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Reforming Juvenile Justice Requires Innovating Equity in Education

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As many as 85 percent of students in juvenile justice are said to have some type of learning disability (National Council on Disability, 2015). A root cause analysis of indicators across societal systems reveals a pattern or chain of events which lead to this contemptible outcome. A contemptible outcome that represents the detriment of millions of children and families used to feed a cycle that erode the emotional and mental wellbeing not only of individuals, but the societies in which they live; not only erodes emotional and mental wellbeing but stands as a hallmark for the devaluing of human life. A contemptible outcome that must be interrupted. Research and best practices are available to disrupt this alarming statistic and with it reduce the number of students ever becoming systems-involved with juvenile justice. Using a synthesis of research and review of best practices, this article identifies problems, offers insights and strategies for intervention, revealing a solution that could put an end to the school-to-prison pipeline.

Keywords: unaddressed trauma, inequity, education, juvenile justice reform, school-to-prison pipeline

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Dr. Ivy Bonk, founder at Every Child Whole, is a systems strategist, master synthesizer, and innovator with over two decades of experience in education. Fourteen years ago, as a principal she suspected a correlation between the misdiagnosis of learning disabilities and the symptoms from childhood trauma. Her suspicions led her down a path of inquiry which resulted in a doctorate in Educational Psychology. This awareness of the impact of unaddressed trauma on learning development converging with the fragmentation and incongruence in the education system is what motivates her every day to design and advocate for strategies and solutions to counter the systemic inequity this causes.

Supporting her doctorate in Educational Psychology from Regent University, is an MBA as well as specialty training in Neuro-sequential Modeling in Education (NME) from the Child Trauma Academy (CTA). In addition to her education and work experience, her passion for systemic reformation has fueled the writing of courses and books including The Day Trauma Came to Class, LOST: Finding My Way Back to a Place I've Never Been and Grounded Learning: Education's Recovery Plan. She is the architect of The Lost Child Theory and Grounded Learning Framework.

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According to the National Council on Disability (2015), 85% of incarcerated youth have disabilities compared to 11-12% of the typical school population. An attempt to understand this unconscionable statistic, reveals reports of trauma symptoms mimicking learning disabilities (D'Andrea et al., 2012) and the disproportionate representation among Black and Brown students being diagnosed (Grindal et al., 2020). Winfrey and Perry (2021) captured the summation of the fallout of these statistics,

> Black, Brown, and Indigenous children are more likely to be over diagnosed and overmedicated in mental health systems; removed from their homes to enter the child welfare system; suspended or expelled from school; and charged at school with truancy and "assault," with the result that they enter the juvenile justice system in disproportionate ways. (p. 220)

Unaddressed childhood trauma in a student multiplied across millions of students impacts an entire education system and left unaddressed creates a continuum of systemic inequities. By ensuring emphasis and investment occur early to systemically (not to be confused with systematically) address this issue, resources can be redirected, and outcomes drastically impacted. The time-sensitive approach to address student need greatly impacts everything forward, not only time-sensitive but the order in which it occurs. The importance of sequencing in education starts as early as Preschool and Kindergarten. At the same time we attempt to impose this standard of sequence, one critical to math and language development, we erroneously disregard the same standard of function and operation within the students themselves. Our own said measure of value is violated, creating fragmentation and dysfunction. "When you spend years responding to problems, you can sometimes overlook the fact that you could be preventing them" (Heath, 2020, p. 10). The upstream solution to this wicked problem found in education is long overdue. The author offers a three-fold approach for addressing the systemic inequity and injustice found in the juvenile justice system by proposing a reach back into the predecessor system of education. This "resequencing" within the predecessor system of education can have an impact on the disparities found further down the systemic continuum as previously cited. Authentic, evidence-based solutions, rather than emotionally driven and often divisive ideals and programs, reduce inequities, interrupt cycles, and provide possibilities for prosperous futures.

Statement of the Problem

Research, and the insight it provides, reveal how the phenomenon of unaddressed trauma creates and perpetuates systemic inequities. To understand how the impact of unaddressed trauma is connected to the social reform of juvenile justice, the following continuum is provided:
1. Poverty is a leading indicator of trauma.
2. Trauma interrupts learning and development.
3. Interruption from trauma produces mimicking symptoms of learning disabilities and special needs.
4. Misinterpretation of these symptoms leads to misdiagnosis.

5. Disproportionate numbers of Black and Brown students are involved in the juvenile justice system.
6. An overwhelming majority of students in the juvenile justice system are labeled as learning disabled or mentally ill.

Poverty is a Leading Indicator of Trauma

Winfrey and Perry (2021) explain,

Any valid attempt at exploring social reform must first address systemic poverty. And the stress is far worse if you have to also worry about housing, food, or employment. The unpredictability and insecurities of poverty drain the stress-response system's bandwidth in ways that make "opportunities" to escape poverty extremely difficult to take advantage of. (p. 258)

The Impact on Wellbeing and Prosperity

In 2019, the United Nations Children's Fund (UNICEF) reported, "about 1 billion children are multidimensionally poor." Poverty impacts child development neurologically, behaviorally, and socially into adulthood. In 2021, the Children's Defense Fund (CDF) stated that over ten million children in America were in poverty and of those children, 71% of them were children of color. Children represent the largest age group in lower socioeconomic standing, with 41% of children considered living in low-income households and 19% in poor households across the United States. Overall, children represent 32% of all people in poverty despite being 23% of the total population (Wunder, 2019). In the United States, more than four out of ten children are living in households that struggling to make ends meet (Heider, 2021), resulting in the inaccessibility of necessities such as food and shelter.

Childhood poverty is strongly associated with poor health conditions, lesser educational attainment, and adverse adulthood outcomes, primarily if poverty occurs early on and persists throughout childhood (Duncan et al., 2020). Exacerbated by growing living costs and socioeconomic gaps between the richest and poorest families, the burden of poverty continues to manifest itself throughout the United States and within the most disadvantaged communities (McCrea et al., 2019). Studies have shown poverty can adversely affect physical and mental health even after childhood. A study exploring how psychological well-being is significantly linked with poverty found adults from impoverished backgrounds are more likely to have reduced short-term memory, more reporting of helplessness, and overall greater stress in life (Evans, 2016). The stressors of poverty affecting families causes parents to implement harsher parenting styles toward children (American Psychological Association, 2022). This detrimentally affects children as it is connected to many psychological disorders, which decreases their social and emotional outcomes.

One of the most pragmatic and longer-lasting approaches to reduce generational poverty is encouraging and supporting further education attainment, especially in underserved communities. However, traditional systems have reduced effectiveness in addressing these adverse effects of poverty without a socioeconomic approach addressing the needs and challenges of at-home poverty. Accompanied by the rising socioeconomic gaps within the United States, children from poor backgrounds are expected to fall further behind than children

from more affluent families, as more enrichment and at-home resources are available for those more affluent students (Duncan et al., 2014; Ladd, 2012). Family poverty is associated with higher amounts of disruptive movement and home environments, more significant summer learning loss, and stunted development (Ladd, 2012). This was only compounded with the stress of a pandemic that not only exacerbated existing traumas but was a reminder of the vast digital divide (absence of technology and ineffectiveness of modes of learning for some) and its resulting learning loss.

Culture Perceptions and Historical Narratives

One of the deep-rooted societal perceptions on poverty is the idea of a culture of poverty, where adverse outcomes associated with poverty such as heightened unemployment, single-parent families, and riskier behavior become entrenched in poor communities. This association and normalization create the popular perception of poverty as the fault of the individual, family, or neighborhood rather than a response to poor economic circumstances and lack of social mobility prospects (Duncan et al., 2014). With the external factors of poverty and trauma, children are often faced with guilt and shame due to their current living conditions which can lead to more externalized or internalized behaviors like anger, bitterness, learned helplessness, aggressive behaviors, and attitudes. These unfortunate maladies are only compounded for Black and Brown students living in the residual and historical reverberations of slavery (DeGruy, 2009).

Families who live in poverty live with the fear of embarrassment and not being able to reach the expectations of others, including the constant struggle to keep up appearances (Felski, 2000; Hudson, 2016) due to connotations of stereotypical imagery. Research shows that media can create stereotypical images for those living in poverty making the conjecture that their poverty is a result of their laziness (Hudson, 2016; Bullock, Wyche, & Williams, 2001). Without informed knowledge, compassion, and empathy, the errant perceptions of stakeholders around people groups and cultures continue. Understanding that historically geographic placement of certain populations whether based on race, economics, or both were intentional is another important factor to consider (Isenberg, 2017). In addition, these social perceptions are compounded by heightened rates of youth violence and criminal prosecution in impoverished communities, especially in marginalized groups such as African Americans and Hispanic Americans. The societal neglect of these communities through diminishing support services and negative public perception is perpetuated rather than addressed through effective programs and policies (McCrea et al., 2019). Muhammad Yunus of Grameen Bank succinctly puts it this way, The more time you spend among people, the more you become convinced that poverty is not the result of any incapacity on the part of the poor. Poverty is not created by poor people. It is created by the system we have built, the institutions we have designed, and the concepts we have formulated (Yunus, 2011, para. 25).

While trauma can occur in any situation, the most significant factor that aids trauma is poverty and its adjoining explicit and implicit biases. This is not to say that trauma does not impact persons of more affluent means, but only that for those where disparities are more overrepresented, poverty is a leading indicator. Understanding histories of people groups and systems and their impact on perceptions is directly related to how certain persons are received and viewed in educational settings. It is not separate. Given the challenges disadvantaged students face, a shift toward addressing poverty and its consequences must be addressed.

Trauma Interrupts Learning and Development

If education is key to reducing generational poverty, then addressing the trauma that impedes the learning must be priority. Trauma has become a social issue within society throughout the United States. About 70% of adults in the U.S. have experienced various scenarios of trauma at some point in their lifetime (National Council for Mental Wellbeing, n.d.). Trauma can pertain to both children and adults due to different situations and upbringings in their lives. Research has shown that childhood trauma results in the impairment of cognitive functioning, including associated behaviors. Children, because of maltreatment, find it difficult to engage in academic tasks, jeopardizing their neurodevelopment across all domains (Bonk, 2016).

Adaptive responses from the threat of traumatic events impact multiple areas of the brain. The occurrence of trauma or adversity in early childhood is more impactful and creates developmental delays, altering neural systems and influencing future functioning. Childhood trauma impacts a student affectively, behaviorally, and cognitively, interfering with the functions and processes required for learning (Bonk, 2016). Research shows that students of trauma (Shonk & Cicchetti, 2001):

- Score significantly lower on standardized tests in reading and math, which has the obvious outcome of significantly more C's and D's and fewer A's and B's
- Are 2.5 times more likely to repeat a grade, and
- Are much more likely to be referred to the principal for disciplinary action.
- As a result, they are significantly more likely to be suspended, and
- Experience more tardy and absent days.

To compound, policies such as the No Child Left Behind (NCLB) Act addressed poor performance with punitive actions that narrow curriculum, overwhelm teachers to meet impractical expectations, and push toward charter and private schools, not necessarily as an answer to the problem, but rather a way to opt-out. The National Center for Education Statistics (NCES) reported 45% of African American and 43% of Hispanic public-school students were considered high poverty. The unaddressed trauma coupled with traditional delivery of education irrespective of the individual mass produces the errant effects. Trauma puts the brain in survival mode. A brain in survival mode cannot learn, and if it cannot learn, it cannot access education; if it cannot access education, it will not see its way out of poverty.

Interruption from Trauma Produces Mimicking Symptoms of Learning Disabilities and Special Needs

In the education system, a student academically lagging is considered to be developmentally delayed. However, when a student reaches a certain age threshold, typically between ages 3 and 9, they must be "identified" to receive services (Learning Disabilities Association of America, n.d.). Existing methods and practices refer students with emotions and behaviors common among traumatized students for learning disabilities and special needs testing. The emotional and cognitive processes required for learning are state-dependent (Perry, 2017). The inequity of unaddressed trauma masks a child's true giftings and abilities. When you place this inequity within a system not designed to address the trauma, the inequities become exacerbated.

Traumatized children may exhibit rigid control patterns and uncontrolled behaviors, including aggression when involved in a traumatic experience (Van der Kolk, 2005; Price et al., 2013). Effects of trauma impair children's cognitive abilities including paying attention, planning, thinking things through, and other executive functions such as the ability to self-narrate or mentally talk to themselves as they are carrying out a simple task (Bonk, 2016).

Misinterpretation of These Symptoms Lead to Misdiagnosis

Research suggests that having a learning disability undermines the motivation to achieve, resulting in failure and frustration (Cohen, 1986). Misdiagnosing a learning disability is a pre-sentence. Research clearly states that poverty and trauma can mimic these suspected disabilities (D'Andrea et al., 2012). Grindal et al. (2020) report, "Students of color – particularly, Black students – are more likely to be identified for special education than their White peers. Not unlike the explicit bias around persons living in poverty are persons labeled as 'special education'."

The National Child Traumatic Stress Network (NCTSN) collects data on trauma and mental health symptoms from children who receive trauma-informed services at their centers. However, the frequency of trauma and mental illness within the child welfare population cannot be estimated from these efforts. The lack of understanding around the prevalence of trauma and mental health symptoms makes it a challenge to answer the question of differential diagnosis (Griffin et al., 2011). Griffin (2011) discusses the overlapping symptoms between child trauma and mental illness. Diagnoses such as bipolar disorder, attention deficit/hyperactivity disorder, oppositional defiant disorder, anxiety, and depression may be representing as symptoms found in persons who have suffered from child trauma. Overlapping symptoms include hyperarousal, traumatic reenactment, aggressive behavior, maladaptive attempt at cognitive coping, restless, hyperactive, disorganized, difficulty sleeping, psychological distress, angry outbursts, and more.

Though the collective data may be limited, a synthesis of what is available points clearly to the relatedness and complexity of these confounding and compounding variables and the detrimental impact they are having on children and youth. Griffin et al (2011) report action was taken in 2002 by the American Academy of Child and Adolescent Psychiatry (AACAP) and the Child Welfare League of America (CWLA) calling for all children in foster care to be screened for mental health and substance abuse issues. This action is one example of an implied recognition of this impact. The trauma is not only the impact of the ACE (adverse childhood experience) of separation from a parent (foster care placement), but also the cumulative trauma that had to occur for the child to be in jeopardy of being separated in the first place; a recognition, now two decades old. There are ramifications for a parent's neglect of children, yet no consideration of the ramifications of the neglect of an entire system.

Disproportionate Numbers of Black and Brown Students are Involved in the Juvenile Justice System

Fabelo et al., (2011), in a report published by the Council of State Governments Justice Center, found students who are suspended are three times more likely to encounter the juvenile justice system. There are more than two million juvenile referrals to police from schools each year (Southern Coalition for Social Justice, 2014). During a single year, an estimated 2.1 million children under 18 are arrested in the United States (Southern Coalition for Social Justice, 2014).

One does not have to know the sequence to connect those dots; two million referred, two million arrested. Out of the 2.1 million arrested, 70% of that group were African American and Latino (Southern Coalition for Social Justice, 2014). African American youth are 4.5 times more likely than Whites to be incarcerated for the same crime (National Council on Crime and Delinquency, 2007; VanderPyl, 2018). They are also less likely to finish their education during their incarceration period. About 39% of children who were arrested were less likely to finish high school than their peers (Southern Coalition for Social Justice, 2014).

An Overwhelming Majority of Students in the Juvenile Justice System are Labeled as Learning Disabled or Mentally Ill

With the 2.1 million children incarcerated, 65% to 70% have a mental health disorder and one out of four suffer from impaired abilities resulting from a mental illness (National Conference of State Legislators, n.d.), with some sources reporting numbers as high as 85% with learning disabilities (National Council on Disability, 2015). Incarcerated individuals are disproportionately in poor health prior, during, and after their incarceration period has ended (Wildeman & Wang, 2017). During their period in the juvenile justice system, their mental health, common among youth in juvenile justice involvement (Hovey, Zolkoski, & Bullock, 2017), and physical health decrease because of the cumulative and compounding traumatic experiences they face day-to-day, perpetuating the cycle, feeding the misperceptions, and deterring them from completing their education.

As shared, childhood adversity leads to misrepresentation and misdiagnosis in the classroom and is directly linked to involvement in the justice system. Adverse childhood experiences (ACEs) not only increase the chances of involvement in the juvenile justice system but increase the risk of re-offense. A focused effort on early identification of ACEs, and intervention for ACEs with a goal of improving youth life circumstances and preventing criminal behavior, may reduce the likelihood of and costs related to juvenile criminal activities (Baglivio et al., 2014).

Unfortunately, what has been coined as the school-to-prison pipeline has become an expectation. The error of normalization of dysfunction is used as a justification and measure for expanded funding, rather than an act of injustice which unless systemically addressed, will continue to perpetuate itself. This acceptance of the status quo clouds the minds of leaders to the possibility of transformation within education and blinded to what Heath (2020) calls the "upstream solution." Considering the available research cited in this article, it is negligent for an education system to proceed with labeling a child with a trajectory- and economically-altering diagnosis when due diligence has not been exercised to prove otherwise. Failure to address the root cause only leads to continued brokering of brokenness found in society with the resulting inequitable systemic continuum stayed in place. However, there is a solution, and it starts with reaching back into education and innovating from within this predecessor system.

Solutions

Unaddressed trauma is the equity issue. As established by collective research, the impact of childhood trauma has devastating and long-lasting effects on children well into adulthood, making their beginnings the top priority. The commonality between persons who have experienced childhood trauma with impact lingering into adulthood is that they all crossed over

the bridge of education. If the systemic beginnings of children are found in education, then ensuring children and their families have sound and equitable foundations to build on is paramount. When the problems of poverty and trauma being addressed are systemic, then the solution innovated to address them must be systemic, as well. Programmatic solutions will never solve systemic problems, another example of misaligned sequencing. The theory of change and pedagogical shift needed begins with an education system (school) committed to ensuring all students in their charge have an equitable foundation on which to build. Operating in equitable and just ways is a function of human behavior. The repressed, suppressed, and maladaptive emotions that result from unaddressed and untreated trauma make it physiologically impossible for it not to impact and influence behavior. These behaviors, in turn, may be misinterpreted. The unaddressed trauma left for generations multiplied across millions has created mass fragmentation and incongruence that become fixed in systems. Generational and historical trauma—a common wound experienced by a collective, yet held individually, perpetuated through generations—becomes culture ensuring that this brokenness remains embedded into the family and community.

The proposed Grounded Learning (GL) methodology suggest an education system based on the story paradigm that views the delivery and practice of education as a means of facilitating and advocating the telling of student stories (identity) from the place of an equitable foundation (Bonk, 2020). Unaddressed trauma, the centerpiece of inequity, denies access to stories. Innovating for a root issue within a root, predecessor system produces a lever for change that is transformational especially for those who are most impacted by the systemic fallout and vulnerable to the structures that keep the inequities in place. GL is a response to this challenge; directly addressing the injustice of unaddressed trauma that leads to the disproportionate misrepresentation and misdiagnosis feeding systemic poverty. Historical and systemic traumas and inequities have mass-produced generational cycles, negative cognitive impact, and a deficit narrative that perpetuates injustice. To confront these historical and systemic traumas and inequities, GL suggests a threefold approach: (1) Solve for Coherence, (2) Implement Strategy to INTERRUPT, and (3) Design and Build for Congruency.

Solve for Coherence

The systemic solution within the predecessor system of education must solve for coherence: personally, organizationally, and systemically. Merriam-Websters Dictionary defines coherence as the quality or state of cohering: such as systematic or logical connection or consistency, and integration of diverse elements, relationships, or values. Conversely, trauma creates disconnection. Disconnecting from feelings in the face of trauma is an adaptive response. Disconnection is the source of all suffering (Maté, 2021). This sense of disconnection multiplied across the weight of trauma in a school is what results in the macro effect. Building cohesion involves building trust, engaging conflict, taking action, accountability, and pursuit of common goals (Lencioni, 2012). In an environment that is traumatized and traumatizing, this sounds near impossible. The Grounded Learning System (GLS) creates a path for coherence-making (Bonk, 2020).

Table 1

Key Drivers of the Grounded Learning System (GLS): A Path for Coherence-Making

Key 1	Key 2	Key 3	Key 4	Key 5
Integration	Whole Child	Multi-Generational	Systemically Sequential	Multi-Disciplinary
Contiguous incorporation of variables	Addressing, as it is in your power to do so, the wellbeing of the child	Drawing on, partnering with, and supporting those relationally CLOSEST to the child	Ensuring the functional design is followed	All stakeholders at the table while keeping students center

Ensuring the key drivers described in Table 1 are implemented, authentically and intentionally, ensuring continuity across all the parts, solves for coherence in a school or organization. Once a school has identified what needs to be done to bring these into alignment, then addressing the source of the incongruence is also required.

Implement Strategy to INTERRUPT

INTERRUPT (Interim Neuro-sequential Treatment and Education for the Reversal of Ramifications Understood from Poverty and Trauma) is a face-off with the foundational inequities created by the challenge of systemically (not to be confused with systemically) unaddressed trauma in education. It is the scale of justice in play to reestablish equitable beginnings. The INTERRUPT Strategy is about (1) identifying students who are trauma positive, and (2) providing approaches and interventions needed to address the impact of the trauma.

Identifying Students Who are Trauma Positive

Inquiry and research to locate an evaluation or assessment tool currently being used to identify trauma early within the educational setting to avoid misdiagnosis was not successful despite thorough investigation. However, a proven and reliable evaluation is used within states' departments serving children and families. This instrument is the Child and Adolescent Needs and Strengths (CANS). According to the lead developer, Lyons, CANS is a multi-purpose tool that supports decision-making, which includes service planning and informing the delivery of services and can be used in the elementary school setting for this purpose with appropriate training (J. Lyons, personal communication, January 31, 2022). The CANS Assessment can help guide conversations within the school team to inform the well-being of children and youth, identify their strengths and needs, and inform strategies and best practices needed to position children back in a place ready to learn.

In a literal push back on systemic inequity, this evaluation tool can be walked backward into education and used to identify a student as trauma positive. If a child is suspected of having a learning disability, with priority on students in poverty, they are provided the CANS. If they test "positive" for trauma, they are given a classification of "Trauma-Suspect" and schools are given a predetermined amount of time to implement best practices to address it. Employing compassionate inquiry and empathetic listening, stories are extracted to ensure children receive

much-needed help, developmental gaps are mended, mislabeling and misdiagnosis are avoided, and systemic inequities are interrupted.

Providing Approaches and Interventions Needed to Address the Impact of the Trauma

Next, is the commitment to implement the three power levers of (1) Engaged Parents/Families, (2) Regulated Brains, and (3) Assets-Based Students to support identified students, helping to counter the negative impacts of poverty and trauma that produces cumulative and compounding effects.

Table 2
Impact of INTERRUPT Strategy

Impediments to Learning and Access	Countered with INTERRUPT Strategy	Dismantling
Disengaged Parents/Families	POWER LEVER 1 – Engaged Parents/Families (EP)	Generational Cycles
Dysregulated Brains	POWER LEVER 2 – Regulated Brains (RB)	Cognitive Impact from Trauma
Disadvantaged Students	POWER LEVER 3 – Assets-Based Students (AS)	Deficit Messaging

Engaged Parents/Families (EP) – Research and Best Practices. Engaged Parents/Families (EP) is about building and strengthening the relationship with home. It counters the disengagement so often seen in education. Building healthy attachments and environments are critical for well-being and necessary for disrupting cycles. When it comes to addressing inequities, nothing is more powerful than the ability to interrupt generational cycles through parent and family engagement. The resulting miseducation from not systemically addressing the historical and systemic inequities and traumas has led to generational cycles of institutionalism, marginalization, and disenfranchisement. To address this, one must reach back into the families. Although opinions vary, the dismal outcomes cannot be argued. Reaching back into the family with empowering, engaging, and equipping activities and strategies inside a multi-generational learning environment is non-negotiable. Partnering with parents to overcome past educational experiences which may have left them distant and distrusting, coupled with the addressing of trauma for both parent and child will change the outlook of an entire family unit. It is what will begin to (1) disengage us from generational cycles, and (2) reset equitable foundations.

Foundational to the wellbeing of children is a healthy attachment with parents. Maté (2011) shared, "The areas of the cortex responsible for attention and self-regulation develop in response to the emotional interaction with the person whom we may call the mothering figure" (p. 69). He goes on to say, "Anything that threatens the mother's emotional security may disrupt the developing electrical wiring and chemical supplies of the infant brain's emotion-regulating and attention-allocating systems" (p. 70). This indisputable grounding needed from mothers serves to underscores the magnitude of the strength of this power lever of EP. Fatherhood, although not specifically addressed in this article, is critically important as well.

The research on the influence of family involvement and engagement fills volumes. A synthesis of research on family (Henderson, Mapp, & Averett, 2002) leads with, "The evidence

is consistent, positive, and convincing: families have a major influence on their children's achievement in school and through life" (p.7). It has never been truer or so needed. Since 2002, Dr. Karen Mapp, Harvard educator and advocate for family engagement, has continued to publish research and presentations regarding this important topic. Other researchers and advocates include Dr. Joyce Epstein, Professor at John Hopkins University and Director at Center on School, Family and Community Partnerships, and Dr. James Comer, Founder of Comer School Development Program, and a forerunner to whole child and Social and Emotional (SEL) work. Following are examples of seasoned, long-standing organizations that have found much success in applying this research.

National Center for Families Learning (NCFL). For over 30 years, NCFL (https://www.familieslearning.org/) has been providing family literacy programming and professional development to educators, families, and communities. According to NCFL, children involved in family learning with a parent/guardian showed a gain of 22.5% in reading scores at or above grade level. Data from NCFL programming showed that for parents who participated in 150 hours of engagement, student attendance was reported at 90%. NCFL reported that of the families engaging in programming and learning at their programs, 96.5% self-reported helping children with homework.

Chicago Parent Program (CPP). CPP (https://www.chicagoparentprogram.org/) is another example of evidence to the validity of the long-standing research behind parent and family engagement and involvement in children's education. CPP focuses on providing support to parents and families who are economically disadvantaged and have experienced social adversity. CPP provides services in the community, school, and mental health settings. They provide support, training, and mentoring around goals such as parenting, education, and social connection. As a result, CPP clients experience increased confidence, modified and decreased risk behaviors, increased emotional regulation, and improved school outcomes.

The science and research around the connection and relationship between Engaged Parents/Families (EP) and Regulated Brains (RB) is clear. Anything, as previously stated, that jeopardizes the mother's emotional wellbeing (unaddressed trauma) may disrupt the developing circuitry of the infant brain. This emotional stress on the mother interferes with infant brain development because it tends to interfere with attunement. Attunement – the sharing of emotional space – is necessary for the normal development of the brain pathways and neurochemical apparatus of attention and emotional self-regulation. Disruption to parent-child relationships can lead to the development of maladaptive behaviors and mental patterns. Transformational experiences that encourage growth happen in the context of the family (Maté, 2011). This research clearly shows the importance of intentional parent and family engagement and heed to the home environments and its relationship to healthy, regulated brains.

Regulated Brains (RB) – Research and Best Practices. Regulated Brains (RB) is about relationship with self. It counters the dysregulation that occurs in the brain as a result of trauma. Bottomline as Dr. Bruce D. Perry, child trauma patriarch and founder of the Child Trauma Academy (CTA) and Neuro-sequential Network, often shares, "Trauma in childhood dysregulates the brain and a dysregulated brain cannot learn" (2017). Addressing the dysregulation directly impacts the emotions and behaviors, cognitively helping to position students in a place ready to learn. The brain develops, processes, and acts on incoming

information in a sequential way – from bottom to top. If students are in the survival or bottom part of their brain, then it will be difficult for information to be received. The frontal cortex contributes to executive control by providing top-down regulation of processes in other brain regions. Trauma impairs access to the frontal cortex creating a perceived deficiency making it difficult to stay on task and impeding learning. This impairment can negatively influence cognitive processes required for learning in the classroom including executive functioning, language, memory, attention, and integration (Bonk, 2016). Regulatory and somatosensory needs must be addressed before success with cognitive functions can be expected. This process is what Winfrey and Perry (2021) refer to as the sequence of engagement.

Perry (2017) shares what he calls the 6 Rs of early brain development. They are: (1) Relational (safe), (2) Relevant (developmentally matched to the individual), (3) Repetitive (patterned), (4) Rewarding (pleasurable), (5) Rhythmic (resonant with neural patterns), and (6) Respectful (of the child, family, and culture). The combination and culmination of these impairments to the interactive processes lead to a dysregulated brain (Perry, 2017). These interrupted processes are the same ones that need to be addressed to bring healing and regulation. Research and evidence-based programs like the ones that follow provide hope in this reliable and valid possibility and strengthens the impact of this power lever.

Neuro-sequential Modeling in Education (NME). The Neuro-sequential Network's (https://www.neurosequential.com/) NME program is a developmentally informed, biologically respectful approach to education. The multi-disciplinary approach provides a context for individual problem solving, organizational program modification and policy development based on Perry's research. The series of neuro-sequential model (NM) approaches equip parents, teachers, coaches, clinicians, and caregivers to understand how the brain is organized. This understanding aids in the delivery and design of services. Also, included is a framework for considering and supporting a child's stress response systems and their interplay with trauma. This is a critical component for schools as they address the inequity of unaddressed trauma. Currently, there are over 1,500 professionals trained in NME.

Think:Kids. Supporting the need for increased metacognition to address emotional regulation and align with the neuro-sequential modeling of NME, Dr. J. Stuart Ablon of Think:Kids (https://thinkkids.org/) provides support and planning for Collaborative Problem Solving (CPS). CPS is based on a set of thinking skills students need to co-partner in the decisions that concern their lives. Ablon's work counters the maladies that perpetuate and exacerbate these cycles by identifying triggers, lagging skills, and challenging behaviors and, through the acquisition of these thinking skills, navigate to a place of wellbeing circumventing the errant trajectory. According to the Think:Kids website, CPS reports 25% reduction in school referrals. In addition, this reduction is supported by an average 86% reduction in use of restraint, 74% reduction in use of seclusion, and 73% reduction in oppositional behavior. An expected response to these types of numbers is a reduction in parent and teacher stress. Acquiring the thinking skills of CPS that lead to brain regulation and the opportunity for students to be a collaborator in their own problem solving is a standalone yet partnered with other approaches like NME is undeniable.

Interactive Metronome (IM). Fundamental to the goal of regulating the brain is understanding of the importance of rhythm and timing in child development. IM

(https://www.interactivemetronome.com/) is a computerized brain training program that has helped thousands of children "tune in" to the world around them. IM interventions and supports accommodate young children with an emphasis on whole body movement and the sensory experience of receiving and responding to an auditory response. The intervention works one-on-one or in a small group setting. IM can be adapted to many different age groups across many different levels of capability. The evidence and research conducted on IM over the years has shown improved timing and rhythm perception translate into significant improvements in developmental progress and academic achievement (Teicher, 2019).

As Engaged Parents/Families (EP) is related to Regulated Brains (RB), so a Regulated Brain (RB) is related to Assets-Based Students (AS). Research (Ponton, Schuette, & Confessore, 2009; Bandura, 1999) shows the direct correlation of emotional regulation to agency. In this process, the confidence and social competence that comes from knowing your strengths, assets, and abilities and the pursuit of them in a personal context creates agency.

Assets-based Students (AS) – Research and Best Practices. Assets-based Students (AS) is about building relationships with school and educators. It counters the idea of "disadvantaged" and dismantles the deficit messaging created from misinformed perceptions and implicit biases. Building on the power levers of EP and RB, processes and practices are put in place that support students in discovering their value, strengths, and passions through which skills are developed, guaranteeing a contribution and their pathway out of poverty. Respecting a student's culture and personal context, while helping them discover their strengths, empowers them to become agents of their own learning. Core to effectual instruction is the understanding of a student's context as well as their individual needs. Toward unity in diversity, ensuring the availability of resources and artifacts that allow students to pull from different perspectives and reporting of history is key, (e.g., Black History Education 365). All persons equal requires non-divisive strategies coupled with the compassion and empathy necessary to create safe dialogue as one labors with another to their individual success. A sampling of evidence-based practices and tools used to support this power level follow.

Search-Institute. For over 60 years, the Search Institute (https://a/searchinstitute.org/) has supported schools, and organizations with the Attitudes and Behaviors (A&B) survey and the Developmental Assets Profile (DAP). The survey and profile are based on the 40 developmental assets that identify the protective power of assets in young people directly impacting risk reduction. The assets are divided into two parts: external and internal. External assets look at relationships and opportunities and what people need to be successful in families, schools, and communities. Internal assets focus on the social-emotional strengths, values, and commitments that are nurtured within young people.

Gallup. StrengthsFinder is an assessment developed by the Gallup organization (https://www.gallup.com/). It has been used in businesses and organizations for over 20 years identifying what is, "right with people." The tool is broken down into 34 themes or categories. The 34 categories fall into four domains: executing, influencing, relationship building, and strategic thinking. Based on the responses of participants, the tool renders a top five strengths report. Given the success of StrengthsFinder and recognizing the need for this type of support in schools and with youth, the StrengthsExplorer and GallupStrengths for Students were developed,

both for the same purpose of identifying strengths and building confidence around contributions in children and youth.

Kolbe. Kolbe (https://www.kolbe.com/) is a cognitive model that has been evaluated by researchers at Harvard, Stanford, the University of Chicago, UCLA, University of Pennsylvania and other colleges and universities (https://www.kolbe.com/). Public, charter, and independent schools in many states have used it to assess students' abilities. Unlike other assessments, Kolbe identifies instinct-based behaviors in four clusters: (1) gathering and communicating information, (2) sorting and storing information, (3) dealing with risks and unknowns, and (4) manipulating physical objects and spaces to achieve desired ends (Gerdes & Stromwall, 2008).

The intersectionality and interplay of the power levers of Engaged Parents/Families (EP), Regulated Brains (RB), and Assets-Based Students (AS) are a gamechanger. It is a direct confrontation to the equity issue in education that directly leads to the systemic inequity of disproportionate representation in juvenile justice. The outcomes are vast, and the impact incalculable. Specific to the education system in America, the outcome is eco-shifting. Dismantling generational cycles, cognitive impact, and deficit messaging will give access to a solid and equitable foundation for students and families to build on. However, as leaders and practitioners, it is understood that identifying and providing support is not enough to ensure sustainability.

Design and Build for Congruency

After assessing needs and taking action to execute and implement a strategy to disrupt the source of incongruency, assurance going forward must be made to design and build for congruency and continuity across all the parts. First and foremost, within the education setting (school and classroom), it requires a delivery of instruction that is considerate of the individual student and done so in a way that is sequential, working in tandem with the functionality of the brain. Providing instruction and delivery of services out of sequence only serves to fragment learning and disrupt coherence. The Grounded Learning Framework (GLF) is a framework for such delivery (Bonk, 2020).

Table 3
Components of Grounded Learning Framework (GLF)

TIER	FOCUS	EMBED	ADDRESS
Find	Early Brain and Child Development	Regulation	Attachment
Build	Core of Four/Foundational Literacy	Regulation	Attachment
Discover	Core of Me/Literacy of Self	Connection	Adaptation
Contribute	Core of You/Literacy of Community	Multiplication	Agency

GLF provides guideposts by which to deliver child-centric instruction and best practices. When foundations have been reestablished and measures taken to address cognitive

impediments, GLF emphasizes the importance of personalized and project-based learning. Core to the need for this universal shift in education is the acquisition of an inquiry mindset. One of the greatest tools for leveraging impact in the classroom and student success is through an inquiry mindset. Students with the confidence and agency that come from understanding their strengths, assets, and passions – as emphasized in the power lever of Assets-Based Students (AB) – learn in context, as they co-create and co-design their learning. Instruction and coaching toward personal agency and context are what will ensure sustainability of the equitable foundations and services that lead to access to opportunities, investment, and prosperous futures.

Conclusion

Innovating equity in education automatically and unequivocally reforms juvenile justice. The indisputable outcome is a dismantling of a historical narrative that would imply the inherent problem is one of race, but rather a recognition of a systemic framework designed to weave the narrative. The juxtaposition of the gross evidence of institutionalized and systemic inequities in relation to the access and availability of solutions and opportunities, calls for immediate implementation of informed policies and practices with systemic solutions that ensure congruency and continuity in the delivery of services, and that provide the infrastructure for the powerhouse called education that will publish millions of powerful stories. Further, the school-to-prison pipeline would be dismantled so services would no longer be needed. No longer would students be walking from the playground to the prison yard. Instead, students would now leave school equipped and confident, walking back into their neighborhoods and communities, as producers and contributors, not just consumers. Students with a sense of belonging and self-determination would now be ready to access the opportunities, making their own unique contributions. Students with stories to tell would be able to tell them.

This upstream solution must be implemented one courageous leader at a time: school leaders, classroom leaders, district leaders, policymakers, community leaders (families), and business leaders. Courageous leaders must be willing to question authenticity and effectiveness; to say "no harm done on my watch"; and to examine their own implicit bias. Courageous leaders must be willing to exercise reciprocal leadership and do the right thing without being told. This includes educators shifting from carriers and dispensers of knowledge to facilitator-coaches of growth and discovery. Such work requires understanding that education is a social enterprise whose outcomes have a social impact and while educators may not be social workers, they are doing a social work. A collective of stakeholders must be willing to advocate for the resequencing and reestablishment of equitable foundations. In the words of Bryan Stevenson, Equal Justice Initiative (EJI), "somebody has to stand when other people are sitting. Somebody has to speak when other people are quiet" (Washington Post, 2012).

References

American Psychological Association. (2022, July). *Effects of poverty, hunger, and homelessness on children and youth*. https://www.apa.org/pi/families/poverty

Baglivio, M. T., Epps, N., Swartz, K., Huq, M. S., Sheer, A., & Hardt, N. S. (2014). The prevalence of adverse childhood experiences (ACE) in the lives of juvenile offenders. *Journal of Juvenile Justice, 3*(2), 1-17. https://www.prisonpolicy.org/scans/Prevalence_of_ACE.pdf

Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-efficacy: The exercise of control. *Journal of Cognitive Psychotherapy,* 13(2), 158-166. doi:10.1891/0889-8391.13.2.158

Bonk, I. T. (2016). *Professional development for elementary educators: Creating a trauma-informed classroom* (Doctoral dissertation, Regent University).

Bonk, I.T. (2020). *Grounded learning: Education's recovery plan*. Every Child Whole Press.

Bullock, H. E., Fraser Wyche, K., & Williams, W. R. (2001). Media images of the poor. *Journal of Social Issues, 57*(2), 229-246.

Children's Defense Fund. (2021). *The state of America's children.* https://www.childrensdefense.org/wp-content/uploads/2021/04/The-State-of-Americas-Children-2021.pdf

Cohen, J. (1986). Learning disabilities and psychological development in childhood and adolescence. *Annals of Dyslexia, 36*(1), 287–300. https://doi.org/10.1007/bf02648035

D'Andrea, W., Ford, J., Stolbach, B., Spinazzola, J., & van der Kolk, B. A. (2012). Understanding interpersonal trauma in children: why we need a developmentally appropriate trauma diagnosis. *American Journal of Orthopsychiatry, 82*(2), 187-200. doi:10.1111/j.1939-0025.2012.01154.x

DeGruy, J. A. (2009). Post-slavery syndrome: A multigenerational look at African American injury, healing, and resilience. In A. Kalayjian, & D. Eugene (Eds.), *Mass Trauma and Emotional Healing around the World: Rituals and Practices for Resilience and Meaning-Making* [2 volumes], 227-250. ABC-CLIO.

Duncan, G. J., Magnuson, K., & Votruba-Drzal, E. (2014). Boosting family income to promote child development. *The Future of Children, 24*(1), 99-120.

Duncan, G. J., Smeeding, T., & Le Menestrel, S. (2020). Poverty, work, and welfare: Cutting the Gordian knot. *Proceedings of the National Academy of Sciences, 117*(29), 16713-16715.

Evans, G. W. (2016). Childhood poverty and adult psychological well-being. *Proceedings of the National Academy of Sciences, 113*(52), 14949-14952.

Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011). *Breaking schools' rules: A statewide study of how school discipline relates to students' success and juvenile justice involvement.* New York: Council of State Governments Justice Center.

Felski, R. (2000). Nothing to declare: Identity, shame, and the lower middle class. *Publications of the Modern Language Association of America, 115*(1), 33-45.

Gerdes, K. E., & Stromwall, L. K. (2008). Conation: A missing link in the strengths perspective. *Social Work, 53*(3), 233-242.

Griffin, G., McClelland, G., Holzberg, M., Stolbach, B., Maj, N., & Kisiel, C. (2011). Addressing the impact of trauma before diagnosing mental illness in child welfare. *Child Welfare, 90*(6), 69-90.

Grindal, T., Schifter, L, Schwartz, G., & Hehir, T. (2020, January 15). Income differences alone

cannot explain the overrepresentation of students of color in special education. *Voices in Education.* https://www.hepg.org/blog/income-differences-alone-cannot-explain-the-overre

Heath, D. (2020). *Upstream: The quest to solve problems before they happen.* Simon and Schuster.

Heider, A. (2021, January 12). *The basic facts about children in poverty.* Center for American Progress. https://www.americanprogress.org/issues/poverty/reports/2021/01/12/494506/basic-facts-children-poverty

Henderson, A. T., Mapp, K. L., & Averett, A. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement* (p. 7). Austin, TX: National Center for Family & Community Connections with Schools.

Hovey, K. A., Zolkoski, S. M., & Bullock, L. M. (2017). Mental health and the juvenile justice system: Issues related to treatment and rehabilitation. *World Journal of Education, 7*(3), 1-13. https://doi.org/10.5430/wje.v7n3p1

Hudson, N. (2016). The trauma of poverty as social identity. *Journal of Loss and Trauma, 21*(2), 111–123. https://doi.org/10.1080/15325024.2014.965979

Isenberg, N. (2017). *White trash: The 400-year untold history of class in America*. Penguin.

Ladd, H. F. (2012). Education and poverty: Confronting the evidence. *Journal of Policy Analysis and Management, 31*(2), 203-227.

Learning Disabilities Association of America. https://ldaamerica.org/info/eligibility-determining-whether-a-child-is-eligible-for-special-education-services/

Lencioni, P. M. (2012). *The advantage: Why organizational health trumps everything else in business.* John Wiley & Sons.

Lyons, J. S. (2022). *Transformational collaborative outcomes management: Managing the business of personal change.* Palgrave Macmillan, Cham.

Maté, G. (2011). *Scattered minds: The origins and healing of attention deficit disorder.* Vintage Canada.

Mate', G. (2021). Compassionate inquiry. [Online course]. https://online.compassionateinquiry.com/

McCrea, K. T., Richards, M., Quimby, D., Scott, D., Davis, L., Hart, S., ... & Hopson, S. (2019). Understanding violence and developing resilience with African American youth in high-poverty, high-crime communities. *Children and Youth Services Review, 99*, 296-307.

National Center for Education Statistics. https://nces.ed.gov/fastfacts/display.asp?id=898

National Child Traumatic Stress Network. (2018, March 23). *Childhood Trauma Effects*. https://www.nctsn.org/what-is-child-trauma/trauma-types/early-childhood-trauma/effects

National Conference of State Legislators. (n.d.). *Mental health needs of juvenile offenders.* https://www.ncsl.org/documents/cj/jjguidebook-mental.pdf

National Council for Mental Wellbeing. (n.d.). *How to manage trauma*. https://www.thenationalcouncil.org/wp-content/uploads/2022/08/Trauma-infographic.pdf

National Council on Crime and Delinquency. (2007*). And justice for some: Differential treatment of youth of color in the justice system.* http://www.nccdglobal.org/sites/default/files/publication_pdf/justice-for-some.pdf

National Council on Disability. (2015). *Breaking the school-to-prison pipeline for students with disabilities.* https://www.ncd.gov/publications/2015/06182015

Perry, B. (2017, October 24-25). *NME Trauma Program Bootcamp*, Nashville, TN, United

States.

Ponton, M. K., Schuette, C. T., & Confessore, G. J. (2009). An agentic perspective of self-directed learning as applied to children. *International Journal of Self-Directed Learning, 6*(1), 46-58.

Price, M., Higa-McMillan, C., Kim, S., & Frueh, B. C. (2013). Trauma experienced in children and adolescents: An assessment of the effects of trauma type and role of interpersonal proximity. *Journal of Anxiety Disorders, 27*(7), 652–660. https://doi.org/10.1016/j.janxdis.2013.07.009

Rodriguez, M. (2012, June 15). *Bryan Steven son savors victory in Supreme Court ruling on juvenile life sentences.* The Washington Post. https://www.washingtonpost.com/lifestyle/style/bryan-stevenson-savors-victory-in-supreme-court-ruling-on-juvenile-life-sentences/2012/06/25/gJQA8Wqm2V_story.html

Shonk, S.M., & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academics and behavioral maladjustment. *Developmental Psychology, 37*(1), 3-17.

Southern Coalition for Social Justice. (2014, April 8). *Mass incarceration of juveniles: Does putting children in jail solve anything?* http://www.southerncoalition.org/putting-children-in-jail/

Teicher, M.H. (2019). *Effects of brain balance exercises and interactive metronome on children with attention deficit hyperactivity disorder are similar to the effects of stimulant medication [White paper].* Harvard Medical School, Department of Psychiatry. www.interactivemetronome.com/wp-content/uploads/2019/09/Research_IM_ADHD_Harvard_Brain-Balance-and-IM_White-Paper2019.pdf

Think:Kids. (n.d.) https://thinkkids.org/research/

United Nations Children's Fund. (n.d.) https://www.unicef.org/social-policy/child-poverty/

Van der Kolk, B. A. (2005). Developmental. *Psychiatric Annals, 35*(5), 401-407.

VanderPyl, T. (2018) Incarcerated DisCrit: The intersection of disproportionality in race, disability, and juvenile justice. *Justice Policy Journal, 15*(1), 1–19.

Wildeman, C., & Wang, E. A. (2017). Mass incarceration, public health, and widening inequality in the USA. *The Lancet, 389*(10077), 1464–1474. https://doi.org/10.1016/s0140-6736(17)30259-3

Winfrey, O., & Perry, B. (2021). *What happened to you?: Conversations on trauma, resilience, and healing.* Boxtree.

Wunder, T. A. (2019). Fighting childhood poverty: How a universal child allowance would impact the US population. *Journal of Economic Issues, 53*(2), 537-544.

Yunus, M. (2011). *Building social business.* PublicAffairs. Kindle Edition.