50</sup> In other words, a symbiosis exists between one's choices, one's environment, and one's genes.

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It is logical to surmise that if positive choices and environment can have a constructive impact upon gene expression, the vice versa will also hold true. When trauma causes the amygdala virtually to hold the cortex hostage, genes are adversely affected. If the hostage situation is protracted, the gene alteration could become permanent.<sup>52</sup> "Emotions literally have an anatomical mapping in the brain."<sup>53</sup> In other words, children who have experienced trauma and have become so stuck they have missed crucial skills can be taught the tools not only to reach the other side of the river but also to grow and thrive. "Biology is not destiny."<sup>54</sup>

## Brain-Based Learning

I liken the pairing of the neuroscience revolution with education as equally monumental as the pairing of Martin Luther's ninety-five theses with the invention of the printing press. Brain-based learning utilizes the current research from the work of cognitive sciences in the disciplines of neurology, biology, psychology, and



education. The focus of brain-based learning is to enhance teacher instruction and develop the student's ability to learn in the way that neurologically works best for their brain. Brain-based learning also addresses emotional learning <sup>55</sup> – the missing link in all of the NCLB movement. Emotion drives attention and attention drives learning. Brain-based learning approaches instruction in such a way as to teach in the way children learn. Gardner maintains that each one of us possesses his or her own unique combination of the eight intelligences; therefore, we are not all going to learn in the same way. Brain-based learning demands that teachers must address all of the eight intelligences when planning and executing instruction.

## **Bibliotherapy**

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For this unit, I am taking a bibliotherapeutic approach. Bibliotherapy is the use of literature (all levels), poetry, and non-fiction books not only to help encourage students to freely express their problems and feelings, but also to help students analyze their thoughts and behaviors as they pertain to themselves and others. In addition, bibliotherapy helps reduce anxiety, provide insight into coping mechanisms, reassure the students that trauma in general is not isolated to only him/her, stimulate discussion, create awareness, and provide possible solutions. <sup>56</sup> Using the books as a vehicle for discussion allows the child the space and distance to examine safely their own situation through the actions of the characters in the literary work. <sup>57</sup> The books help establish a trust conduit between the student and the teacher. <sup>58</sup>

There are a few drawbacks to a bibliotherapeutic approach. First, for certain trauma issues, appropriate literature may not be available. Secondly, some students may not be ready or willing to let down their emotional walls. Third, the trauma may be of such a nature the student is defensive or in denial of the event(s); therefore, the student reacts defiantly.

In this situation, all of the students will be reading the same materials. Any open, class-wide discussion will be of a generic nature, allowing the student the right-to-pass during the group discussions. In addition, the student will be completing a personal journal that I can read if they give permission, or not if the student wants to maintain confidentiality. This past school year, I began utilizing this journal method. Once the students were able to believe I would not read their journal if they did not want me to, they then began trusting me to read them. This was and will be a crucial part of establishing that trust relationship.

## **Basic Structure of Class Time**

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The students are arranged in an A/B block scheduling format except on Monday. Every Monday, I see all of my students in forty-five minute segments. On Tuesday and Thursday, I see group A and group B on Wednesday and Friday in ninety minute blocks. Monday is utilized for whole group instruction. On Tuesday through Friday, the students will be divided into groups of five. Each group will rotate through three twenty minute stations: independent reading, small-group, and computer. The computer station is part of the reading program prescribed for my students and is a non-negotiable station. The whole-group time, small-group, and independent reading stations are where this unit will be implemented.

## Strategies

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Three research-based strategies will form the backbone of this unit: journal writing, cooperative learning, and nonlinguistic representation.

### Journal Writing

Each class period will begin with a journal question. The student responds to the question in his /her journal. The journal question will be thought-provoking and thematic in nature. The purpose of the journal question is to provide the student with a safe arena in which to reflect and respond. Erin Gruwell<sup>59</sup> found that her students were more apt to open up emotionally if their responses were guaranteed to be kept confidential. As mentioned earlier, I will only read their responses if they give me permission. When I have previously utilized the journal writing strategy, I found that once students found they could trust me, their journal responses lengthened in quantity and deepened in quality. The journal prompts will progress from superficial (get-to-know-you type) to self-reflective. The journal writing strategy is key to beginning and enriching the dialogue between the student and me and within the student's internal dialogue.

### Cooperative Learning

Cooperative learning is a broad term referring to the various methods of grouping students. Research has shown grouping students heterogeneously at least once a week has a positive impact upon learning. Cooperative learning promotes positive interdependence, face-to-face promotive interaction, and interpersonal skills. In forming the groups, I need to be cognizant of not grouping strictly by ability but use other criteria as well. I will have fifteen students in each class, therefore I will divide the students into three groups of five. I will use a reading inventory, an attitude inventory, and personal interviews and observations as vehicles to determine the base long-term groups. I will use a variety of innocuous methods (birthday months, hair color, etc...) to form the formal and informal groups necessary in implementing the daily and weekly lesson plans.<sup>60</sup>

### Non-linguistic Representation

A large percentage of today's student population is visual and bodily-kinesthetic. They spend a considerable portion of each day texting, surfing the internet, and playing video games. All these activities are visual and bodily kinesthetic; yet their school instruction is primarily delivered in a linguistic method (primarily at the secondary level). The "dual coding" theory of information storage states that knowledge is stored in two different forms, linguistic and imagery.<sup>61</sup> In other words, we process and store information through our words, our senses, and our movement. Trauma is stored through the imagery pathway. To help the students unstick and process new information, I need to address both pathways of information storage.

Non-linguistic representation primarily focuses on the imagery path to information storage and retrieval. Non-linguistic representation can be produced through a variety of activities. Non-linguistic representation will be utilized before, during, and after reading. The before reading non-linguistic representation focal point will be upon self-exploration and opening the internal dialogue. The during reading non-linguistic representation application will concentrate on making the text-to-self connection. The after reading non-linguistic representation activities will focus upon reflection and cementing the text-to-self connection.

## Basic Format of the Unit

Every class period will begin with a journal entry designed to stimulate thought about the day's topic. The class meets in a community circle for a discussion stemming from the journal topic. On Mondays there will be a whole-group reading of a children's book aimed at exploring the thematic topic of the week's activities. The children's book acts as a non-threatening 'way in'. After the reading, there will be an activity relating to the topic of the reading. On Tuesday through Friday, after completing the journal entry and related discussion, students will break up into their base groups and follow the rotation chart to their beginning station. At the computer, the students will follow the prescribed computer program. In the small-group station, the students meet with me where we will be reading our novel, *Freak the Mighty*. At the independent reading station, the students will be completing an activity related to the journal topic and *Freak the Mighty*. Each piece of text and activity is chosen based upon its ability to further the aim of stimulating thought and self-reflection.

## Classroom Activities

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### Sense of Self

The objective in this activity is for the students to explore characteristics about themselves using the five senses, explore characteristics of the main characters in the novel using the same criteria, and then compare and contrast themselves with the characters in an effort to make a text-to-self connection and open an external and internal dialogue.

To begin with, the students will bring a picture of someone (either an actual picture or one from a magazine – but not one of themselves). The students will form formal groups of two to three students. They will choose one of the pictures to work with. The students will work collaboratively with their chosen picture to answer what the person in the picture is experiencing with each sense. For example, I have a picture of Michael Jordan mid-air going for a shot at the basket. I could say he sees the basket; he feels invincible; he tastes victory; he hears the roar of the crowd; he smells the sweat of all the hard work to get to this moment. At the conclusion, the group will then share their picture and story with the rest of the class.

Next, each student will repeat the activity on themselves. They will take the picture I took of them earlier in the school year and apply the same five senses observation to what they see of themselves in their own picture. (I will take the pictures during the first week of school. I want the pictures to be of the students in a comfortable setting so the picture will be more revealing than I would get from a formal type of picture setting. I will tell the students I just need the pictures so I can connect faces to names.) The students will then create a non-linguistic representation in order to present themselves to the class. They will trace and cut out one of their hands on a piece of construction paper. They will paste the picture in the palm of the hand. Then, on each finger and thumb, the student will write their answer to each sense. For example, if I were doing this activity with the Michael Jordan picture, I would put the picture in the center of the hand, and then on each finger and thumb write each one of the statements mentioned earlier. The students will then be organized into informal groups to present their pictures.

The activity will be repeated several times throughout the novel. A few chapters into the novel (at the point where Max and Kevin formally meet in the backyard), the students will repeat the activity substituting Max and Kevin as the focus of the activity. The focal point will be upon our first impression of the characters and

our limited knowledge of them at this point in the novel. In the middle of the book, the students will repeat the activity with Max and Kevin, I will add the characters of Gram, Grim, and the Fair Gwen of Air. The focus is upon revising our view of the main characters and extending our sense of the characters by taking into account the people exerting the most influence upon the primary characters. The discussion at this point will be upon how those around us influence our own sense of ourselves. At the end of the book, the students will do a final sense of self analysis of each of the primary and secondary characters. The discussion will center around the growth in the characters throughout the novel and how events in the novel altered the character's sense of themselves.

### **How Full is Your Bucket**

This activity is designed to stimulate external and internal dialogue concerning the influence upon our lives of our own choices and the choices of others. The activity is based upon the children's book *How Full is Your Bucket for Kids* by Tom Rath and Mary Reckmeyer. Using simplistic wording and relatable characters, the book emphasizes the decisions we make in our everyday behavior and whether those decisions fill up our 'life' bucket or cause the bucket to drip. Do the choices have a positive effect upon our lives or a negative effect? In addition, do the people with which we daily interact enhance the quality and substance of our lives or do they detract? The purpose is to prompt the students to be cognizant of and reflect upon their choices and interactions.

Before reading, each student will be given three small pieces of paper (Just fold a blank piece of paper- line or unlined- into fourths and then cut). Direct the students to write on each piece of paper something that has recently happened to them (such as getting new shoes for school, getting into a fight with a friend or sibling). Have them write one event per piece of paper. The students will then wad up each paper into a paper ball. They will then have a snowball fight with the paper balls. The snowball fight will commence for a couple of minutes. The students will then put their chairs into a community circle leaving all of the paper snowballs on the floor. I will put an empty bucket into the center of the circle. I will then read aloud the story. At the end of the story, I will ask the students comprehension questions from the story. For example: What is the bucket full of? What goes into or comes out of the bucket? What kinds of things caused the bucket to drip or to fill up? After the discussion, I will direct the students to each pick up three paper snowballs (not necessarily their own). Each student will read the items on their snowballs. As a whole group, we will decide whether the event represents something that fills up the bucket or causes the bucket to leak. If the item should go in the bucket, the paperball will be tossed in the bucket. If the event represents something causing the bucket to leak, the paperball will be placed back on the floor outside the bucket. At the end of discussing all of the events on the paperballs, I will then ask the group, "Who has the power to decide what goes in or gets dripped out of our bucket?"

### **Letter of Advice**

The purpose of this activity is to promote a text-to-self connection between the primary character, Max, and the student. This activity will take place in the independent reading station. The activity will take place at the point in the novel when Max is called into the principal's office and told his father would like to see him once his father gets out of prison. Max has a very strong reaction when confronted with the possibility of seeing his father. Each student is going to write a letter of advice to Max advising Max how he should handle the situation with his father and why he should handle it that way. The intent is for the letter to act somewhat like a journal entry. The letters will be confidential between the student and me reinforcing the trust.

## Conclusion

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As for the first two boys I mentioned in the introduction, the straight A kid is still making straight A s at one of the top high schools in the country and is being heavily recruited to play basketball at the collegiate level. The second young man did not have the grades or test scores to get into the same high school as the first. He, too, is still playing basketball and still barely passing each year. Time will tell as to whether or not my prediction is correct. As for the third young man, he passed the state test this past school year. In fact the class of which he was a part had 100% failure rate on the previous year's state test. At the end of this school year, 80% of the students in the class passed the state test. Addressing the emotional needs of my students is just as important -if not more so -as addressing their academic needs. NCLB for all its good intentions has completely missed the mark in regards to this concept. To be effective teachers, we have to be experts in our content, experts in child physical, cognitive, and psychological development. Now with the new research, to be the most effective of teachers we need to be versed in brain development. To those making the economic decisions affecting classrooms heed this clarion call. To those teachers who have read this unit, despite all you are asked to do, never lose sight of why you became a teacher.

## Endnotes

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3. 3 Conley and Hinchman, "No Child Left Behind."
4. 4 Yell and Drasgow, "No Child Left Behind."
5. 5 "The Nation's Report Card- National Assessment of Educational Progress." <http://nces.ed.gov/nationsreportcard/>.
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7. 7 Gibbs, "TRIBES."
8. 8 Kovalik and Olsen, "Exceeding Expectations."
9. 9 Gardner, "Frames of Mind."
10. 10 Sternberg and Hedlund, "Practical Intelligence, g, and Work Psychology."
11. 11 Gardner, "Frames of Mind."
12. 12 Jensen, "Enriching the Brain."
13. 13 Hunt, "The Story of Psychology."
14. Shenk, "The Genius in All of Us."
15. 14 Shenk, "The Genius in All of Us," 31.
16. 15 Becker, "History of the Stanford-Binet Intelligence Scales."
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19. 18 Gardner, "Multiple Intelligences: New Horizons."
20. 19 Ibid.
21. 20 Ibid, xxiv.
22. 21 Graham-Bermann, et al, "Traumatic Events."
23. 22 Levine and Kline, "Trauma Through a Child's Eyes."
24. 23 Graham-Bermann, et al, "Traumatic Events."

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26. 25 Graham-Bermann, et al, "Traumatic Events."
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28. Wong, et.al, " School-Based Intervention for Adolescents Exposed to Violence."
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32. 28 Levine and Kline, "Trauma Through a Child's Eyes."
33. 29 Ibid, 11.
34. 30 Henry, Sloane, and Black-Pond, "Neurobiology and Neurodevelopmental."
35. Levine and Kline, "Trauma Through a Child's Eyes."
36. 31 Byrne and Taylor, "Children At-Risk From Domestic Violence."
37. Graham-Bermann, et al, "Traumatic Events."
38. Harris, Lieberman, and Marans, "In the Best Interests of Society."
39. Henry, Sloane, and Black-Pond, "Neurobiology and Neurodevelopmental."
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44. 33 Byrne and Taylor, "Children At-Risk From Domestic Violence."
45. 34 Harris, Lieberman, and Marans, "In the Best Interests of Society."
46. 35 Ibid, 394.
47. 36 Graham-Bermann, et al, "Traumatic Events."
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49. Levine and Kline, "Trauma Through a Child's Eyes."
50. 37 Hunt, "The Story of Psychology."
51. Shenk, "The Genius in All of Us."
52. 38 Begley, "Train Your Mind Change your Brain."
53. Horstman, "The Scientific Brave New World."
54. 39 Hunt, "The Story of Psychology."
55. Shenk, "The Genius in All of Us."
56. 40 Begley, "Train Your Mind Change your Brain," 5-6.
57. 41 Sousa, "How the Brain Learns."
58. 42 Horstman, "The Scientific Brave New World."
59. Siegel, "The Developing Mind."
60. 43 Nelson, de Haan, and Thomas, "Neuroscience of Cognitive Development."
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62. Nelson, de Haan, and Thomas, "Neuroscience of Cognitive Development."
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80. 55 Connell, "The Global Aspects of Brain-Based Learning."
81. Jensen, "A Fresh Look at Brain-Based Education."
82. 56 Pardeck, "Using Literature to Help Adolescents Cope With Problems."
83. Prater, Dyches, Johnstun, and Johnstun, "Using Children's Books as Bibliotherapy."
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# Implementing District Standards

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## **Pass Standards Addressed With This Unit:**

Reading/Literature: The student will apply a wide range of strategies to comprehend, interpret, evaluate, appreciate, and respond to a wide variety of texts.

Standard 3: Comprehension/Critical Literacy – The student will interact with the words and concepts in the text to construct an appropriate meaning.

3.1 – Literal Understanding

3.2 – Inferences and interpretation

3.3 – Summary and Generalization

3.4 – Analysis and Evaluation

3.5 – Monitoring and Correction Strategies

Standard 4: Literature – The student will read, construct meaning, and respond to a wide variety of literary forms

4.1 – Literary Genres

4.2 – Literary Elements.

Oral Language/Listening and Speaking: The student will demonstrate thinking skills in listening and speaking.

Standard 1: Listening – The student will listen for information and for pleasure Standard 2: Speaking – The student will express ideas and opinions in group or individual situations.

Visual Literacy: The student will interpret, evaluate, and compose visual messages.

Standard 2: Evaluate media – The student will evaluate visual and electronic media, such as film, as they compare with print messages

Standard 3: Compose Visual Messages – The student will create a visual message that effectively communicates an idea.

## **Common Core Standards Addressed With This Unit:**

Four standards will be addressed with this unit. First, Comprehension and Collaboration standard one. Next, Research to Build and Present Knowledge standard nine. Third, Key Ideas and Details, standards two and three. Fourth, Integration of Knowledge and Ideas standards seven and nine.

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