CREATING SAFE & SUPPORTIVE SCHOOLS II: NEXT STEPS

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SECTION VII: ADDITIONAL RESOURCES

AFT Resolution: Support Restorative Justice Programs In Schools That Receive Public Funds

Advocates that every school that receives public funds adopt the restorative justice philosophy and restorative justice practices and support systems, including but not limited to counseling, intervention, peace circles, peer juries, peer mediation, conflict resolution, restitution and community service.

Effective Labor-Management Partnerships
Mary Seiu, Leadership (May-June 2015)

This article, from the superintendent of the ABC Unified School District in California (and a Good Schools participating district), describes the process whereby labor and management have learned to work systematically and collaboratively to improve student achievement and the conditions of teaching and learning.

Excessive Stress Disrupts the Architecture of the Developing Brain
Harvard University Center on the Developing Child

Extensive research on the biology of stress now shows that healthy development can be derailed by excessive or prolonged activation of stress response systems in the body and the brain, with damaging effects on learning, behavior, and health across the lifespan. Yet policies that affect young children generally do not address or even reflect awareness of the degree to which very early exposure to stressful experiences and environments can affect the architecture of the brain, the body's stress response systems, and a host of health outcomes later in life.

The Science of Early Life Toxic Stress for Pediatric Practice and Advocacy
Sara B. Johnson, Anne W. Riley, Douglas A. Granger & Jenna Riis, *Pediatrics* (January 21, 2013)

This report provides an overview of the science of toxic stress. It summarizes the development of the neuroendocrine-immune network, how its function is altered by early life adversity, and how these alterations then increase vulnerability to disease. The fact that early environments shape and calibrate the functioning of biological systems very early in life is both a cautionary tale about overlooking critical periods in development and reason for optimism about the promise of intervention. Even in the most extreme cases of adversity, well-timed changes to children's environments can improve outcomes.

Turnaround Metrics Framework
Turnaround for Children

A visual of the metrics that apply for each level of intervention, schoolwide, classroom-wide, and the individual student level.

Turnaround: Partners in School Transformation and ***Turnaround: Building Blocks One Pager***
Turnaround for Children

These pamphlets provide an overview of the Turnaround for Children model, its goals, and the framework it provides for students' social-emotional development.

Schools Enlist Parents to Bridge Cultural Barriers
Caralee Adams, Education Week (Oct. 27, 2015)

Increasingly, schools are working to bridge the cultural differences to get families engaged more deeply in their children's education. This means welcoming families, visiting their homes, listening to their experiences, and explaining the educational system so that families can recognize when biases are hurting their children's learning and work to overcome them.

Advancing School Discipline Reform
Greta Colombi & David Osher, National Association of State Boards of Education (August 2015)

The authors explore the latest research on punitive school discipline and zero-tolerance policies, their effects on student achievement and engagement, and how child-serving agencies can work with educators to implement a range of more effective strategies that should supplant them.

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AFT Resolution

SUPPORT RESTORATIVE JUSTICE PROGRAMS IN SCHOOLS THAT RECEIVE PUBLIC FUNDS

WHEREAS, there is a crisis of criminalization in this current generation of our nation's youth, which has come to be known as the "school-to-prison pipeline," that begins with student suspensions, expulsions, push-outs, referrals to alternative institutions, and arrests in our public schools that increases and exacerbates our nation's tragedy of mass incarceration; and

WHEREAS, there are decades of research that demonstrate punitive and reactionary discipline measures heighten the incidence and severity of the behaviors they are designed to reduce in our public schools; and

WHEREAS, punitive approaches are not making our schools and communities any safer but instead discourage, demean, and criminalize our children and have resulted in an unacceptable and unnecessary number of suspensions, expulsions, push-outs, referrals to alternative institutions, and arrests; and

WHEREAS, these harsh disciplinary practices, also known as "zero tolerance," further result in the loss of valuable instruction time, cause students to dropout, and not only increase the risk of contact with law enforcement agencies and the juvenile court system, but ultimately help to swell the numbers of persons who are unemployed, in need of public welfare, and plagued by mental health issues; and

WHEREAS, in a learning environment where student behavior issues are not properly addressed, there exists a climate which is both unwholesome and unsafe for students and school staff which negatively impacts the academic performance of the school; and

WHEREAS, our public schools need to implement and develop disciplinary systems that work with our students and not against them, by transitioning to comprehensive restorative justice philosophy and practice in order to integrate social and emotional learning into the curriculum, incorporate the necessary wraparound services, create a safe and respectful environment for everyone in the school, and prepare our students to become productive citizens; and

WHEREAS, restorative justice philosophy and practice in schools teaches children to understand the impact of their behavior, take responsibility,

repair the harm they have done and restore relationships; and

WHEREAS, in most cases so far, the move from zero tolerance to restorative justice has been a change in rhetoric only, without the necessary personnel, training and resources needed to fulfill the intentions and stated objectives of the program:

RESOLVED, that the American Federation of Teachers will advocate that every school that receives public funds adopt the restorative justice philosophy and restorative justice practices and support systems, including but not limited to counseling, intervention, peace circles, peer juries, peer mediation, conflict resolution, restitution and community service; and

RESOLVED, that the AFT will advocate that all school administration, staff, and security personnel be trained in the basic philosophy and critical practices of restorative justice; and

RESOLVED, that the AFT will advocate that the students, parents, community members, legislators, and public be educated about the basic philosophy and critical practices of restorative justice; and

RESOLVED, that the AFT will advocate for funds to place restorative justice coordinators/trainers and support staff in every school with the goal of promoting positive learning environments that foster meaningful student relationships to develop self-worth, cultivate emotional well-being, culturally relevant and culturally responsive curriculum, and help produce responsible citizens.

(2014)

Please note that a newer resolution, or portion of a resolution, may have superseded an earlier resolution on the same subject. As a result, with the exception of resolutions adopted at our most recent AFT convention, resolutions do not necessarily reflect current AFT policies.

Effective
labor-management
partnerships

This district's partnership is about more than civil cooperation. Labor and management actually work together to improve student achievement.

In recent years, there has been mounting interest in building strong collaborative relationships between labor and management as part of school improvement efforts.

The U.S. Department of Education has sponsored national conferences about collaborative models of school improvement each year since 2011. Organizations such as the American Federation of Teachers, the National Education Association, the American Association of School Administrators, the National School Boards Association, the Federal Mediation and Conciliation Service, the Council of the Great City Schools and the Council of Chief State School Officers have been co-sponsors.

At each conference, approximately 100 school district teams that include the superintendent, local union president and the board of education president learn more about labor-management collaboration from other districts across the country. I have been asked numerous times to share at these conferences how ABC Unified School District in southeast Los Angeles County created and sustained a successful labor-management partnership for over 15 years.

The power of collective capacity

It's encouraging to recognize that the importance of labor-management collaboration is growing. Michael Fullan, professor emeritus at the Ontario Institute for Studies in Education, University of Toronto notes: "The power of collective capacity is that it enables ordinary people to accomplish extraordinary things – for two reasons. One is that knowledge about effective practice becomes more widely available and accessible on a daily basis. The second reason is more powerful still – working together generates commitment."

Many of us are aware that systemic change requires collaboration, especially in imple-

Mary Sieu

menting large-scale initiatives such as the Common Core State Standards and new state assessments. Collaboration is particularly important when we are asked to rethink how we structure professional learning, curriculum and instructional materials, and family engagement activities.

In ABC Unified School District, our labor-management partnership has required more than just civil communication and cooperation. Our joint work has focused on our strategic priority of improving student achievement.

How did the ABC labor-management partnership get started and what does it look like? What structures are in place to sustain this collaborative model? In 2012, "The ABC's of Partnership: Creating a Labor-Management Partnership Focused on Student Achievement" was published by the American Federation of Teachers and ABC Unified, and supported by the AFT Innovation Fund. Ten elements were identified to help others understand how we achieved the partnership that exists today in ABCUSD, and to encourage others to develop their own unique partnerships in the existing system.

Element 1: Developing an interest in partnership

ABC Unified School District comprises 21,000 K-12 students in 30 schools serving the cities of Artesia, Cerritos and Hawaiian Gardens as well as parts of Lakewood, Long Beach and Norwalk. More than 51 percent of the students are from low-income families, with 92 percent representing different ethnic groups.

In the case of ABCUSD, the interest in forming a partnership grew out of an eight-day teacher strike in 1993 after reaching an impasse in contract negotiations. Shortly after the strike a new superintendent was hired. The president of ABC Federation of Teachers worked with the new superintendent to move forward differently, and a new era of collaboration began to take shape. Since then, the partnership has been built upon and sustained through multiple superintendents and different union leadership.

Although I have been involved with the development of the collaboration since 1999,

I am the third superintendent in ABCUSD to build on the labor-management partnership.

Element 2: Getting together and establishing guidelines

Many of the original features of the partnership remain today, including a weekly meeting between the superintendent and teacher's union president that started 15 years ago. These meetings are largely informal and typically without an agenda. We cover a wide range of topics, but largely we keep each other informed about what is happening in the district.

Guiding principles

A set of guiding principles and behaviors were developed in 1999 that helped to communicate to the Board of Education and the district's labor and management team how we were going to partner to improve student achievement. These principles are critical to our long-term success:

• All students can succeed and we will not accept any excuse that prevents that from happening in ABC. We will work together to promote student success.

• All needed support will be made available to schools to ensure every student succeeds. We will work together to ensure that happens.

• The top five percent of teachers in our profession should teach our students.

• All employees contribute to student success.

• All negotiations support conditions that sustain successful teaching and student learning. This is the "main thing."

• We won't let each other fail.

Guiding behaviors

The guiding behaviors of the partnership are as follows:

• We will work hard to understand the core of each other's job.

• We will respect each other.

• We will be honest with each other.

• We will not "sugar coat" difficult issues.

• We will disagree without being disagreeable.

• We will reflect on each other's comments, suggestions and concerns.

• We will seek clarification until we understand.

• We will maintain confidentiality.

• We will both "own the contract."

• We will laugh at ourselves and with each other.

Element 3: Making student achievement a priority

The labor-management partnership in ABCUSD identified raising student achievement as our highest priority. In 1999, in our first project together, we worked toward finding more instructional support to help struggling readers in six schools (four el-

> All negotiations support conditions that sustain successful teaching and student learning. This is the "main thing." We won't let each other fail. We also work hard to understand the core of each other's job, and respect each other.

ementary schools, one middle school and one high school) in the southern end of the district.

The first jointly sponsored professional development was with these six schools that we called the Southside Schools Reading Collaborative. This collaborative allowed teachers and administrators to meet in vertical teams across grade levels to better

connect the reading curriculum and assessments in the different grade spans.

Since the effort began, all the schools experienced growth in student achievement. The high school (Artesia HS) was named a California Distinguished School in 2013 and the middle school (Fedde MS) was recently selected as a 2015 Schools to Watch and National Model Middle School.

■ Element 4: Creating an infrastructure

Communication and collaboration meetings with labor and management teams occur at every level in the district organization. Each Cabinet member representing academic services, human resources, business services, information and technology, and school services meets regularly with a union leader from ABCFT. At the school level, principals meet regularly with the union site representatives.

Since 2001, the district holds an annual PAL (Partnership with Administration and Labor) retreat in October with all the princi-

pals and their site union representatives. The retreat also includes members of the Cabinet, district leaders, the Board of Education and our classified labor leaders. A PAL committee made up of district and ABCFT leaders creates the agenda for the PAL retreat.

Each year, the superintendent's Cabinet also meets with the ABCFT Executive Board for a retreat. The joint retreat is designed to review upcoming changes in the district that may affect teachers, and to look for other opportunities to collaborate.

■ Element 5: Confronting issues together

In addition to the regular meetings held throughout the year, other structures are in place to help with solving problems together. The PROPS (Proactive Problem Solving) Committee was developed with the special education department and special education teachers to discuss emerging issues that can be solved together.

District leaders and many school teams have participated in the training provided by AFT's Center for School Improvement to learn about best practices in team building. The district and labor leaders meet regularly each year regarding the state's budget. We attend budget meetings together and share the latest budget information with all the executive board members representing labor and management.

This transparency and honesty has helped

to build support for the partnership among all employees. Confronting the budget challenges together in the past five years has allowed us all to be problem solvers and has resulted in no layoffs.

■ Element 6: Building partnerships at the school level

In 2009 we were awarded an AFT Innovation Fund that expanded the partnership at the school level. Over the years, the joint district-union Innovation Fund of more than $400,000 supported creative ideas to improve student learning and the teaching environment through collaboration between school leaders and teachers.
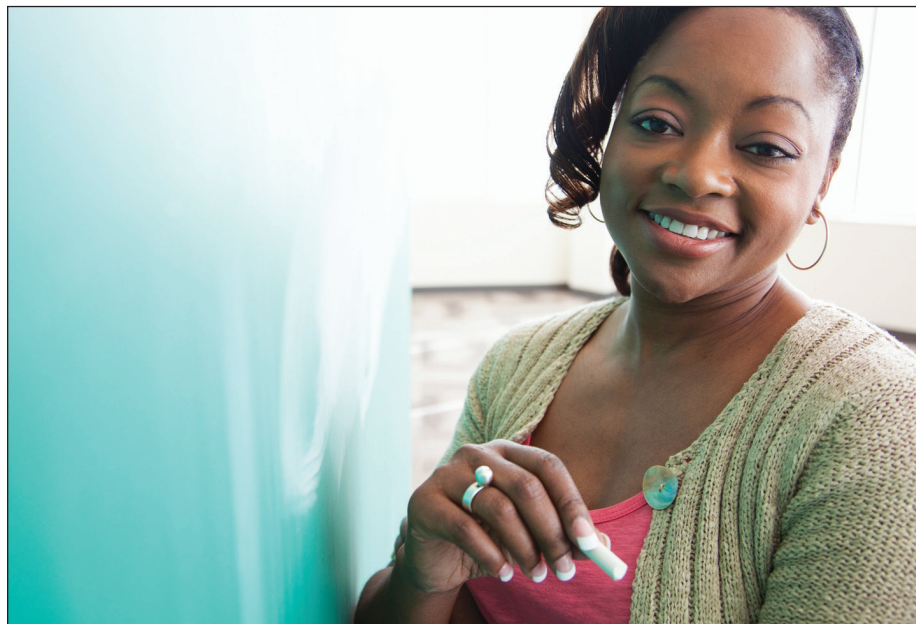
The Innovation Funds were successful at fostering collaboration and opening new lines of communication in the schools, and provided seed money to create a special project together. Some of the programs created by the Innovation Funds became signature practices that led schools to be designated as California Distinguished Schools.

■ Element 7: Handling conflicts and challenges

When challenges arise with a teacher or school employee struggling on the job, the Peer Assistance and Support System is available to provide support. Members of my Cabinet are alerted by key union leaders to emerging issues that may affect the classroom. Shifts in the Common Core State Standards have provided opportunities for our Academic Services Department to disseminate joint newsletters with ABCFT regarding the changes in curriculum and instruction.

A joint "advance partnership" meeting was held with principals and the union site representatives before school started to go over all the changes coming during the school year. More than 144 teachers have been on the Common Core Study Teams for the past several years to develop and review instructional units when none were available. Teacher leaders and administrators present jointly at board meetings and parent meetings, speaking with one voice.

Having a positive labor-management partnership does not mean that we've eliminated conflicts or differing points of view. It

highlights the importance of teacher voice and leadership in the implementation process of new initiatives.

■ Element 8: Collecting data on your partnership

In 2009, a PAL Committee made up of three administrators and three teachers convened to create a new survey to be administered each year to all teachers in the district. The climate survey helps to assess the partnership efforts at the school and district level. It focuses on six areas: schoolwide culture, professional development, resources, communication, data and the partnership.

In 2014, Saul Rubinstein and John McCarthy of the School of Management and

The research builds a strong case for efforts to expand collaborative partnerships as a vehicle for school improvement reform that can impact student performance.

Labor Relations at Rutgers University released their research regarding ABCUSD's partnership efforts. They examined the patterns of collaboration that occur within schools among teachers and administrators and looked to see if and how that collaboration affected student performance.

The researchers used the PAL survey results, data from the California API and social network analysis. Social network analysis explores what teachers and administrators communicate about on a regular basis, how they communicate, and what topics they discuss.

They used the 2011 survey data on the quality of school partnerships and analyzed those data against 2011 and 2012 student performance data. They were able to examine the relationship between the strength of the partnership and both the level of API performance in 2012 and the difference in student performance level of API between 2011 and 2012. Their research concluded the following:

• The quality of formal partnerships be-

tween teachers' unions, administrators and teachers at the school level had an important and significant positive impact on student performance as well as performance improvement, even after controlling for poverty.

• High quality teacher-administrator partnerships predicted "denser" school-level collaboration and communication around student performance data; curriculum development; sharing, advising or learning about instructional practices; and giving or receiving mentoring.

• Strong partnership schools have structurally different patterns of union-management collaboration. The strength of partnerships predicted different communication patterns between union site representatives and principals. Communication in high partnership schools was more frequent and less formal.

Their research builds a strong case for efforts to expand collaborative partnerships as a vehicle for school improvement reform that can impact student performance.

■ Element 9: Celebrating success and planning for the future

Each year at the annual PAL retreat, district leaders and labor leaders not only work on serious issues confronting us, such as the Common Core State Standards, but also recognize the hard work all our educators do every day in the schools. We celebrate our successes as a district together, and have fun laughing with each other.

Since 2010, we have coordinated and hosted the West Coast Labor Management Institute, held the day before the PAL Retreat in October. The Institute provides an opportunity for other district teams from around the country to join us and network together to learn from each other. By sharing our experiences, we have been fortunate to see other districts thrive in their partnership efforts. It's been exciting to watch and learn from the new partnerships that have been fostered around us.

In 2012, California School Employees Association leaders worked with us to create the PAL2 partnership with classified employees. CSEA leaders have participated

Three practical ways to partner with your local emergency responders

By Joe Viramontez
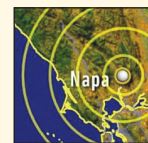
Last August 24 at 3:20 a.m. a 6.0-magnitude earthquake struck Northern California. The region affected is well known for its wine – the Napa Valley. Now it's also known for the largest earthquake in Northern California since the Loma Prieta Quake of 1989.

What if the quake had happened on a weekday instead of a weekend? What if the quake had happened at a time when parents were at work while kids were at school? What if the quake was so large that emergency responders were inundated with numerous events while schools had to fend for themselves? Unfortunately, this could be a very real situation.

Fortunately, there are some things that schools can do to properly prepare for the next big disaster. Following are three practical ways schools can partner with emergency responders so sustainability is not only maintained at a school site, but also thrives.

1. Preparation

You've heard it said many times, "A good offense is a good defense." In this case, it's never truer. Schools today have to prepare to defend and protect their staff and their children. One of the ways schools can do this is by developing a comprehensive safety plan that includes the Incident Command System (ICS). With the knowledge and practice of this system, a school can handle any situation that comes up.

Because fire departments use the ICS system every single day, they are

Creating effective district labor-management partnerships

in the PAL retreats each year. The partnership with CSEA has provided opportunities for all secretaries, technicians, library clerks, student intervention assistants, para-educators, and other classified staff to expand their professional learning. A PAL2 committee made up of the director of human resources and classified union representatives work on the professional learning calendar for each year.

Element 10: Keeping it going

We know that a change in leadership can dramatically affect successful programs in place. A new superintendent, a union election or a school board election can change the dynamics of what has been built over the years.

In 2009, the ABC Board of Education approved a Charter Statement between the ABCFT Executive Board and the district stating the partnership's mission statement, guiding principles and guiding behaviors. Putting the partnership efforts in writing sent a strong message about the district's commitment to sustain this in the future.

The Charter Statement is an important step in preserving the relationships that have been built as well as communicating to future district and union leaders that the labor-management partnership is key to the successful operation of the district and growth in student achievement.

Unquestionably, cultivating labor-management partnerships is a lot of hard work and difficult to sustain. For me, it has been a positive alternative to the adversarial counterparts that exist in many school districts today. Growing research makes it clear that students and educators benefit greatly from strong partnerships between teachers and administrators. As we move forward with significant changes in the years ahead, a focus on strengthening labor-management partnerships must be part of any serious school improvement effort. ∎

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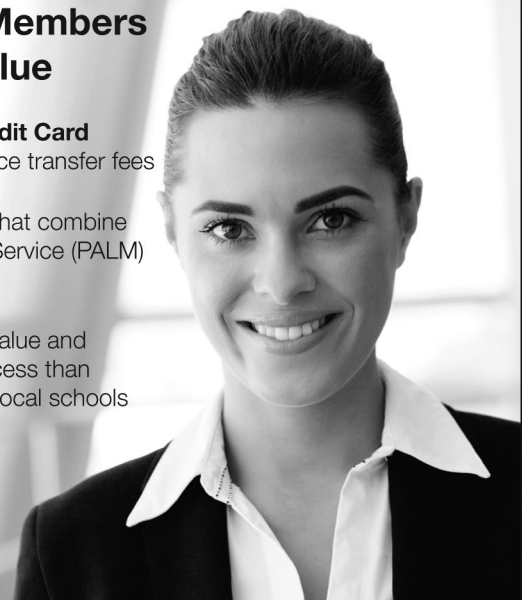
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> Growing research makes it clear that students and educators benefit greatly from strong partnerships between teachers and administrators. A focus on a strong labor-management partnership must be part of any serious school improvement effort.

Mary Sieu is superintendent of ABC Unified School District in Los Angeles County.

Excessive Stress Disrupts the Architecture of the Developing Brain

WORKING PAPER 3

Center on the Developing Child HARVARD UNIVERSITY

NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD

The Issue

THE FUTURE OF ANY SOCIETY DEPENDS ON ITS ABILITY TO FOSTER THE HEALTHY DEVELOPMENT OF the next generation. Extensive research on the biology of stress now shows that healthy development can be derailed by excessive or prolonged activation of stress response systems in the body and the brain, with damaging effects on learning, behavior, and health across the lifespan. Yet policies that affect young children generally do not address or even reflect awareness of the degree to which very early exposure to stressful experiences and environments can affect the architecture of the brain, the body's stress response systems, and a host of health outcomes later in life.

Learning how to cope with mild or moderate stress is an important part of healthy child development. When faced with novel or threatening situations, our bodies respond by increasing our heart rate, blood pressure, and stress hormones, such as cortisol. When a young child's stress response systems are activated in the context of supportive relationships with adults, these physiological effects are buffered and return to baseline levels. The result is the development of healthy stress response systems. However, if the stress response is extreme, long-lasting, and buffering relationships are unavailable to the child, the result can be toxic stress, leading to damaged, weakened bodily systems and brain architecture, with lifelong repercussions.

Not all stress is harmful. Stressful events can also be tolerable, or even beneficial, depending on how much of a bodily stress response they provoke and how long the response lasts. These aspects of the response, in turn, depend on the duration, intensity, and timing of the stressful experience, as well as its context, such as whether the experience is controllable, how often and for how long the body's stress system has been activated in the past, and whether the affected child has safe and dependable relationships to turn to for support. Because a child's ability to cope with stress in the early years has consequences for physical and mental health throughout life, understanding the nature and severity of different types of stress responses to early adverse experiences can help us make better judgments about the need for interventions that reduce the risk for later negative impacts.

Positive stress refers to moderate, short-lived stress responses, such as brief increases in heart rate or mild changes in the body's stress hormone levels. This kind of stress is a normal part of life, and learning to adjust to it is an essential feature of healthy development. Adverse events that provoke positive stress responses tend to be those that a child can learn to control and manage well with the support of caring adults, and which occur against the backdrop of generally safe, warm, and positive relationships. The challenges of meeting new people, dealing with frustration, entering a new child care setting,

> **Healthy development can be derailed by excessive or prolonged activation of stress response systems in the body and the brain.**

getting an immunization, or overcoming a fear of animals each can be positive stressors if a child has the support needed to develop a sense of mastery. This is an important part of the normal developmental process.

Tolerable stress refers to stress responses that have the potential to negatively affect the architecture of the developing brain but generally occur over limited time periods that allow for the brain to recover and thereby reverse potentially harmful effects. Tolerable stress responses may occur as a result of the death or serious illness of a loved one, a frightening accident, an acrimonious parental separation or divorce, persistent discrimination, or other serious events, but always in the context of ongoing, supportive relationships with adults. Indeed, the presence of supportive adults who create safe environments that help children learn to cope with and recover from major adverse experiences is one of the critical ingredients that make serious stressful events such as these tolerable. In some circumstances, tolerable stress can even have positive effects, but in the absence of

supportive relationships, it also can become toxic to the body's developing systems.

Toxic stress refers to strong, frequent, or prolonged activation of the body's stress management system. Stressful events that are chronic, uncontrollable, and/or experienced without children having access to support from caring adults tend to provoke these types of toxic stress responses. Studies indicate that toxic stress can have an adverse impact on brain architecture. In the extreme, such as in cases of severe, chronic abuse, especially during early, sensitive periods of brain development, the regions of the brain involved in fear, anxiety, and impulsive responses may overproduce neural connections while those regions dedicated to reasoning, planning, and behavioral control may produce fewer neural connections. Extreme exposure to toxic stress can change the stress system so that it responds at lower thresholds to events that might not be stressful to others, and, therefore, the stress response system activates more frequently and for longer periods than is necessary, like revving a car engine for hours every day. This wear and tear increases the risk of stress-related physical and mental illness later in life.[1]

What Science Tells Us

THE CAPACITY TO DEAL WITH STRESS IS controlled by a set of interrelated brain circuits and hormone systems that are specifically designed to respond adaptively to environmental challenges. When an individual is threatened, this system sends signals to the brain that trigger the production of brain chemicals, as well as stress hormones that are sent throughout the body and cue the brain to prepare the individual to respond adaptively to threat.

> **A poorly controlled response to stress can be damaging to health and well-being if activated too often or for too long.**

The neural circuits for dealing with stress are particularly malleable (or "plastic") during the fetal and early childhood periods. Early experiences shape how readily these circuits are activated and how well they can be contained and turned off. Toxic stress during this early period can affect developing brain circuits and hormonal systems in a way that leads to poorly controlled stress response systems that will be overly reactive or slow to shut down when faced with threats throughout the lifespan.[2,3] As a result, children may feel threatened by or respond impulsively to situations where no real threat exists, such as seeing anger or hostility in a facial expression that is actually neutral, or they may remain excessively anxious long after a threat has passed.

Well-functioning brain systems that respond to stress are essential to healthy development. The ability to cope with novel and/or potentially threatening situations, such as an unfamiliar environment or physical danger, is essential to survival. Equally essential is the body's ability to react to such things as lack of adequate nutrition, wounds, infections, and other threats or injuries. The capacity to react to both psychological and physical threats is built into specific brain circuits whose development is influenced by multiple experiences beginning early in life. However, like the immune system, a poorly controlled response to stress can be damaging to health and well-being if activated too often or for too long.[4]

Frequent or sustained activation of brain systems that respond to stress can lead to heightened vulnerability to a range of behavioral and physiological disorders over a lifetime. These undesirable outcomes can include a number of stress-related disorders affecting both mental health (e.g., depression, anxiety disorders, alcoholism, drug abuse) and physical health (e.g., cardiovascular disease, diabetes, stroke).[4]

Stress responses include activation of a variety of hormone and neurochemical systems throughout the body. Two hormonal systems have received extensive attention in this regard: (1) the sympathetic-adrenomedullary (SAM) system, which produces adrenaline in the central part of the adrenal gland, and (2) the hypothalamic-pituitary-adrenocortical (HPA) system, which

produces cortisol in the outer shell of the adrenal gland.[4] Both adrenaline and cortisol are produced under normal circumstances and help prepare the body for coping with stressors.

- **Adrenaline production occurs in response to many forms of acute stress.** It mobilizes energy stores and alters blood flow, thereby allowing the body to effectively deal with a range of stresses. Its release is essential to survival.[5]

- **Cortisol also is produced in response to many forms of stress, and likewise helps the brain and body cope effectively with adverse situations.** When it is released suddenly and turned off quickly, cortisol mobilizes energy stores, enhances certain types of memory, and activates immune responses. If the body fails to shut off the cortisol release or experiences chronic stress, longer-term effects can include suppression of immune function, other types of memory, and contributions to metabolic syndrome, bone mineral loss, and muscle atrophy.[5]

Sustained or frequent activation of the hormonal systems that respond to stress can have serious developmental consequences, some of which may last well past the time of stress exposure. When children experience toxic stress, their cortisol levels remain elevated for prolonged periods of time. Both animal and human studies show that long-term elevations in cortisol levels can alter the function of a number of neural systems, suppress the immune response, and even change the architecture of regions in the brain that are essential for learning and memory.[6,7]

SCIENTIFIC KNOWLEDGE ON THE EFFECTS OF stress comes from research on both humans and animals, creating a combined body of knowledge that is greater than would otherwise be possible. Specifically, research involving animals informs much of what we know about the effects of stress on the developing brain architecture, including the following:

Stress turns some specific genes "on" and others "off" at particular times and locations in the brain, and cortisol plays a key role.[8] Examples include regulation of the glucocorticoid receptor gene, which affects the long-term

responsiveness of the brain to stress-induced cortisol release, neurotrophic receptor genes that help to alter neuronal architecture, and the myelin basic protein gene, which is involved in regulating the development of the "insulation" on a nerve that increases the efficiency of signal transmission.[9,10,11] Thus, chronic stress can potentially affect the expression of genes that regulate the stress response across the life course.

Sustained activation of the stress response system can lead to impairments in learning, memory, and the ability to regulate certain stress responses. In both young and adult animals, high, sustained levels of cortisol or corticotropin-releasing hormone (CRH), which is the

> **Sustained activation of the stress response system can lead to impairments in learning, memory, and the ability to regulate certain stress responses.**

brain chemical that regulates the HPA system, result in damage to a part of the brain called the hippocampus. This area of the brain is critical to both learning and memory as well as to some types of stress response regulation.[12]

Significant maternal stress during pregnancy and poor maternal care during infancy both affect the developing stress system in young animals and alter genes that are involved in brain development. Pregnant female rodents who experience exceptionally high levels of stress have offspring that are more fearful and more reactive to stress themselves. Young animals that experience inattentive maternal care have similar problems and show impaired production of neural growth factors important for brain development and repair.[13,14] Both groups of animals also have impaired memory and learning abilities, and they experience more aging-related memory and cognitive deficits in adulthood.[4,15]

Positive experiences after infancy in young animals, such as being exposed to an environment rich in opportunities for exploration and social play, have been shown to compensate to some degree for the negative behavioral consequences

of prenatal stress and postnatal neglect. This compensation actually involves adaptive changes in both the architecture and the chemistry of the developing brain (such as reversal of the effects of mild adversity on stress hormone output). However, the brain is not infinitely plastic. Some stress-related changes (e.g., reduced glucocorticoid receptors in the hippocampus) are more resistant to reversal over time.[16]

Individual responses to early stressful experiences can vary dramatically. This variability is thought to be related to differences among animals in the expression of so-called "vulnerability genes," which make it more likely that early stressors will lead to subsequent problems in stress hormone regulation and behavioral

The relationships children have with their caregivers play critical roles in regulating stress hormone production during the early years of life.

difficulties. In such cases, positive early caregiving can decrease the likelihood of these adverse outcomes, demonstrating that beneficial environmental influences can moderate the impact of genetic vulnerability.[17]

Building on the animal research, studies of children living in adverse conditions are beginning to document a compelling story about the relation between early stress experiences and human development. The following findings appear to be particularly salient:

The relationships children have with their caregivers play critical roles in regulating stress hormone production during the early years of life. Those who experience the benefits of secure relationships have a more controlled stress hormone reaction when they are upset or frightened. This means that they are able to explore the world, meet challenges, and be frightened at times without sustaining the adverse neurological impacts of chronically elevated levels of hormones such as cortisol that increase reactivity of selected brain systems to stress and threat. In contrast, children whose relationships are

insecure or disorganized demonstrate higher stress hormone levels even when they are mildly frightened. This results in an increased incidence of elevated cortisol levels, which may alter the development of brain circuits in ways that make some children less capable of coping effectively with stress as they grow up.[3]

Research has shown that the presence of a sensitive and responsive caregiver can prevent elevations in cortisol among toddlers, even in children who tend to be temperamentally fearful or anxious.[18] Thus, sensitive and responsive caregiving from a parent or a child care provider can serve as a powerful buffer against stress hormone exposure, even in children who might otherwise be highly vulnerable to stress-system activation.

The quality of the early care and education that many young children receive in programs outside their homes also plays an important role in whether (and to what extent) their brains are exposed to elevated stress hormones early in life. Young children who spend significant amounts of time in poor-quality child care settings with large ratios of children to adults, less supportive relationships, and more harsh adult-child interactions show larger elevations than those in better quality care.[19] Young children who are temperamentally shy may be in particular need of highly supportive child care; one study has shown that when these children experience child care that elevates stress hormones, they develop more symptoms of emotional problems than do outgoing children.[20]

Children who grow up in conditions of economic hardship often exhibit elevated stress hormone levels. This is especially true for children who live in chronic situations of poverty and experience an accumulation of adverse conditions (e.g., overcrowding, noise, substandard housing, separation from parent(s), exposure to violence, family turmoil). Moreover, the impact of economic hardship on children's stress systems is often exacerbated when mothers experience symptoms of depression.[21,22,23] Recent research also has demonstrated that a mother's depression during her child's early years increases the child's cortisol reactions to adverse family conditions later in childhood. [24,25,26]

Young children who are neglected or abused have abnormal patterns of cortisol production that can last even after the child has been moved to a safe and loving home.[27,28] This is especially true for children who show symptoms of post-traumatic stress, even if their behavior is not sufficient to warrant a definitive diagnosis of post-traumatic stress disorder.[29,30,31]

Many maltreated children also have elevated blood pressure by adolescence and increased levels of inflammation in the blood by early adulthood, both of which increase the risk of cardiovascular disease. Intervening early to prevent maltreatment can reduce both stress hormone elevations and their associated disruptions of stress response systems.[32,33]

Addressing Common Misconceptions

AS THE PUBLIC´S INTEREST IN SCIENTIFIC information about the development of young children is stimulated by exciting new findings, the risk of exposure to misleading or, frankly, irresponsible messages grows. Within this context, it is essential that we distinguish scientific fact from popularly accepted fiction.

Science does not support the claim that infants and young children are too young to be affected by significant stresses that negatively affect their family and caregiving environments. To the contrary, human studies with infants and children as well as animal studies have shown that adverse early infant experiences (e.g., neglectful maternal care) and serious disruptions of the

prenatal environment (e.g., drug and alcohol exposure) can lead to short-term neurobehavioral and neurohormonal changes in offspring that may have long-term adverse effects on memory, learning, and behavior throughout life.[34]

Notwithstanding the preceding statement, there is no credible scientific evidence that supports the conclusion that all young children who have been exposed to significant early stresses will always develop stress-related disorders. In both animal and human studies, interventions that provide consistent, predictable, and nurturing care help to stimulate positive adaptation and prevent poor outcomes.[16,27,35]

The Science-Policy Gap

ALTHOUGH IT IS WELL KNOWN THAT MANY young children are exposed to significant adversity, the degree to which children's early experiences influence their biological responsiveness to later stress is not broadly understood. Evidence that stresses experienced by parents and other caregivers can affect a child's developing brain architecture and chemistry in a way that makes some children more susceptible to stress-related disorders later in life is also new information for most people.

A rich and growing scientific knowledge base illuminates the multiple adverse effects of early life stresses, including their long-term impacts on children's ability to learn, adapt, and cope with stress throughout their lives. Yet little

attention has been paid to the development and implementation of strategies to prevent or reduce significant stressors that affect children and families every day. This gap between what we know about the potentially harmful developmental impacts of adversities experienced by both caregivers and children, and what we do to promote healthy coping and adaptation through informal supports, voluntary workplace practices, and formal public policies and programs, is illustrated by the following examples:

Limited availability of family leave after the birth or adoption of a baby, and little financial support for parents who wish to stay at home with their newborns but do not have the economic resources to make ends meet in the absence of

Excessive Stress Disrupts the Architecture of the Developing Brain

paid employment. In some circumstances, this creates situations where the supportive relationships necessary to help very young children manage stress are intermittent or seriously compromised.[36,37,38,39]

Limited availability of convenient, affordable, high-quality early care and education, flexible scheduling options for jobs and health care, and community-based support for working parents at all income levels who are struggling to balance the demands and responsibilities of work and raising children. These balancing challenges are particularly difficult for low-income, working families whose economic security depends on multiple low-wage jobs, often during non-standard working hours, and for families whose children have chronic health problems or special developmental needs that require multiple medical appointments and specialized child care. In such circumstances, some young children are subjected to excessive stress that can have lasting effects on their health and well-being.[35]

Limited efforts to reduce high job turnover in child care programs, which affects the quality of relationships between adults and the children under their care. This is a particularly serious problem for those children whose family's socioeconomic circumstances limit their access to better-quality programs that have staffs that are well trained, adequately compensated, and more stable.[39,40,41,42]

Limited availability of expert help and promising interventions for parents and providers of early care and education who are struggling to manage behavioral difficulties in young children. Recent data on increases in the expulsion of children from preschool programs indicate the extent to which staff members are unable and/or unwilling to deal with challenging behavioral problems.[43] The growing "off-label" use of prescription drugs, particularly stimulant and anti-depressant medications, for increasingly younger children with emotional or behavioral difficulties is another sign of the extent to which parents are putting greater pressure on professionals to provide more help in managing behavior problems during the preschool years.[44]

Limited access to clinical expertise in mental health for very young children and their families. This is particularly problematic in child welfare agencies that are mandated to assess children who are coping with toxic stress that can have lasting adverse effects on their well-being. In this context, young children who experience debilitating anxiety and trauma as a result of abuse or neglect, or those who witness violence in their family or neighborhood, would derive substantial benefits from specialized treatment, beginning as early as possible.[45,46]

Implications for Policy and Practice

THE SCIENCE OF EARLY CHILDHOOD DEVELOPment, including knowledge about the impact of stress on the developing brain, supports a number of evidence-based implications for those who develop and implement policies that affect the health and well-being of young children.[47,48] To this end, both public policy and private-sector actions can prevent the kinds of adverse circumstances that are capable of derailing healthy development, as well as increase the likelihood that effective interventions will reduce potential damage to a young child's developing brain architecture and thereby promote greater resilience. The following six implications are particularly worthy of thoughtful consideration.

The scientific understanding of how children cope with stress should be used to strengthen a range of informal supports and formal services to bolster parents who are struggling to manage the challenges of raising their children. These could be provided through varying combinations of extended family support, community-based volunteer efforts, flexible workplace policies, and publicly funded programs.[49]

High-quality early care and education programs that provide stable, supportive relationships with caring adults should be more available to young children who are at risk of experiencing tolerable or toxic stress. Extensive research evidence

underscores the particular importance of higher-quality programs for young children who are temperamentally vulnerable to fear and anxiety. Assuring that a young child has reliable, safe, and engaging relationships both at home and in out-of-home care can buffer the effects of multiple stressors that may exist in his or her life.

Affordable expert assistance should be more available to parents, relatives, foster parents, teachers, physicians, caseworkers, and providers of early care and education who do not have sufficient knowledge and skills to help young children who exhibit symptoms related to abnormal stress responses. This is particularly important for children who exhibit excessive fears, aggressive behavior, or difficulties with attention and "hyperactivity."[39,45]

Existing intervention programs could better address the effects of toxic stress if they incorporate training and expertise in the identification of young children with serious, stress-related, mental health problems (as well as mothers with depression) and have ready access to expert assessment and mental health services as needed. Research indicates that young children can experience a range of mental health impairments that used to be viewed solely as adult problems, such as depression, anxiety disorders, and anti-social behaviors.[39] Pediatric practitioners must also be trained to understand and identify the signs of early adversity and toxic stress in childhood as a strategy to prevent adult diseases later in life.[50,51] All professionals who interact with children on a daily basis are best positioned to learn from—and inform—science-based strategies that prevent and address the impacts of toxic stress early in life.[50,52]

Responses to suspected child abuse or neglect should include an expert assessment of the child's developmental status, including cognitive, linguistic, emotional, and social competence. This could be accomplished through closer collaboration between child welfare services and early intervention programs for children with developmental delays or disabilities,[53] as mandated by the Keeping Children and Families Safe Act of 2003 and the more recent reauthorization of the Individuals with Disabilities Education Act (IDEA), or through Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit.

Because families experiencing poverty are likely to have greater exposure to stress and fewer resources to deal with adversity than the general population, adult-focused services in the Temporary Assistance for Needy Families (TANF) program should be augmented to include developmental screening assessments for their children. In this context, it is difficult to justify the extent to which public discussion about support for low-income parents focuses primarily on maternal employment and other adult behaviors, while the specific needs of the young children in these families are afforded relatively little attention. Our knowledge of the importance of supportive relationships as buffers against the adverse effects of stress on the architecture of the developing brain indicates the need for serious reconsideration of mandated employment for mothers of very young children, particularly when access to high-quality child care is not assured. Research also underscores the importance of timely assessments and intervention services (when indicated) for children living in stressful environments who show early signs of developmental difficulties.[54,55]

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The Science of Early Life Toxic Stress for Pediatric Practice and Advocacy

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abstract

Young children who experience toxic stress are at high risk for a number of health outcomes in adulthood, including cardiovascular disease, cancers, asthma, and depression. The American Academy of Pediatrics has recently called on pediatricians, informed by research from molecular biology, genomics, immunology, and neuroscience, to become leaders in science-based strategies to build strong foundations for children's life-long health. In this report, we provide an overview of the science of toxic stress. We summarize the development of the neuroendocrine-immune network, how its function is altered by early life adversity, and how these alterations then increase vulnerability to disease. The fact that early environments shape and calibrate the functioning of biological systems very early in life is both a cautionary tale about overlooking critical periods in development and reason for optimism about the promise of intervention. Even in the most extreme cases of adversity, well-timed changes to children's environments can improve outcomes. Pediatricians are in a unique position to contribute to the public discourse on health and social welfare by explaining how factors that seem distal to child health may be the key to some of the most intractable public health problems of our generation. We consider the challenges and opportunities for preventing toxic stress in the context of contemporary pediatric practice. *Pediatrics* 2013;131:319–327

In January 2012, the American Academy of Pediatrics (AAP) released a policy statement and accompanying technical report that detailed the role of early life "toxic stress" in shaping health across the life course.[1] Toxic stress is the extreme, frequent, or extended activation of the stress response, without the buffering presence of a supportive adult.[1,2] Risk factors for toxic stress in childhood include neglect and abuse, extreme poverty, family violence, substance abuse, and parental mental health problems.[1,2] Young children who experience toxic stress are at high risk for a multitude of health outcomes in adulthood ranging from cardiovascular and obstructive pulmonary disease to cancers, asthma, autoimmune disease, and depression.[3–8] Identifying the pathways by which early adverse experiences set in motion trajectories toward poor adult health is an area of intense scientific interest. To date, the evidence suggests that early adversity catalyzes a series of biological adaptations that change the way the brain, neuroendocrine stress response, and immune system function, both individually and cooperatively. Preventing toxic stress, however, entails an entirely different paradigm, with a focus not at the molecular level but at the level of family, society, and policy. The success of these prevention efforts depends, in part, on health professionals' ability to successfully make the case in the popular discourse that improving child health requires interventions that seem quite distal to health.

With this in mind, the AAP has called on pediatricians to become leaders in new science-based strategies designed to build strong foundations for life-long health.[9] To do this effectively, physicians must be familiar with a diverse body of evidence that draws on research from molecular and developmental biology, genomics, immunology, and neuroscience. In service of this goal, this report provides an overview of the biological pathways by which early life toxic stress shapes health. While many discussions of early adversity and health focus specifically on the impact on the developing brain, we take a broader view to consider how toxic stress shapes the development and calibration of the neuroendocrine-immune (NEI) network in the prenatal and early childhood periods. NEI functioning is at the heart of multiple goals of pediatric practice: addressing children's acute medical needs, preventing communicable diseases, and, increasingly, identifying and intervening at the family and population level to limit the effects of social determinants of adverse health. In this report, we begin by outlining the core concepts of biological adaptation to stressful circumstances, including plasticity and critical and sensitive periods. We then provide an overview of the development and functioning of the NEI network, and how toxic stress during the prenatal and early childhood periods disrupts these processes. Given that toxic stress is defined by the absence of supportive caregiving, we pay particular attention to the role of caregiving in building a healthy, well-modulated NEI network. Finally, we consider the challenges and opportunities for preventing toxic stress in the context of pediatric practice.

BIOLOGICAL EMBEDDING, PLASTICITY, AND CRITICAL AND SENSITIVE PERIODS

More than 2 centuries ago, poet William Wordsworth observed that "the child is father of the man."[10] Not until recently, however, has the scientific evidence accumulated to identify the mechanisms of this "biological embedding." Biological embedding is the process by which individuals' previous experiences and environments systematically alter their health and functioning across the life span.[11]

One of the foundations of individuals' ability to adapt to their environment is neural plasticity. Plasticity is the iterative process by which experience shapes the brain, allowing it to be exposed to new experiences, which, in turn, shape brain structure and function.[12] While the brain is plastic across the life span, critical and sensitive periods are "windows of opportunity" during which experiences and environments have a disproportionately large impact on development.[13] (The development of binocular vision in infancy is a common example of a critical period–dependent developmental process.[12]) Plasticity has been referred to as a "double-edged sword," because the brain can adapt to either positive or negative environmental stimuli.[12]

THE NEI NETWORK

It is virtually impossible to parse the impact of experience on the developing brain from its simultaneous impact on the stress response and immune systems. Also calibrated by early experience, this NEI network plays a critical part in physical, cognitive, and socioemotional development by sensing, interpreting and orchestrating the body's response to stress in the environment. The brain, endocrine, and immune systems share a common language of hormones, signaling molecules, receptors, and neurotransmitters, which facilitates communication across the network to maintain homeostatic balance[14,15] (Fig 1). In addition, through interactions with the brain and neuroendocrine system, immune insults affect not only immune competence but also the building blocks of brain development, including neurogenesis and neural signaling.[16]

TOXIC STRESS AND NEI DEVELOPMENT

Figure 2 summarizes how early life adversities, including lack of nurturance and social support, poverty, and trauma, are translated into health and developmental outcomes via the NEI
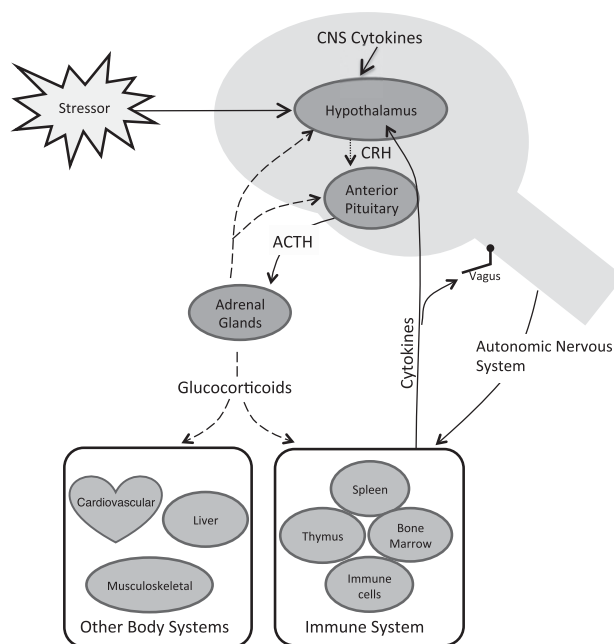
FIGURE 1
Relationship between the HPA axis, immune systems, and other body systems. Glucocorticoids are indicated by dashed lines, corticotropin-releasing hormone (CRH) by dotted lines, and cytokines by solid lines. ACTH, adrenocorticotropic hormone (ie, corticotropin); CNS, central nervous system.

network. Importantly, outcomes vary considerably among children exposed to similar environments, underscoring the role of resilience factors. In Fig 2, this variability is captured by individual moderators, including variability in genetic endowment, coping skills, and stage of development.

Before reviewing the science illustrated in Fig 2, by way of background, we provide a very brief overview of human immune system development in early life. (We refer the reader to Janeway[17] and Vedhara and Irwin[18] for additional reading.)

Immune System Overview

The immune system is sometimes called the "sixth sense" because of its ability to perceive and respond to the environment.[14] Consequently, the immune system demonstrates its own sort of plasticity in response to environmental stimuli. The immune system is designed to be deployed in stages. The body's first line of defense against disease, the innate immune response,

it is activated very quickly, often within minutes. It relies on physical barriers, such as the skin, as well as on phagocytic cells and enzymes.[18] A major component of innate immunity is the inflammatory response. After an immune threat has been eliminated, the immune system stops producing proinflammatory substances and inflammation subsides, protecting healthy cells and tissues. The innate immune response slows the progression of the immune insult until the second phase of the immune response, the acquired response, is deployed, if necessary.

Acquired immunity involves the activation of immune cells (ie, T and B lymphocytes) specific to the infecting agent; together, they result in the production of antibodies that bind to and neutralize or kill the antigen. Antigen-specific antibodies circulate in the bloodstream, making the immune response swift and efficient if the same antigen reinfects the body. To prevent the body from attacking itself, the

healthy immune system can differentiate "self" from "nonself" antigens; only nonself antigens activate the immune response.

LINKING THE BRAIN AND IMMUNE SYSTEM

Cytokines

Although the brain and immune system are physically segregated, cytokines are the chemical messengers that link them and they play a key role in regulating both innate and acquired immunity.[19] As such, they are essential to development, growth, and maintenance of most body tissues and organ systems.[20] In the face of an immune threat, the immune system produces proinflammatory cytokines to destroy it. Proinflammatory cytokines also act directly on the brain, leading to "sickness behavior" characterized by loss of appetite, fatigue, social withdrawal, depressed mood, irritability, and poor cognitive functioning.[21] Accumulating evidence suggests that cytokines also play a role in the pathophysiology of depressive disorders, behavioral dysregulation, and posttraumatic stress symptoms in adults and children.[22–27]

Hypothalamic-Pituitary-Adrenal Axis

Central to the mammalian response to threats in the environment is the hypothalamic-pituitary adrenal (HPA) axis. The HPA axis is responsible for managing metabolic and cardiovascular responses to acute and chronic stress, among other functions.[28] The HPA also plays an important role in the immune response.[29] Specifically, proinflammatory cytokines activate the HPA axis; in turn, cortisol from the HPA creates a negative feedback loop and extinguishes the HPA and the inflammatory response.[29,30] One of the primary consequences of early life toxic stress is HPA dysregulation, as the developing neuroendocrine system is
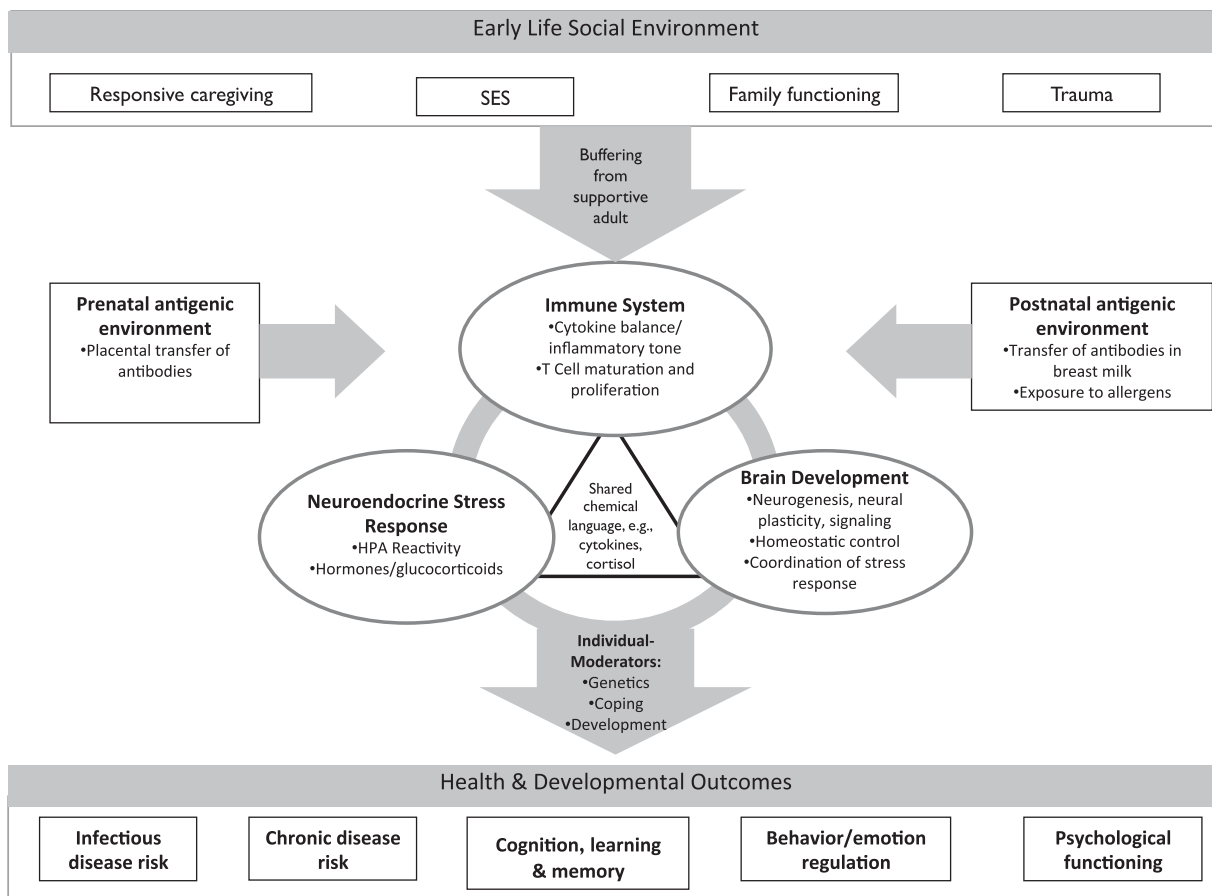
FIGURE 2
Mediating role of the NEI network in linking early life experiences to individual differences in health and functioning. SES, socioeconomic status.

chronically pressed into action.[31,32] Because of the close links between the 2 systems, HPA dysregulation has broad effects on immune and inflammatory processes.[29,30,33] Too much cortisol suppresses immunity and increases the chance of infection; too little cortisol and the inflammatory response persists after it is no longer needed.[30]

PRENATAL/PERINATAL INFLUENCES ON NEI NETWORK DEVELOPMENT

The majority of immune system development occurs before birth and in the first year of life, and environmental input during this period refines the immune response and calibrates its life-long functioning.[34] Coe and Lubach[35] argue that maturational processes amplify the impact of early

disruptions to immune development, akin to "changing the course of a rocket at the moment of take-off."[36]

Early Environments and Immune Development

Maternal mental health and psychosocial factors are important for the development of the child's immune system both before and after birth. Considerable evidence from animal models demonstrates that prenatal maternal distress undermines fetal immune development.[34,35] Chronic maternal prenatal stress and anxiety have been linked in both humans and animals to an altered cellular immune response at birth[37] and more illnesses and health complaints in newborns.[38]

Before birth, maternal, placental, and fetal cytokines interact to prevent re-

jection of the fetus by the mother's immune system. After birth, however, a series of changes must occur to allow for the healthy development of the infant's immune system. One of these essential changes is the polarization of the immune response to up-regulate T-helper 1 cellular immunity and down-regulate T-helper 2 cellular immunity.[39] A dominant T-helper 2 cell response early in life creates life-long immune hyperreactivity, including allergies and asthma.[39,40] Although animal models are abundant, studies of prenatal stress on cellular immune response in humans remain sparse. One study found that maternal prenatal poverty, life stress, and community violence were associated with alterations in their infants' innate and adaptive immunity, as measured in cord blood.[41]

Other studies have linked cumulative trauma in the mother's lifetime, even predating the pregnancy, to immunoglobulin E antibody levels in the neonatal period.[42]

After birth, maternal functioning continues to be a key risk factor for childhood toxic stress. In addition to adverse psychosocial environments, infants at risk for toxic stress are also more likely to encounter physical environments that increase the chance of immune hyperreactivity. For example, poor children are more likely to be exposed to secondhand smoke, mold, rodents, cockroaches, and dust mites.[43,44] Sensitization to these allergens is highly correlated with the development of allergic and atopic disease.[44] While some studies have suggested that sensitization to these allergens begins in utero,[45] most conclude that the critical period for allergic sensitization is between birth and age 8.[44,46,47]

EARLY CAREGIVING AND THE DEVELOPMENT OF THE NEI NETWORK

Humans are distinguished by their altriciality; that is, they need a caregiver in early life to survive. During the fetal period, humans grow rapidly; gestation is shortened to allow the head to be delivered through the birth canal. We emerge from the womb more immature than virtually any other similar-sized species.[48,49] The parent–child relationship is therefore "evolutionarily expected" as the context for a major part of postnatal maturation.[36] In the absence of this expected parent–child bond, children must make adaptations that allow them to survive. These adaptations are essential in the short term, but they carry long-term costs by limiting an individual's ability to cope with new demands are they mature.[50,51]

Evidence of the ways in which humans adapt to their caregiving environments

is evident in virtually every biological process, including at the level of gene expression[51] Research in the field of epigenetics has demonstrated that genes work together reciprocally, over time and across development, with cellular, familial, and even sociopolitical environments. Epigenetic changes control how genes are turned on or off and how proteins are transcribed, without altering the underlying DNA sequence. The genetic code can be thought of as the hardware of a computer and the epigenetic code as the software.[52,53] The software, which can constantly be rewritten, determines how the computer works.[52] The family environment, particularly early caregiving, has emerged as a particularly critical context for epigenetic regulation of the human stress response.

Epigenetic Regulation by Caregiving

Animal models demonstrate that interactions with parents early in life program enduring aspects of HPA functioning. In rodents, naturally occurring variations in maternal care (demonstrated by levels of licking and grooming) are related to individual differences in HPA reactivity of their offspring. As adults, offspring born to high nurturing mothers demonstrate a well-regulated, modest HPA response, whereas those born to low nurturing mothers exhibit exaggerated HPA responses to stress.[53–56] These group differences are due to differential expression of the glucocorticoid receptor in the brain, which is regulated epigenetically by caregiving.[56,57] Encouragingly, however, when offspring born to low nurturing mothers are raised by high nurturing mothers, these animals develop the same well-regulated HPA response as the genetic offspring of high nurturing mothers[54,58] In humans, several studies have documented similar HPA programming effects due to lack

of caregiving among children raised in institutional care.[32,59,60]

Caregiving and Immune Function

Early caregiving also plays a pivotal role in the maturation of immunity.[36,61] Reflecting the broader theme of altriciality discussed earlier, human immune development is premised on the expectation of consistent and positive mother–child interaction in the first weeks and months of life.[35] For example, while some components of immunity (eg, immunoglobulin G antibodies) are transferred across the placenta, the organism expects some aspects of immunity to be provided by the mother after birth in breast milk (eg, secretory immunoglobulin A antibodies, lactoferrin).[35,62] Young children cared for by individuals who are available and responsive to their emotional and material needs develop immune systems that are better equipped to deal with initial exposures to infections and to keep dormant infections in check over time.[63,64]

Animal Models

In primate models, infants who experience disruptions in caregiving show poorer immunity and resistance to disease over the long term.[61,65] For example, primates raised by humans in nurseries rather than by their mothers have impaired thymic development, which negatively affects immune function.[66] In seminal studies, Coe and colleague[64] investigated why nursery-raised monkeys showed higher levels of blood lymphocytes than those raised by their mothers; they had expected that the stress of inadequate caregiving would *dampen* the monkeys' immune response. They assessed the monkeys every 6 months from birth to age 2.[67,68] Not only did lymphocytes proliferate in nursery-reared monkeys, but these monkeys also had different lymphocyte profiles.

Mother-reared monkeys showed similar levels of CD4^{+} "helper" T cells, which facilitate immune reactions, and CD8^{+} "killer" T cells that destroy infected cells. In contrast, among nursery-reared monkeys, there were proportionately fewer CD8^{+} killer T cells, resulting in poorer immune competence (Fig 3). At 1 year of age, all of the monkeys were rehoused to identical living conditions consisting of small groups along with a supportive adult. Nonetheless, the immune differences between the nursery- and mother-reared groups persisted, highlighting the formative role of early caregiving in immune competence.[67]

Human Studies

In humans, there is similar empirical evidence that inadequate caregiving and nurturance very early in life have long-term and even permanent effects on immune and inflammatory responses.[63,68–71] For example, 56% of children raised in Romanian orphanages were found to have antibody to herpes simplex virus and a bacterium associated with meningitis (*Haemophilus influenzae*), compared with only 5% of same-age noninstitutionalized children, which suggests that institutionalized children's immune systems were less competent at keeping the illnesses dormant.[36] Another study compared adolescents raised in orphanages as young children but subsequently adopted into stable homes with adolescents with recent histories of maltreatment and family disruption[63] The 2 groups showed similar inability to keep the herpes simplex virus dormant, despite the fact that the adopted children had experienced significant periods of protective family environments.

Human studies also illustrate that disruptions to caregiver attachment early in life alter neuroimmune processes by sensitizing proinflammatory pathways.[72,73] Children exposed to risk factors for toxic stress, including poverty, intimate partner violence, and community violence, are more likely to develop or report asthma; asthma has a known inflammatory/stress component.[74–78] Similarly, HPA/immune links are increasingly implicated in metabolic syndrome.[4] Chronic elevations in cortisol are linked to hypertension, insulin resistance, obesity, type 2 diabetes, and cardiovascular disease.[4,15] As adults, children maltreated during childhood are more likely to have elevated inflammatory markers (eg, C-reactive protein) and greater inflammatory response to stress.[70,79] Encouragingly, however, there is evidence that early maternal nurturance is sufficient to buffer children raised in poverty against the risk of metabolic syndrome in midlife.[73] This suggests that ensuring that every child has a stable source of adult nurturance can foster resilience to a number of common disease outcomes in adulthood by transforming toxic stress into "tolerable" stress.

CONCLUSIONS

In this report, we have provided an overview of the development of the NEI network, how its function is altered by early life stress, and how these adaptations then increase vulnerability to a large number of immune and endocrine system–related mental and physical health conditions. The AAP statement "Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health" calls for pediatricians to lead an "invigorated, science-based effort at transforming the way our society invests in the development of all children, particularly those who face significant adversity."[1] Becoming conversant in the science of toxic stress is the first step toward pediatricians assuming the mantle of scientist-advocate. However, the science of toxic stress draws heavily on research from genomics, neuroscience, molecular biology, and the basic health sciences, literature that falls outside the purview of the practicing physician. We suggest that just as there have been calls to translate basic research "from bench to bedside" in other domains of practice, research scientists outside of clinical practice should be mindful that the science of toxic stress must also be accessible to those who are providing care to vulnerable children and families.
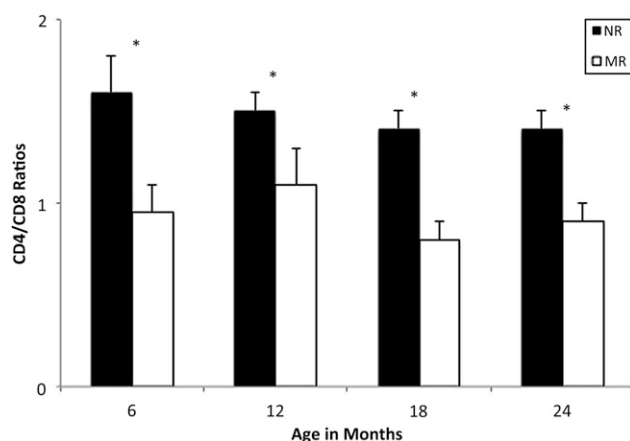

FIGURE 3
Ratios of CD4 and CD8 cells for mother-raised (MR) and nursery-raised (NR) monkeys over 2 years. Mean (+SE) of 2 or 3 samples per subject portrayed at 6-month intervals. NR monkeys had significantly higher ratios than MR monkeys at all ages (*$P < .05$). Reprinted from Lubach et al[67] with permission from Elsevier.

Pediatricians, in turn, can leverage their position of authority to educate the diverse community of stakeholders in child health (from families, to educators, policy makers, and insurers).

In one way, the science of toxic stress and the NEI network is a cautionary tale about the perils of failing to recognize critical periods in health risk. Perhaps more important, however, the science of toxic stress highlights extraordinary opportunities for improving lifelong health at the population level. In contrast to efforts such as immunization programs, which approach prevention one disease at a time, reducing toxic stress can target the common physiologic pathway implicated in an enormous array of health outcomes from asthma to cardiovascular disease. Within existing family-centered care models, pediatric providers are well positioned to identify distressed caregivers, to intervene on behalf of children without a source of stable responsive caregiving, and to advocate on behalf of systems, structures, and policies that support caregiving in young families. The AAP policy statement outlines a wide variety of specific steps that would help facilitate adopting the prevention of toxic stress as a core mission of pediatric practice.[1] These include efforts to change reimbursement strategies to incentivize activities, including screening for risk factors for toxic stress; linking families with the clinical, community, and social resources they need; and working collaboratively with these stakeholders to ensure the best outcomes for vulnerable children.[1]

The concept of plasticity, whereby environments shape developmental biology, and the resulting biological adaptations shape subsequent experiences, is the scientific basis for renewed optimism about the promise of intervention. Even in the most extreme cases of adversity, improving the quality of children's environments can change many, if not most, outcomes if carried out during critical and sensitive periods.[50,80–82] Pediatricians are in a position of authority to explore and explain how distal factors, such as neighborhood violence, housing and zoning policies, the availability and affordability of quality childcare, and funding for mental health services for parents of young children, may be the key to some of the most intractable public health problems of our generation. In making the case for preventing risk factors for toxic stress, pediatricians can help build bridges in the public discourse between childhood experiences and lifelong health.

ACKNOWLEDGMENTS

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	ELEMENT	METRIC	TARGET
SCHOOLWIDE	Physical and emotional safety for students and staff	High-need students receiving services	80% min
		Severe behavioral incidents	5% max
		Student and staff surveys: Sense of Physical Security (CSCI)	3.5 mean
		Student and staff surveys: Sense of Social-emotional Security (CSCI)	3.5 mean
	Strong relational trust, adult-to-adult	Staff surveys: Leadership (CSCI)	3.5 mean
		Staff surveys: Professional Relationships (CSCI)	3.5 mean
		% staff attendance at professional development	80%
	Belief in success and sense of belonging for adults and students	Severe chronic absenteeism	5% max
		District surveys: School culture	--
	Family and community engagement*	No metric(s) at this time; qualitative measures possible	--
	Academic capacity*	No metric(s) at this time; qualitative measures possible	--
CLASSROOMS	Calm, orderly, and predictable environment	CLASS ratings of climate and productivity	5.0 mean
	Highly-engaged students	CLASS ratings of engagement	5.0 mean
		CLASS ratings of instructional support	5.0 mean
		Student surveys: Emotional and behavioral engagement	3.0 mean
		Student surveys: Emotional and behavioral disaffection	3.0 mean
	Strong relational trust, adult-to-student	Student and staff surveys: Social Supports - Adults (CSCI)	3.5 mean
		CLASS ratings of emotional support	5.0 mean
STUDENTS	Student progress in self-regulation	Student surveys: Self-regulation, Schoolwork, Impulsivity (DSIS-C index)	3.5 mean
	Student progress in academic mindsets	District Survey: Student motivation [DC only]	**
	Student progress in social efficacy	Student surveys: Social efficacy with peers and adults	3.5 mean
	Strong relational trust, student-to-student	Student and staff surveys: Social Supports - Students (CSCI)	3.5 mean
	Academic recovery	Student math/reading growth percentile	50 mean
		Average gains in reading grade levels during year	50%

1   Turnaround's Staff Survey incorporates items from the Comprehensive School Climate Inventory (CSCI), a nationally-recognized and empirically-validated school climate survey that provides an in-depth profile of how students, parents, school personnel and community members perceive a school's particular climate for learning.

2   The Classroom Assessment Scoring System (CLASS) is a classroom observation protocol developed by University of Virginia researchers to assess classroom-level processes that are directly associated with children's performance. It assesses teacher-student interactions related to emotional support, classroom organization and instructional support.

3   Turnaround's Student Survey incorporates items from the DSIS-C, a domain-specific impulsivity scale developed by University of Pennsylvania researchers that assesses students by asking them about common and consequential behaviors nominated by children indicating lapses in self-control.

Turn Around

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ABOUT TURNAROUND FOR CHILDREN

Turnaround for Children is a nonprofit organization that partners with public schools to build safe, supportive and productive teaching and learning environments that are the foundation for strong academic performance and healthy student development.

Founded: 2002
President and CEO: Pamela Cantor, M.D.
Staff: 58
Headquarters: New York City
School partners to date: 87

2015-16 school year at-a-glance:
• 11 school partners
• 4,600 students
• 400 school staff
• 5 community-based mental health partners

Where We Work:

New York City
7 schools

Newark, N.J.
2 schools

Washington, D.C.
2 schools

SCAN TO LEARN MORE:

turnaroundusa.org   f fb.com/TurnaroundforChildren   🐦 @Turnaround   in linkd.in/tfcusa

HOW TURNAROUND WORKS:

STUDENTS

Turnaround builds a Student Support System that works in cooperation with schools and families to provide individualized services for the highest-need students, either in school or in partnership with a community mental health provider.

TEACHERS

Turnaround provides professional development for teachers and school staff in classroom management and instructional strategies that create safe, engaged and productive classrooms.

SCHOOL LEADERS

Turnaround partners with school leaders to implement a school-wide improvement plan that puts positive disciplinary practices in place and fosters a culture of high expectations for student achievement.

GOALS

TURNAROUND WORKS WITH SCHOOLS TO:

REDUCE STRESS AND INCREASE READINESS TO LEARN

PROMOTE STUDENT GROWTH IN ATTRIBUTES SHARED BY ALL SUCCESSFUL LEARNERS

BUILD THE FOUNDATION FOR ACADEMIC IMPROVEMENT & HEALTHY STUDENT DEVELOPMENT

Turn Around

PARTNERS IN SCHOOL TRANSFORMATION™

HELPING SCHOOLS FULFILL THE PROMISE OF PUBLIC EDUCATION FOR ALL CHILDREN

BUILDING BLOCKS FOR LEARNING

Turnaround for Children's *Building Blocks for Learning* is a framework for the development of skills children need for success in school and beyond. Each element represents a set of evidence-based skills and dispositions that have been proven by research to strongly correlate to, and even predict, academic achievement. The framework describes how these skills are acquired and built over time, as well as how they progress from lower-order to higher-order developmental stages. In some cases, where evidence exists, it demonstrates the interdependence of these skills to one another. Overall, it provides a rigorous perspective on what it means to teach the whole child intentionally – to develop the social, emotional, motivational and cognitive skills in every learner.

Independence and Sustainability	Self-Direction	Curiosity	Civic Identity
Perseverance	Resilience	Agency	Academic Tenacity
Beliefs about Self and School	Growth Mindset / Self-Efficacy	Sense of Belonging	Relevance of School
School Readiness	Self-Awareness	Social Awareness/ Relationship Skills	Executive Functions
Healthy Development	Attachment	Stress Management	Self-Regulation

GUIDING PRINCIPLES FOR SELECTION OF BUILDING BLOCKS FOR LEARNING:

1. Alignment to the development of the child as a learner in an educational setting
2. A measurable and malleable skill, behavior or belief – differentiating between fixed personality/ character traits and teachable learner attributes
3. A research base demonstrating the impact of the skill, behavior or belief on academic achievement

NEWS

Schools Enlist Parents to Bridge Cultural Barriers

By Caralee Adams | Education Week   Oct. 27, 2015

Jeremy Gabrieo and his daughter Gabriel River browse at the book fair at Mt. Rainier Elementary School in Maryland. Earlier, Gabrieo attended a breakfast and lecture for the Men of Mt. Rainier, a group made up of the parents and guardians of children at the school. The school has been working with a nonprofit to reach out to more parents. *Justin T. Gellerson for Education Week*

Maxine Nguyen used to think getting her four children to school and making sure they finished their homework was enough.

"From my culture, we usually leave it to the teachers to deal with education," said Nguyen, of Kent, Wash., who came from South Vietnam at age 4 as a refugee and had painful memories of being treated differently by teachers because of her ethnicity.

But her attitude changed once she got to know teachers, administrators, and other parents though a process in which her local school district was redesigning strategies to engage parents. Nguyen said she began to see teachers as fellow human beings who were approachable. The experience made her feel more confident asking questions, allowed her to better understand what was happening in her children's classrooms, and prompted her to volunteer at the school.

Increasingly, schools are working to bridge the cultural differences to get families engaged more deeply in their children's education. This means welcoming families, visiting their homes, listening to their experiences, and explaining the educational system so that families can recognize when biases are hurting their children's learning and work to overcome them.

"Teachers go into the classroom and they are confronted with kids who are a rainbow of colors and backgrounds, and [teachers] are just woefully underprepared," said Anne T. Henderson, a senior consultant for the Community Organizing and Engagement program at the Annenberg Institute for School Reform. "I'm convinced the inequitable practice of engaging families is very much behind the disparate outcomes that we see for our more-vulnerable children."

Not Out to 'Fix Parents'

Henderson said that instead of traditional, one-way activities that aim to "fix parents," such as lecturing parents at Back-to-School Nights, schools need to reach out to families and help them navigate schools. "Parents know when a school looks down on them," she said.

Complete Series: Beyond Bias ... read more

The key is to change the relationship from one of distrust to one of respect and collaboration. "We are moving from thinking of parents as the problem to parents as partners," said Henderson, a co-author of the 2007 book *Beyond the Bake Sale*.

Take Mt. Rainier Elementary School in Maryland, composed mostly of Hispanic and African-American students, about half of whom are English-language learners. Principal Shawn Hintz wanted to do more than hold a social event, such as the annual barbecue, to engage families in the education of their children and the decisions of the school.

In partnership with Teaching for Change, a nonprofit that helps schools and parents build positive connections, Mt. Rainier last year invited parents into the classroom, with translators who could help educators explain how lessons were taught so they could replicate the methods at home. Hintz also hosts regular parent-principal "chit-chats" where parents are encouraged to raise issues.

"Before, the parents would do a lot of talking amongst themselves," Hintz said. "Now they feel more empowered to come talk to me about their concerns."

Creating a Story Quilt

This year Mt. Rainier will begin a six-week story-quilt activity where parents are given different prompts (such as to talk about their first paycheck or a time when they got in trouble) and then share their experiences as they make a quilt together. They also discuss challenges in the school and begin to do some community organizing, finding power working in a collective.

"It's based on the idea that we build meaningful relationships by sharing our stories," said Allyson Criner Brown, an associate director of Teaching for Change, in Washington. Teachers and principals are also encouraged to take part. "We are trying to address the power dynamics in the room and looking for where there may be differences, and biases and structures that may be putting up barriers."

In the Central Falls, R.I., district, drop-in "family rooms" have been set up in schools to provide a warm, welcoming space, along with computers and a staff member who is bilingual to connect with parents before, during, and after school.

"With so many minority families, especially if they don't speak the language, there is this big wall in front of the school," said Joshua Wizer-Vecchi, the coordinator of a federal Investing in Innovation, or i3, grant through Children's Friend, a Providence nonprofit that works with the district on family engagement. "Maybe you had a terrible experience or feel that you don't have a place here. We have tried to break that down and say, 'No, no, come in.' "

Sometimes school staff members mistakenly believe parents are not interested in their children's educations because they don't show up at school events. But it can be a matter of tuning into what works for the school's diverse community.

"We are guilty of scheduling for a time that works for us," said Wizer-Vecchi, who has switched events to evenings to accommodate working families. The district also has also begun to replace pizza and pasta with rice, beans, and empanadas to appeal to Latino families.

Expanding Teacher Awareness

ly-engagement curriculum in collaboration with teachers, administrators, and researchers f of Washington. The process gave parents a chance to share their experience develop priorities for improving the school together with educators, said An assistant professor of education at the University of Washington in Seattle, work.

In turn, the process raised a level of awareness for these educators about ho and racial dynamics influence their ongoing interactions with children and fa

Go Back

**Building t
Relations**

May 14, 2008

the classroom, Ishimaru said.

Being part of the collaborative design team was "enlightening," said Teresa W
5th grade teacher who is white and works at Panther Lake Elementary Scho
has become increasingly diverse through influxes of refugees.

"It was interesting to hear what was most important to parents—it's not alw
as what seems important to staff," said Wocken-Linders.

For instance, parents were concerned about safety and wanted training on h
bullying. They also thought it was important that their children develop a po
within the school system, she said.

Wocken-Linders began to ask parents about their priorities going into confe
more of a shared agenda.

"As a teacher, I feel I have an increased awareness and respect for what pare
their child and the needs of their child," she said. Now she translates more of
correspondence with parents—into Spanish or Vietnamese, as needed—usin
"I'm trying to be more sensitive."

*Coverage of issues related to creating opportunities for all American studen
to choose a quality school is supported by a grant from the Walton Family Fo
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Volume 1, No. 2

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Advancing School Discipline Reform

BY GRETA COLOMBI AND DAVID OSHER

NASBE | National Association of State Boards of Education

Kicking kids out of school without looking at what is really going on with us just makes things worse. It's like saying, "We don't care about you. You are just a problem we want to get rid of." —Rosie

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ABOUT THE AUTHORS

Greta Colombi is senior researcher, health and social development program, and
David Osher is vice president and co-director of the health and social development
programs at American Institutes for Research in Washington, DC.

Advancing School Discipline Reform

By Greta Colombi and David Osher

During the past two decades, there has been an increase in exclusionary and punitive discipline in US schools. These disciplinary approaches have been discriminatory in their impacts and have failed to improve school safety. Although there is broad agreement that creating safe, orderly schools is critical to student success, there has not yet been an equally widespread shift toward instituting discipline practices that actually work.

Schools face challenges in engaging all students, including those with behavioral issues. While schools try to build the cognitive skills students need to participate in deeper learning, they also must focus on building interpersonal and intrapersonal skills as well. Failure to do so can have tremendous costs when students have experiences that place them at higher risk of failing academically, dropping out, and being drawn into the juvenile justice system. There are many such experiences: Some students respond to being pushed academically without sufficient support by becoming frustrated and acting out. Others may have experienced trauma, mental illnesses, or may lack social skills. The effort to manage troubling student behavior reactively and punitively often diverts valuable administrative time and contributes to teacher burnout (Byrne 1999; Public Agenda 2004; Kendziora and Osher 2009; Coggshall and Ott 2010).

Luckily, a growing body of evidence shows that changing discipline policies and practices can improve school climate and student achievement. Policymakers and practitioners have more guidance than ever before on how to engage students and prevent and address behavior problems in more positive ways.

This report focuses on how to address students' behavioral issues while enabling them to succeed. It describes current discipline practice—which is often reactive, punitive, and exclusionary—and its impact on students, achievement, and school climate. The report then reviews alternatives and shows what states can do to advance discipline reform. Each section includes questions that state boards can address in partnership with key stakeholders and using related resources. The appendix offers tools states can use in their effort to advance school discipline reform.

DEFINING SCHOOL DISCIPLINE

School discipline addresses schoolwide, classroom, and individual student behaviors—truancy, defiance, disruption, cheating, bullying, harassment, substance abuse, property damage, and violence, in particular—through broad prevention and targeted intervention. Schools take varied approaches to discipline. They may approach it positively via tiered, school climate improvements and restorative practices or punitively via office referrals, suspension, expulsion, and corporal punishment.

SCHOOL DISCIPLINE AND ACADEMIC ACHIEVEMENT

Students must feel emotionally and physically safe, connected, supported, challenged, engaged, and socially capable to succeed academically (see figure 1). Thus the way students experience discipline is a condition for learning. There is solid evidence that creating positive conditions for learning or school climate more broadly improves academic achievement (Osher et al. 2010; Osher et al. 2008, Devine and Cohen 2007; Bryk 2010; Bryk et al. 2009;

Furlong et al. 2003; Steinberg et al. 2011; O'Malley et al. 2012; Cohen et al. 2009; National School Climate Council 2009).

Approaches to discipline affect whether students feel connected, are engaged, and have opportunities to learn. Students' exclusion from school limits their opportunity to learn. Alternatively, when students have opportunities to learn, they are more likely to behave, perform well academically, and make academic gains (Brookover, Erickson, and McEvoy 1997; Brophy 1988; Brophy and Good 1986; Carter 1984; Cooley and Leinhardt 1980; Fisher et al. 1981; Reynolds and Walberg 1991; Stallings, Cory, Fairweather, and Needles 1978; Wang, Haertel, and Walberg 1997; Greenwood, Horton, and Utley 2002; Hattie 2002).

When school discipline practices are aligned with efforts to promote the conditions and opportunities to learn, academic achievement improves (Osher et al. 2014, WestEd 2013; Teske 2013b; Thapa et al. 2012; Niehaus et al. 2012; Shirley and Cornell 2012; Wang and Selman 2010; Osher et al. 2010; MacNeil et al. 2009; Freiberg and Lapoint 2006). For example, students can develop self-discipline, which supports their ability to avoid risky behavior, build strong relationships, focus and commit to learning, and cooperatively engage with classmates (Osher et al. 2010). Conversely, when school discipline does not promote the conditions for learning, it is a risk factor and is related to lower academic achievement (Skiba et al. 2003; APA Zero Tolerance Task Force 2008).

SCHOOL DISCIPLINE TRENDS

Several worrisome trends reflect the state of school discipline in the United States. A description of each follows.

Increasing Reliance on Exclusionary Discipline

US schools often rely on punitive and exclusionary forms of discipline—sanctions,

office referrals, corporal punishment, suspensions, and expulsions—that fail to improve safety and undermine attendance (Office for Civil Rights 2014; Losen and Martinez 2013; Raffaele Mendez and Knopff 2003). In the 2011–12 school year, approximately 3.5 million students received in-school suspension, 1.9 million students received a single out-of-school suspension, 1.55 million students received multiple out-of-school suspensions, and 130,000 students were expelled (Office for Civil Rights 2014). One analysis found that one in nine secondary students were suspended at least once and that the suspension rate for secondary students has nearly doubled since 1970 (Losen and Martinez 2013). Moreover, while there has been an increase in suspensions overall, the number of suspensions due to serious behaviors has remained steady. That suggests that the increase of suspensions represents higher rates of suspensions for minor infractions (Losen and Martinez 2013). Examples of questionable punishment for minor infractions, a reflection of this trend, are easily found in the news:

- A Tennessee elementary school student with a military style haircut was threatened with suspension because the school policy prohibited "Mohawk haircuts or

other extreme cuts."
- A Georgia high school student was suspended and later arrested for bringing ibuprofen to school.
- An 11-year-old Virginia boy was suspended for a year after his school found a leaf that looked like marijuana in his backpack, which ultimately was tested and proved to not be marijuana.

Disparities in How Discipline Is Applied

Students of color, particularly those who are black, Hispanic, and American Indian, disproportionately receive office referrals, are suspended, and are expelled more often compared with their peers (Office for Civil Rights 2014; Losen and Martinez 2013; Skiba et al. 2011; Losen and Skiba 2010; Brown and Di Tillio 2013; Vincent et al. 2013; National Clearinghouse on Supportive School Discipline 2013; Vincent et al. 2012; APA 2008; Arcia 2006; Raffaele Mendez and Knoff 2003; Advancement Project and Civil Rights Project 2000). For example, in 2006 there was a 34 percent gap between the risk of suspension for black female students and white male students in Milwaukee public schools (Losen and Skiba 2010). As suspensions doubled over the past few decades, the gap between the number of suspensions for white students

"Approaches to discipline affect whether students feel connected, are engaged, and have opportunities to learn."

and black students has increased at a higher rate. In the 1988–89 school year, black students were suspended at two times the rate of white students; in the 2009–10 school year, black students were suspended at four times the rate of white students (Losen et al. 2015).

Students with disabilities also disproportionately experience exclusionary discipline. The latest national data available, school year 2011–12, show that students with disabilities are twice as likely to be suspended as students without disabilities (Office for Civil Rights 2014). While students with disabilities who are served by the Individuals with Disabilities Education Act represent 12 percent of students enrolled, 58 percent of students who were placed in seclusion or involuntary confinement had disabilities, and 75 percent of students who were physically restrained at school to immobilize them or reduce their ability to move freely had disabilities (Office for Civil Rights 2014).

Suspension and expulsion rates vary district to district; they also vary for students with disabilities (Skiba et al. 2008). In 2009–10, while 5 percent of districts had suspension rates that were 25 percent or higher, 34 percent of districts had suspension rates that were 25 percent or higher for students with disabilities (Losen and Martinez 2013). When a student has a disability and is black, disciplinary disparities are further exacerbated. In 2008 alone, a number of states suspended 20 to 30 percent of their black students with disabilities, and three states suspended more than 30 percent of their black students with disabilities (Losen 2011; Losen and Martinez 2013).

[FIGURE 1]
Conditions for Learning Most Proximally Related to Positive Academic Outcomes

Students are safe
- Physically safe
- Emotionally and socially safe
- Treated fairly and equitably
- Avoid risky behaviors
- School is safe and orderly

Students are supported
- Meaningful connections to adults
- Strong bonds to school
- Positive peer relationships
- Effective and available support

Students are challenged
- High expectations
- Strong personal motivation
- School is connected to life goals
- Rigorous Academic opporunities

Students are socially capable
- Emotionally intelligent and culturally competent
- Responsible and persistent
- Cooperative team players
- Contribute to school community

There is also growing evidence that students who identify as lesbian, gay, bisexual, or transgender (LGBT) are disproportionately disciplined in school (Himmelstein and Bruckner 2011; Poteat and Russell 2013). In a nationally representative study, adolescents who identify as "nonheterosexual" had between a 1.25 and 3 times greater odds of being sanctioned in school compared with their heterosexual peers (Himmelstein and Bruckner 2011).

Though one might think that students disciplined at higher rates misbehave more, the disproportionality in discipline is in fact not rooted in disparate levels of student misbehavior (Skiba and Williams 2014). Rather, students of color, students with disabilities, and students who identify as LGBT appear to be punished more severely for the same offenses (Carter et al. 2014; Skiba and Rausch 2006; Finn and Servoss 2013; National Clearinghouse on Safe Supportive Discipline 2013; Bradshaw et al. 2010b; Losen 2011; Himmelstein and Bruckner 2011). The types of offenses that generate discipline also vary. For example, white students have been referred more often for offenses that are easier to document objectively, such as smoking, vandalism, and obscene language, while black students have been referred more for offenses that are subjective and at risk for bias, including showing disrespect, making threats, and loitering (Skiba et al. 2002).

The manner in which schools discipline also varies across schools and classrooms within districts (Skiba et al. 2002; Skiba and Rausch 2006; Wallace et al. 2008). One study found rates of suspension vary from less than 10 percent in some schools to more than 90 percent in others (Skiba and Rausch 2006). While it might seem reasonable that higher rates of suspensions and expulsions exist in schools with higher levels of poor behavior, upon a closer look, researchers have found that the rates of suspension and expulsion vary significant-ly independent of student behavior and school demographics (Losen and Martinez 2013). In other words, there are schools that share similar demographic characteristics but have different rates of suspension and expulsion. It turns out that suspension rates correlate more strongly with principals' attitudes toward the disciplinary process and nonbehavioral school characteristics (Losen and Skiba 2010; Skiba et al. 2003; Skiba et al. 2013).

Resources Redirected to Security

With increases in the incidence and national attention on school shootings, schools have increased their reliance on metal detectors, surveillance systems, and staffing school-based police officers (Osher et al. 2014). At the same time, fewer resources have been directed to support counselors, social workers, and psychologists in providing prevention and intervention services to students needing assistance. Yet the use of security equipment in schools does not necessarily make students feel safer, safety issues still arise in schools that have taken such measures, and disparities in the application of exclusionary discipline are more pronounced (Finn and Servoss 2013).

Increased Efforts to Advance Positive Approaches

Educators, researchers, government agencies, courts, advocates, and philanthropists have worked to assess school discipline practices, investigate alternatives, and make changes:

- In 2011, the US Departments of Education (ED) and Justice (DOJ) started the Supportive School Discipline Initiative (SSDI)—to promote safe, supportive learning environments while keeping students in school. Since its inception, SSDI has coordinated development of a School Discipline Guidance Package, which describes schools' obligations under federal law to administer student discipline without discriminating on the basis of race, color, or national origin;

recommendations to aid guide state- and locally controlled efforts to improve school climate and school discipline; partnered with researchers, philanthropic partners, and communities to develop products and host events; funded programs; and hosted a webinar series to share the latest research and practices.

- The Research-to-Practice Discipline Disparities Collaborative, a group of 26 nationally known researchers, educators, advocates, and policy analysts, began addressing the problem of disciplinary disparities in 2011. Some of the results of there research are published as briefs and can be found at http://rtpcollaborative.indiana.edu/briefing-papers/.

- In 2014 the Council of State Governments released the School Discipline Consensus Report (Council of State Governments 2014), a comprehensive set of consensus-based and field-driven strategies aimed at keeping students engaged in school and out of the juvenile justice system. It includes more than two dozen policies and 60 recommendations focused on keeping more students in

safe, supportive classrooms and out of courtrooms. The report is based on the work of 100 advisers from across the country, including policymakers, school administrators, teachers, behavioral health professionals, police, court leaders, probation officials, juvenile correctional leaders, parents, and youth. The report also includes numerous examples of promising practices.

• In 2014 the National School Leadership Summit on School Discipline and Climate drew education, judicial, and other community leaders from 22 jurisdictions together to plan strategies, policies, and programs to keep kids in school and out of court.

An increasing number of states, districts, and schools are advancing school discipline reforms with the support of judicial leadership, law enforcement, state and local school administrators, educators, youth, parents, and advocates (Council of State Governments 2014; see also box 1). Those reforms are typically leading to cross agency collaborations and positive approaches to addressing poor behavior (Council of State Governments 2014). The reforms rely heavily on specialized student supports, school-police partnerships, and collaborations among education, courts, law enforcement, juvenile justice, and health agencies that focus on analysis of disaggregated data, changed policies, and training. Despite persistent disparities, these communities are seeing reductions in suspensions and expulsions (Porowski et al. 2014).

EFFECTS OF PUNITIVE DISCIPLINE

Two things are driving efforts to advance school discipline reform. First, there is a strong desire to ensure that schools are safe. Second, many recognize that exclusionary and other punitive approaches simply do not work. Rather, punitive discipline has increasingly been used as a quick fix to what often is a chronic, long-term problem and in so doing has created more problems (Osher et al. 2010).

> "Disproportionality in discipline is in fact not rooted in disparate levels of student misbehavior."

Poor School Climate

One of the arguments for exclusionary school discipline has been that it would improve school climate: If students who misbehave are removed, the climate will be better for the rest of the students. However, researchers have found that such measures actually hurt school climate (Harvard University Civil Rights Project 2000; American Psychological Association 2008). And students and school staff reported that principals in schools with low suspension rates were more concerned with school climate than principals in schools with high suspension rates (Bickel and Qualls 1980). When schools rely on exclusionary discipline, they lose focus on the full spectrum of practices to strengthen school climate (Davis and Jordan 1994) and experience lower ratings in academic quality and school governance (Skiba and Rausch 2006). Conversely, when students are suspended and expelled, all students, whether they tend to misbehave or not, tend to feel less safe, are less likely to bond with teachers and other staff, and are less likely to get along with each other (American Psychological Association 2008; Steinberg et al. 2011; American Institutes for Research 2014).

Poor Behavior Not Deterred

One of the arguments for punitive and exclusionary school discipline has been that it would deter future poor behavior (Ewing 2000). Yet there is little evidence that suspending or expelling works as a deterrent (Raffaele Mendez 2003; American Academy of Pediatrics 2008; Fabelo et al. 2011). In fact, as schools increasingly implemented zero tolerance policies, suspensions and expulsions increased tremendously even as the incidence of violent crime in schools

decreased (Butts 2013). One close examination found that suspensions appeared to actually reward poor behavior among those suspended more frequently (Atkins et al. 2002). Further, and even more troubling, students who are out of school are more likely to be involved in physical fights or carry a weapon (American Academy of Pediatrics 2008).

Loss of Instructional Time

When students are suspended or expelled, they lose valuable instructional time, cannot benefit from class participation, are less likely to complete schoolwork, and are more likely to subsequently skip school. Scott and Barrett (2004) estimated that students who were suspended in an urban elementary school missed 462 hours of instruction during a single school year. In the 2009–10 school year alone, the latest year for which nationally representative information is available, students were suspended from school for five days or more 321,012 times (Robers et al. 2013). This translates to at least 10 million hours of missed school time, not including all the hours of missed instruction among students suspended for less than five days.

Poor Academic Achievement

Students who have been suspended and/or expelled earn lower grades and achieve lower levels of academic performance compared with their peers (Whisman and Hammer 2014; Skiba et al. 2003; Morrison and D'Incau 1997; Raffaele Mendez 2003). This is especially the case for students who have been suspended repeatedly (Davis and Jordan 1994; Arcia 2006). While one might argue that sociodemographic factors could explain this poor performance, researchers are finding that the more exclusionary discipline practices are applied, the worse students perform academically, even after controlling for poverty and other demographic factors (Davis and Jordan 1994; Raffaele Mendez 2003; Ma and Willms 2004; Skiba and Rausch 2006; Tobin et al. 1996; Wald and Losen 2003, Rausch and Skiba 2005; Fabelo et al. 2011; Skiba et al. 2013). In a statewide

study in Texas, Fabelo et al. (2011) found the likelihood of being forced to repeat a grade doubled when a student was suspended. Further, students who remain in schools that frequently suspend and expel fail to show improvements in academic achievement (Skiba, Arrendando, and Rausch 2014). Conversely, a number of jurisdictions that have lowered suspension rates have seen academic improvements (Porowski et al. 2014; Gonzales and Cairns 2011).

Higher Dropout Rates

Higher suspension rates are associated with higher dropout rates and lower graduation rates (Ekstrom et al. 1986; Wehlage and Rutter 1986; Raffaele Mendez 2003; Rumberger and Lim 2008; APA Zero Tolerance Task Force 2008; Lee et al. 2011; Boccanfuso and Kuhfeld 2011.) Balfanz et al. (2014) found that if a student is suspended just once in ninth grade, the likelihood of his dropping out doubles (16 percent for those not suspended compared with 32 percent for those suspended once). Such outcomes are probable because students who are repeatedly absent, for whatever reason, are more likely to struggle academically (Sundius and Farneth 2008). They have a harder time mastering reading, passing courses, and earning credits (Balfanz et al. 2014).

Greater Involvement with Juvenile Justice System

Higher suspension and expulsion rates are associated with students being arrested (in and out of school) and in contact with the juvenile justice system (Council on School Health 2003; Fabelo et al. 2011; Shollenberger 2013; Toldson, McGee, and Lemmons 2013). This is particularly the case for students who have been repeatedly disciplined (Aizer and Doyle 2013, Puzzanchera 2013, Fabelo et al. 2011, Carmichael et al. 2005). As the use of punitive discipline increased in schools and as police were placed on campus, increasing numbers of students have been arrested and referred to juvenile court for infractions once handled by school administrators (Wald and Losen 2003). In Clayton County, Georgia, for example, where zero-tolerance policies were implemented, there was a 2,000 percent increase in juvenile arrests on campus (Teske 2013a). When youth are out of school during school hours, they are significantly more likely than youth who are in school to become involved in physical fights; carry a weapon; and use alcohol, marijuana, and other drugs that could lead to arrest and incarceration (Centers for Disease Control 1994). A youth, once arrested, is at an even higher risk of a host of negative outcomes, including recidivism and unemployment (National Research Council 1995).

Discussion Questions
Together with key stakeholders, find answers to the following questions to assess whether your state follows these trends.

- What discipline data are collected in your state, districts, and schools?
- What do the discipline data tell you about your state, districts, and schools?
- What are the rates of suspension and expulsion?
- How have the rates changed over time?
- How do they compare according to student characteristic (race/ethnicity, disability status, LGBT identification, other)?
- How do they compare between districts and schools?
- What state policies address school discipline?
- To what extent are they punitive versus supportive? (Go to **https://safesupportivelearning.ed.gov/school-discipline-compendium** to find your state's discipline policies.)
- What kinds of school discipline policies do your districts and schools have? To what extent are they punitive versus supportive?

EFFORTS TO ADVANCE SCHOOL DISCIPLINE REFORM

A growing body of research is pointing researchers and practitioners toward implementing disciplinary alternatives that show promise in preventing and addressing problem behavior in school (Taylor-Greene et al. 1997; Muscott et al. 2004; Horner et al. 2005; Bradshaw et al. 2008; Human Impact Partners 2012; CSG 2014). The alternatives range from preventing

[BOX 2]

Greenville's Code of Conduct

One district that has revised its code of conduct is in Greenville, Mississippi. Parents and community advocates from Citizens for a Better Greenville partnered with a national organization, the Advancement Project, to help them reform discipline policy and practice. Advocates demonstrated to the community the impact punitive discipline was having on students and then worked with the district to revise its code of conduct. Modeled off the Baltimore, Maryland, code, the revised Greenville code was tailored by advocates, district officials, and school leaders to meet their community's needs. This effort led to a continued partnership focused on improving student outcomes.

Source: **www.dignityinschools.org/sites/default/files/Greenville_Matrix_Interventions_Responses(CBG,AP).pdf.** .

[BOX 3]

Lafayette's School Climate Plan

As part of the US Department of Education's Safe Supportive Schools grant program, Carencro High School in Lafayette, LA, implemented comprehensive school climate improvements that also improved discipline practices and led to greater academic achievement. Beginning in 2012, the school sought staff who believed that school climate was a priority, and it established a vision for reform to take place over three years. Using school climate data, the school extensively trained and supported staff, developed and maintained systems and supports for all students, implemented specific programs for freshmen, and provided targeted intensive counseling. In one year's time, the school saw impressive gains: a 50 percent improvement in freshmen passing math, out-of-school suspensions dropping by nearly 65 percent, and in-school suspensions dropping by 50 percent.

Source: **https://safesupportivelearning. ed.gov/events/webinar/ssd-webinar-se- ries-conditions-learning.**

poor student behavior via school climate improvement and prevention to developing or reforming policies and practices across systems that ensure expectations and consequences are clear, appropriate, and consistent. They often are research based, data driven, and involve collaboration among student support teams and other staff in school, and between systems.

What Educators Can Do

With support from state education agencies and districts, schools are adjusting policy and practice. Some are revising

codes of conduct; making school climate improvements; or implementing strategies, practices, and programs to address and prevent problem behavior. Some communities are addressing discipline in schools comprehensively via many strategies, while others are focused on implementing just one. Regardless, each relies on (1) using data to identify patterns of practice, including disparities, and using student and school information to focus approaches and (2) engaging stakeholders who have a vested interest in making change—staff, family, and students.

Revise Discipline Policies and Codes of Conduct

Some SEAs, districts, and schools have been adjusting their codes of conduct, focusing on breaking down categories of offenses to better track infractions. Revisions often include adjustments to the consequences of offenses. The best codes result when a diverse group of stakeholders and agencies come together to revise them and plan systems of support within the school, district, and community (box 2).

Related Resources
Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014b, pages 71-90), **http://csgjusticecenter.org/youth/school- discipline-consensus-report/.**

Dignity in Schools' Model Code, **http://www. dignityinschools.org/our-work/model-school- code.**

Dignity in Schools' sample revised codes of conduct, **http://www.dignityinschools.org/ category/tags/revised-code-conduct.**

Make School Climate Improvements

In the face of evidence that improving school discipline and climate more broadly improves academic achievement, SEAs, districts, and schools have sought to improve school climate (e.g., box 3). They have relied on school climate data—quantitative data from surveys, student information systems, and surveillance systems and qualitative data via interviews and focus groups—to identify appropriate strat-

egies, practices, and programs. As schools implement their plans, they use the same data to evaluate whether they are having a positive impact. Strategies tend to focus on improving safety, improving engagement, and fortifying the school environment via instructional and school discipline improvements. SEAs, districts, and schools often report reductions in suspensions and expulsions after making school climate improvements, whether they intended on making discipline reforms or not.

Related Resources
From the National Center on Safe Supportive Learning Environments, "School Climate Measurement," including a compendium of school climate surveys,

[BOX 4]

Cleveland's Three-Tiered Approach

Following an audit on the effectiveness of the health and human services it provided to students, the Cleveland Metropolitan School District partnered with the American Institutes for Research on revising policies and practices to reduce violence, improve school climate, and enhance behavioral interventions. Using a three-tiered approach, Cleveland schools instituted an early warning system, established student support teams, set up planning centers as an alternative to in-school suspensions, and implemented other evidence-based programs that required ongoing data collection, analysis, and professional development. Between the 2008–09 and 2010–11 school years, out-of-school suspensions decreased by nearly 60 percent and the incidence of offenses that could lead to suspensions decreased by nearly 50 percent.

Source: **http://www.clevelandmetroschools. org/Page/398.**

https://safesupportivelearning.ed.gov/topic-research/school-climate-measurement; and on school climate implementation, https://safesupportivelearning.ed.gov/topic-research/program-implementation.

Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014b, pages 23–108), http://csgjusticecenter.org/youth/school-discipline-consensus-report/.

Attendance Works, http://www.attendanceworks.org/.

National Clearinghouse for Supportive School Discipline, http://supportiveschooldiscipline.org/.

Implement Interventions Using a Multitiered Approach

Many SEAs, districts, and schools are implementing tiered interventions to prevent and address problem behavior, similar to the tiered public health approach, in which they differentiate how they handle behavior for all students, some students, and for a small group of students needing intensive interventions (e.g., box 4). A commonly applied framework for addressing school behavior in schools is the three-tiered Positive Behavioral Interventions and Support (PBIS) approach:

- **Tier 1: Schoolwide Improvements.** Implement strategies and programs in all settings and for all students to support prosocial skills and behavior and reduce new cases of problem behavior. Tier 1 interventions should be effective for 80 to 90 percent of a student body. Tier 1 strategies include setting and teaching behavioral expectations via cross-staff teams, reforming codes of conduct, encouraging and fostering caring relationships among staff and students, integrating social and emotional learning into academic programming, and rewarding positive behavior (e.g., students who have met behavioral expectations have lunch with the principal, help with morning announcements, or get special parking privileges).
- **Tier 2: Targeted Interventions.** Implement strategies and programs aimed at a small group of students exhibiting

early warning signs. Tier 2 interventions should meet the needs of 5 to 15 percent of the student body. Tier 2 strategies include early warning systems; evidence-based programs aligned with the issues and student strengths (e.g., Check and Connect, Cognitive Behavior Interventions for Trauma in Schools, Check-In/Check-Out, attendance phone calls). They can also include specialized social and emotional learning supports and restorative justice practices (e.g., community conferencing, peer juries).

- **Tier 3: Intensive Interventions.** Implement intensive strategies and programs to intensively intervene with troubled students. Tier 3 interventions sometimes rely on administering assessments to individual students and providing intensive assistance. Such interventions are designed to serve the 1 to 5 percent of students who struggle the most. Tier 3 strategies include intensive support via school psychologists, social workers, and other instructional support personnel; Check and Connect; Interactive Data Based Individualization (DBI) Process; Check-In/Check-Out; Coping Power Program; wraparound services; clinical mental health services; and restorative justice approaches.

This multitiered approach relies on student support teams working closely with staff, students, and family to share and use data as they plan, implement, and evaluate their approaches. Most schools have student support teams; those teams can plan tiered interventions, in addition to partnering with students, family, and community organizations.

Related Resources
The Technical Assistance Center on Positive Behavioral Interventions and Supports, https://www.pbis.org/.

National Center on Intensive Interventions, http://www.intensiveintervention.org/.

Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014b, pages 109–81): http://csgjusticecenter.org/youth/school-

discipline-consensus-report/.

"Social Emotional Learning," *From Policy to Practice* 1, no. 1 (Alexandria, VA: NASBE, October 2013), http://www.nasbe.org/wp-content/uploads/FPP-Social-Emotional-Learning.pdf.

National Resource Center for Mental Health Promotion and Violence Prevention, http://www.healthysafechildren.org/.

[BOX 5]

Restorative Practices in San Francisco Unified

San Francisco Unified School District in 2009 adopted a districtwide policy to train and support ongoing learning about restorative practices. The district developed and disseminated an implementation guide, and it built a community of practice with school site leaders via monthly meetings on practices such as community building, problem-solving circles, and conferencing. Between the 2009–10 and 2012–13 school years, the district saw suspensions decrease by a third.

Source: http://www.sfusd.edu/en/programs-and-services/restorative-practices.html.

Implement Restorative Practices

Districts and schools have also been implementing restorative practices, which schools can use to prevent and address conflict and poor behavior (e.g., box 5). These practices include restorative circles, family group conferences, social emotional learning, and affective questioning. Restorative practices focus on fostering healthy relationships among students and adults and a sense of community. Students who committed infractions take full responsibility for their behavior by understanding how their behavior affected others, recognizing that their behavior was harmful, repairing the harm, and working

[BOX 6]

Maryland's Reformed Discipline Policies

After a four-year collaboration, Maryland made substantial changes to its state discipline policies in January 2014. While the new regulations (13A.08.01.11, 13A.08.01.12, 13A.08.01.15, 13A.08.01.21) allow principals to suspend students, the harshest penalties are reserved for the most severe offenses, and discipline practices overall focus on rehabilitation. Maryland also added educational services for suspended students and created a new timeline for appeals. The Maryland State Department of Education has released implementation guidelines to help districts and schools update their codes of conduct so they are in alignment with the state policy.

Source: http://www.marylandpublicschools. org/nr/rdonlyres/42ed8eda-af34-4058- b275-031891 63882d/32853/schooldisciplin- eandacademicsuccessreportfinaljuly2.pdf.

Restorative%20Justice_implementation%20 guidelines.pdf.

Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014b, pages 79–83): file:///C:/Users/gcolombi/Downloads/ The_School_Discipline_Consensus_Report%20 (3).pdf.

"Social Emotional Learning," *From Policy to Practice* 1, no. 1 (Alexandria, VA: NASBE, October 2013), http://www.nasbe.org/wp-content/ uploads/FPP-Social-Emotional-Learning.pdf.

Supportive school discipline webinar: http:// safesupportivelearning.ed.gov/events/webinar/ stemming-school-prison-pipeline-applying- restorative-justice-principles-school.

National Clearinghouse on Supportive School Discipline, http://supportiveschooldiscipline.org/.

HOW CHILD-SERVING AGENCIES CAN COLLABORATE WITH EDUCATORS

Child-serving agencies should partner together to prevent and address poor school behavior. Students with more serious issues often require services that agencies outside school provide or that involve systems outside the educational system. Successful efforts have relied on educators partnering with health agencies, law enforcement, and juvenile justice.

Health Care Systems

Many students with discipline issues have behavioral health needs. While many schools do not provide mental health services, it is also the case that students have a greater chance of receiving mental health services when schools do provide them.

Sample Strategies
- Partner to assess the behavioral health needs of students.
- Evaluate and expand school capacity to serve the needs.
- Establish systems of care and community-based partnerships.

Related Resources
Krista Kutash et al., *School-Based Mental Health: An Empirical Guide for Decision Makers* (Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, 2006),

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http://rtckids.fmhi.usf.edu/rtcpubs/study04/ SBMHfull.pdf.

Education and Systems-of-Care Approaches: Solutions for Educators and School Mental Health Professionals (University of Maryland, Center for School Mental Health Analysis and Action, May 2007).

Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014b, pages 157–66), http://csgjusticecenter.org/youth/school- discipline-consensus-report/.

National Resource Center for Mental Health Promotion and Violence Prevention, http://www. healthysafechildren.org/.

Law Enforcement

Although law enforcement has been based in schools since the 1960s, often addressing truancy, the number of law enforcement officers working in schools rose beginning in the 1990s (Cannady, Bernard, Nease 2010). Many schools have relied on these officers to address safety concerns and discipline issues. As use of law enforcement to handle discipline has increased, more students have been arrested in school.

Sample Strategies
- Clarify roles of school administrators and school resource officers; school resource officers should address only safety.
- School-based law enforcement defer other school discipline matters to school administrators.
- Provide specialized training for school-based law enforcement on working with students and administrators in school.

Related Resources
Maurice Canady et al., *To Protect and Educate: The School Resource Officer and the Prevention of Violence in Schools* (Hoover, AL: NASRO, 2012), https://nasro.org/cms/ wp-content/uploads/2013/11/NASRO-To- Protect-and-Educate-nosecurity.pdf.

Supportive school discipline webinar, http://safesupportivelearning.ed.gov/events/ webinar/intersection-school-safety-and- supportive-discipline-navigating-roles-and.

Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014b, pages 183–267): http://csgjusticecenter.org/ youth/school-discipline-consensus-report/.

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on avoiding that behavior in the future.

Related Resources
Ted Wachtel, "Defining Restorative," (International Institute for Restorative Practices, 2013), http://www.iirp.edu/pdf/Defining- Restorative.pdf.

Restorative Practices: Fostering Healthy Relationships and Promoting Positive Discipline in Schools (Cambridge, MA: National Opportunity to Learn Campaign, March 2014), http://www.otlcampaign.org/restorative- practices.

"Restorative Classroom Circles," http:// restorativeclassroomcircles.wikispaces.com/ home.

Restorative Justice: Implementation Guidelines (National Center for Mental Health Promotion and Youth Violence Prevention, February 2009), http://www.promoteprevent.org/sites/ www.promoteprevent.org/files/resources/

[BOX 7]

Louisiana SEA Builds Cross-Program Collaboration

Since 2010 the Louisiana Department of Education has provided coaches to help schools identify discipline issues using data and to coordinate programmatic interventions. Staff also met with offices across the department so other program staff understood the relationship of school climate improvements to other priorities, such as academic standards. They also met with coordinators of federally funded programs other than the Safe Supportive Schools (S3) grant that supported their work to look at how they could integrate the work of S3 within those programs. For example, Title I, Part A, requires parent involvement; the S3 work focused on how engagement could help inform the work on Title I, Part A and on how certain processes could be integrated.

Source: **http://www.louisianabelieves.com/schools/public-schools/school-climate.**

Courts and Juvenile Justice

As school-based arrests and youth recidivism have increased, judges have noticed more students showing up in their courtrooms. For many years, the number of youth ultimately involved in the juvenile justice system rose as a result. With busy dockets and frustration, and in an effort to make changes, some judges are convening cross-agency teams to prevent children and youth from entering the system and to ensure that those who enter the system successfully transition out of the justice system without offending again.

Sample Strategies
Convene stakeholders to develop memo-

randa of understanding between agencies to provide supports that can help prevent students from entering the juvenile justice system.
- Divert students who have committed minor school-based offenses.
- Ensure high-quality educational services in juvenile correction facilities.
- Successfully transition students from juvenile justice facilities back to school.

Related Resources
Dear Colleague Letter on Correctional Education, US Department of Education, **http://www2.ed.gov/policy/gen/guid/correctional-education/index.html.**

The National Evaluation and Technical Assistance Center on Education Children and Youth Who Are Neglected, Delinquent, and At-Risk (NDTAC), **www.neglected-delinquent.org.**

Emily Morgan et al., School Discipline Consensus Report (New York: Council of State Governments Justice Center, 2014, pages 269–323): **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

Supportive school discipline webinars:

Overall Effort of Judge Teske in Clayton County, GA, **http://safesupportivelearning.ed.gov/events/webinar/making-case-positive-approaches-discipline**; Addressing Truancy, **http://safesupportivelearning.ed.gov/events/webinar/addressing-truancy-innovative-approaches-systemically-increasing-attendance-and.**

Discussion Questions
With partners, find answers to the following questions to assess the impact of your state's discipline policies and practices.

1. What efforts are your state/districts/schools making that can advance school discipline reform? In schools? With health agencies? With law enforcement? With courts/juvenile justice?
2. What are you/they implementing?
3. How well are you/they implementing?
4. With whom are you/they partnering?
5. How can you work together effectively?

STATE-LEVEL ACTIONS TO ADVANCE SCHOOL DISCIPLINE REFORM

State boards of education can work with state agencies, and with state education

agencies in particular, to develop policy and support practices in districts and schools that encourage integration, collaboration, training, and data collection and analysis to advance school discipline reform.

Establishing Policy

State policies can advance school discipline reforms. State boards of education may not legislate policy, but they can collaborate with legislatures and staff from a variety of agencies to assess the latest research; collect and analyze state discipline, school climate, and court and juvenile justice data disaggregated by geography, race/ethnicity, gender, disability status, and LGBT status; review current policy; and make recommendations (e.g., box 6). States will approach policy changes differently; some may focus on making a range of policy changes at one time while others may implement one policy at a time.

Integrating Interventions

States can help districts, schools, and

[BOX 8]

Nevada's Cross-Agency Task Force

Nevada developed a cross-agency task force of state and local education and judicial leaders called the Student Attendance and Disturbance Committee to focus on attendance and discipline issues. As task force members began work, they realized that all members did not understand the terms each agency used and were not clear on what each agency did. With the leadership of a chief justice, they organized round tables to learn what each agency represented on the committee does and how it operates. They then discussed how their work overlapped and where they could coordinate.

Wisconsin's Data Collection and Reporting Tool

The Wisconsin Department of Public Instruction has been collecting and disaggregating school climate data as part of their US Department of Education Safe Supportive Schools funding, with a specific focus on discipline data. In particular, they have developed a web-based tool for collecting and reporting data to schools. The tool allows participating schools to view disaggregated data by race/ethnicity, disability status, and other characteristics. Schools with identified disparities can then address them as they make general school climate improvements.

Source: **http://winss.dpi.wi.gov/.**

Connecticut's Priority on Training

An initiative by the Connecticut State Department of Education provides free training on how to make school climate improvements, and it targets educators in schools with the greatest need. The training covers what school climate is, why it is important, and strategies to establish and maintain a safe, supportive learning environment. It also builds the capacity of educators to train staff in their schools and instructs school improvement teams on team members' roles and how to use their data.

Source: **http://www.sde.ct.gov/sde/cwp/ view.asp?a=2618&q=321794.**

other agencies understand the services they provide, assess their effectiveness in meeting student needs, and consider what evidence-based interventions, including strategies and practices, are effective and how staffing and resources can be used to make the greatest impact.

- Schools and state education agencies often implement programs and strategies separately. States can help schools figure out how to integrate frameworks and programs, including, for example, PBIS, social emotional learning, restorative justice, and behavioral supports.
- With academic pressures high, many districts and schools are focusing on improving academic outcomes. Since school climate and discipline go hand in hand with academic success, states can help educate districts and schools on the relationship between academics and discipline and how it can be operationalized.
- State boards of education can support the development of tools and encourage effective management implementation and evaluation of integrated practices such as cross-system collaboration. They can also encourage consistency in practices across elementary, middle, and high schools within a district and among districts, if appropriate.

Collaborating Within and Across Systems

Students with behavioral issues tend to be drawn into more than one system—education, mental health, juvenile justice, child welfare, law enforcement, and other child-serving organizations and agencies that serve youth and families—or are at risk for becoming so. Since the systems typically operate independently, the most effective service will be delivered in states whose agencies understand how each system works, where they overlap, what aspects are supporting and hindering support for students, and how to best serve students.

Creating strong collaborations can be challenging. Philosophical, structural, language, and communication barriers prevent agencies from forming partnerships. In some cases, staff may be resistant to change because they think it will increase their workload or reduce their autonomy (Gonsoulin and Read 2011). In addition, it is difficult to delineate where the work of one agency ends and another begins. However, states that work to overcome these challenges can eliminate siloes and operate as one system (Gonsoulin and Read 2011; see also boxes 7 and 8).

Training

A shift to positive discipline requires that states support appropriate professional development (see, e.g., box 9). Such development must be focused, job embedded, aligned with selected practice, and assessed to determine what additional training is needed. Based on feedback from partici-

Arizona's Evaluation of Intervention Programs

The Arizona Department of Education has been helping districts and schools participating in their S3 grant to implement three intervention programs: PBIS, Break Away, and Student Assistance Programs. The department developed benchmarks and checklists to evaluate progress in implementation, identify strengths and challenges, and assist with annual planning. Arizona also partnered with the University of Arizona's College of Education to train school climate improvement teams.

Source: **https://safesupportivelearning. ed.gov/innovation-spotlight/arizona.**

pants in national listening sessions held in 2012, stakeholders indicated that training should enable staff to do the following:

- address students' developmental needs during academic improvement efforts;
- promote cultural competence and address special populations' needs;
- create a healthy learning environment;
- understand what interventions are appropriate and implement them;
- establish appropriate discipline policies;
- support discipline policy reform;
- collect, analyze, and use data;
- gain a deeper understanding of family engagement, access to wraparound services, and adapt learning models for traumatized youth; and
- gain access to coaching and other supports that prevent burnout and encourage consistency.

Addressing Disparities

States should review data to determine whether and which groups of students are being disproportionately disciplined; communicate the importance of addressing disparities; and provide tools for analyzing and addressing those disparities in a culturally responsive manner (Hershfeldt et al. 2009; Utley and Obiakor 2012). Box 10 provides an example of a state initiative to address disparities.

Assessing Implementation

As districts and schools implement evidence-based interventions to advance discipline reform, it is critical to determine the degree to which these interventions are being delivered as intended (US Departments of Education and Justice 2012; Bradshaw 2008; CASEL 2012; Durlak et al. 2011; Skiba and Rausch 2006; Horner et al. 2004). To assess implementation, districts and schools can ask themselves the following set of questions:

- Is the intervention being implemented as prescribed?
- Are students receiving sufficient exposure to the intervention?

- What is the quality of implementation?
- To what extent are students engaged in the intervention?
- Are features of the intervention distinct from other interventions and strategies being implemented?

Such efforts can help improve the likelihood of positively affecting the outcomes of students as intended (CASEL 2012). States can create or support the use of tools that assess the fidelity of assessment (see, e.g., box 11).

Collecting and Analyzing Data

To understand how frequently students are removed from class, why, and what to do about it, education officials are required to regularly collect and analyze school discipline data and related data on school climate, attendance, and academic achievement (Losen and Skiba 2010; APA Zero Tolerance Task Force 2008; Skiba and Rausch 2006; Osher et al. 2014). They can also use the data to identify trends and target problems, identify interventions, monitor progress, assess disparities, evaluate the effectiveness of efforts, and increase transparency overall (see, e.g., box 12). To facilitate collections, reporting, and use, state boards of education can advocate for consistent definitions and report-

ing codes, the expansion of statewide longitudinal data systems that include or broaden what data are collected and reported, meaningful analysis and use of data, and the coordination of collections of related data.

CONCLUSION

Research shows that exclusionary discipline policies and practices do not work and often backfire. As states, districts, and schools wrestle with the simultaneous challenges of improving instruction and school climate, they should shift toward more supportive approaches to school discipline.

At the same time, research is shedding light on what alternative strategies will work better. As districts and schools make this shift, they will need professional development, training, and support to access, analyze, and use data to inform appropriate interventions. SEAs and state boards of education can support districts and schools' efforts in making real, measurable change in their disciplinary practices. Such change should result not only in a reduction of exclusionary practices but also should improve a range of student outcomes, including achievement, attendance, and graduation rates.

[BOX 12]

West Virginia's Analysis of Discipline Data

With S3 grant funding and NASBE support, the West Virginia Department of Education received training on improving school climate and making changes to discipline policy and practice. It has also developed a system to track data on student disciplinary referrals. The system enabled the department to study the relationship between the discipline practice and aca-

demic achievement, and staff found that punitive discipline practices were associated with poorer academic outcomes.

Source: **http://wvde.state.wv.us/healthyschools/ documents/TrainingGuidePDF.pdf and http:// wvde.state.wv.us/research/reports2014/TheAssociationBetweenSchoolDisciplineandMathematicsPerformance2014.pdf.**

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Appendix A: Tools State Boards Can Use to Advance School Discipline Reform

TOOL 1: TASK FORCE QUESTIONS

Advancing school discipline reform requires partnership among educators (administrators and staff on the ground). The following questions can frame useful discussions. In most cases, these questions do not yield simple yes or no answers but will help spark critical thinking.

Trends According to Data

1. What discipline data are collected in your state, districts, and schools?
2. What do the discipline data tell you about your state, districts, and schools?
a. What are the rates of suspension and expulsion?
b. How have the rates changed over time?
c. How do they compare according to student characteristics (race/ethnicity, type of disability, LGBT identification, English language learner status, other)?
c. How do they compare between districts and schools?

Current Policies

3. What state policies address school discipline? To what extent are they punitive versus supportive? State discipline policies can be found here: **https://safesupportivelearning.ed.gov/school-discipline-compendium**.

4. How are they being interpreted?

a. How do you know?

b. About what do you need to know more?

5. What kinds of school discipline policies do your districts and schools have?

a. To what extent are they punitive versus supportive?

Impact of Punitive and Exclusionary School Discipline Policies and Practices

6. How have your state, districts, and school discipline policies and practices affected your districts/schools?

a. How does the school climate compare between and among districts/schools with different discipline policies and practices?

b. How does academic achievement compare between schools with different discipline policies and practices?
c. Estimate how much instructional time has been lost from punitive discipline policies and practices.
7. What is happening/has happened to students who have been suspended and expelled or received discipline referrals?
a. Examine academic achievement, attendance, dropout, and incarceration rates.
b. How do they compare with rates for students who have or have not been subject to exclusionary school discipline? Are there disparities?
c. How do they compare according to student characteristics (race/ethnicity, type of disability, LGBT identification, English language learner status, other)?
d. How do they compare between districts and schools?

Efforts to Advance School Discipline Reform

8. What programmatic interventions are your state/districts/schools making that can advance school discipline reform?
a. in schools
b. with health agencies
c. with law enforcement
d. with courts/juvenile justice
9. What additional programs are available to students during out of school time?
10. Are the programmatic interventions that are being implemented as demonstrated by research to work within similar contexts?
11. Are the state/districts/schools assessing implementation?
12. Are any of the programmatic interventions inconsistent, unaligned, or duplicative? Is there a way to integrate programming if some are duplicative?

Training

13. What kind of training are educators receiving?

14. Is the training linked to how teachers can change their practice to improve student self-discipline, engagement, and achievement?
15. How much training is provided on school climate/behavior/discipline?
16. Is it consistent with principles of good professional development?
17. Is follow-up training provided?

Partners

18. What systems are students typically interacting with (e.g., justice, health and human services, family and child services)?
19. How are the systems working together?
20. How are community, families, and youth engaged?
a. If they aren't, how could they be?
21. How satisfied are youth and families with the services?
a. What are the outcomes?
b. How linguistically and culturally competent are the services?
22. How could they better work together?

TOOL 2: TALKING POINTS

Consistent and informative messaging about school discipline reform is critical. Because the time an education policymaker has with a stakeholder, talking points are grouped into "elevator pitch" interactions when time is short and additional talking points for when there is an opportunity to expand on these ideas. Either way, each state will need to customize according to its data and planned reform.

Elevator Speech Talking Points

1. Creating safe, orderly schools supports learning for all students.
2. Punitive disciplinary approaches do not work and have harmful consequences for schools. They are unfair and inconsistently applied. They hurt students with and without behavior challenges.
a. They lead to unintended consequences

that adversely affect student outcomes. Exclusionary school discipline fails to deter poor behavior, leads to a loss of instructional time, and worsens the school climate and conditions for learning that are essential for student success. Students subjected to exclusionary discipline perform worse academically and are more likely to drop out and become involved in the juvenile justice system.

b. Provide a quick example from your jurisdiction.

3. Universal approaches that aim to prevent behavioral issues and address discipline positively work. These approaches include:

a. Improving conditions for learning. Spaces where students feel emotionally and physically safe, connected and supported, challenged and engaged, and socially capable to succeed academically can prevent problematic behavioral issues and improve academic achievement.

b. Effective and promising approaches include building upon and aligning, if possible, social emotional learning and positive behavioral approaches. This can be accomplished by revising codes of conduct, improving school climate, implementing tiered behavioral interventions as an overall framework that guides the implementation of focused strategies and evidence-based programs, including social emotional learning, and implementing restorative practices.

4. As the Common Core State Standards or other more rigorous standards are implemented, it is critical for interpersonal and intrapersonal domains to be proactively addressed, which ultimately means improving the conditions for learning.

5. Analyzing data and effectively collaborating within and across systems are key to making change at all levels of education and beyond.

Talking Points for Speeches and Presentations

1. The context of schools is a critical piece of improving school discipline.

a. Academic success for all students is im-

perative and is affected by the conditions for learning.

b. Most schools are implementing new curricula based on new standards, and they will not realize significant success without addressing student needs and improving conditions for learning.

c. Schools are having to manage competing priorities.

d. Doing something is not in question; the question is how to do it

e. There is solid evidence for improving academic achievement via safe and supportive learning environments.

2. Key aspects of school climate and discipline are the conditions for learning.

a. Students are safe when they are physically safe, emotionally and socially safe, treated fairly and equitably, avoid risky behaviors, and are in a school that is safe and orderly.

b. Students are connected and supported when they feel a meaningful connection to adults, strong bonds to school, are engaged in positive peer relationships, and have effective and available support.

c. Students are challenged and engaged when adults around them have high expectations, when they have strong personal motivation, when school is connected to their life goals, and when they have rigorous academic opportunities.

d. Students are socially capable when they are emotionally intelligent and culturally competent, responsible and persistent, cooperative team players, and contribute to school community.

3. Schools can pose as risk and protective factors for students.

a. Risk factors can include alienation; academic frustration; chaotic transitions; negative relationships with adults and peers; teasing, bullying, and gangs; poor adult role modeling; segregation with antisocial peers; school-driven and child welfare-driven mobility; and harsh discipline including suspensions and expulsions that lead to student push outs or drop outs.

4. The context of discipline is critical.

a. Violence and problematic behavior exist

in schools.

b. It is imperative that students are emotionally and physically safe.

c. Doing something is not in question; the question is how issues are addressed.

e. Research demonstrates that punitive, exclusionary approaches are ineffective and often harmful.

f. Many police and judges are interested in advancing school discipline reform in order to keep youth in school and out of prison.

5. We often rely on zero tolerance policies to discipline children in school. However, there is no evidence that zero tolerance policies work. Zero tolerance policies are often interpreted more harshly at a district and school level. Such interpretations have led to punitive, often subjective, and sometimes extreme responses to discipline issues. Those reactions have contributed to racial and ethnic disparities.

6. Research shows that punitive discipline does not work. Punitive discipline

a. has detrimental effects on teacher-student relations

b. models undesirable problem solving

c. reduces motivation to maintain self control

d. generates student anger and alienation

e. can result in more problems (e.g., truancy, vandalism, aggression)

f. does not teach, and weakens academic achievement

g. has limited long-term effect on behavior

h. contributes to grade retention, dropout, and juvenile justice contact.

7. A statewide study in Texas followed cohorts of all seventh-grade students in 2000, 2001, and 2002.

a. Over a six-year period, nearly 60 percent were suspended or expelled once in middle or high school, about 15 percent were suspended or expelled 11 times or more, and only 3 percent of the disciplinary actions were for conduct in which state law mandated suspensions and expulsions.

b. The rest of the disciplinary actions were made at the discretion of school officials,

primarily in response to violations of local schools' conduct codes.

c. African-American students and those with emotional behavior disorders were disproportionately disciplined for discretionary actions.

d. Schools that had similar characteristics, including the racial composition and economic status of the student body, varied greatly in how frequently they suspended or expelled students.

8. The more students are out of the classroom, the less likely they will be to receive instruction, participate in class, complete work, and graduate, and the Common Core will exacerbate this.

9. Positive approaches to discipline can work when implemented effectively.

a. Multitiered intervention supports include universal-teacher and student SEL and PBIS, effective class management, youth development approaches (e.g. class meetings and service learning), early intervention (e.g., planning centers not in school suspension), intensive services that may include individualized wraparound support and support from other agencies, peer mediation, and restorative justice and practices.

b. Important characteristics of each are that they are family-driven and youth-guided, culturally competent, prevent problems proactively, and constructively address discipline issues when they arise.

KEY RESOURCES

There are a number of helpful resources that address school discipline.

Research Reports

Beyond Zero Tolerance: Discipline and Policing in Pennsylvania Public Schools

Civil Rights Suspended: An Analysis of New York City Charter School Discipline Policies Suspensions and Expulsions in Connecticut Are We Closing the School Discipline Gap?

Breaking School Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement. Describes the analysis of millions of school and juvenile justice records in Texas to improve policymakers' understanding of

who is suspended and expelled from public secondary schools and the impact of those removals on students' academic performance and juvenile justice system involvement. **http:// knowledgecenter.csg.org/drupal/system/files/ Breaking_School_Rules.pdf.**

Discipline Disparities Research-to-Practice Collaborative Briefs. Uses information from stakeholder groups, as well as knowledge of current research, to present a series of informational briefs and supplementary research papers with targeted recommendations customized for different audiences. Items include an overview of the latest research on discipline disparities, information on interventions, mythsversus facts, and more. **http://www.indiana.edu/~atlantic/briefing-papers/.**

Out of School & Off Track: The Overuse of Suspensions in American Middle and High Schools. Provides an analysis of data from districts on the number of students suspended just once during the school year and the number suspended more than once via the US Department of Education's Office for Civil Rights (OCR) data collection. **http:// civilrightsproject.ucla.edu/resources/projects/ center-for-civil-rights-remedies/school-to-prison-folder/federal-reports/out-of-school-and-off-track-the-overuse-of-suspensions-in-american-middle-and-high-schools/ OutofSchool-OffTrack_UCLA_4-8.pdf.**

National Leadership Summit on School-Justice Partnerships: Keeping Kids In School and Out of Court. Offers presentations, articles, data, and other information generated for the 2012 National Leadership Summit on School-Justice Partnerships. This event brought together education and judicial leaders and other community leaders from 45 states, D.C., Puerto Rico, and the Virgin Islands to hear about and to become catalysts for strategies, policies, and programs to keep kids in school and out of court. **http://www.school-justicesummit.org/ home.cfm.**

Policy Guidance

NDTAC Practice Guide: Quality Education Services are Critical for Youth Involved with the Juvenile Justice and Child Welfare Systems **http:// www.neglected-delinquent.org/resource/ndtac-practice-guide-quality-education-services-are-critical-youth-involved-juvenile.**

Older Resources

My Brother's Keeper Report **https://www. whitehouse.gov/sites/default/files/docs/053014_ mbk_report.pdf?utm_source=SSDCoP+e-Digest+Volume+1%2C+Issue+6&utm_ campaign=SSDCoP+e-Digest+Vol+1+Issue+6.**

Federal Civil Rights Guidance Issued for

Charter Schools **http://www2.ed.gov/about/ offices/list/ocr/letters/colleague-201405-charter. pdf?utm_source=JFSF+Newsletter&utm_ campaign=ead71e6b0e-Newsletter_July_2013.**

New 2013 School Crime and Safety Report Released **http://www.bjs.gov/content/pub/pdf/ iscs13.pdf.**

The Federal Interagency Reentry Council Releases Two Snapshots Focused on Education Juvenile Reentry Reform **http://csgjusticecenter.org/wp-content/uploads/2014/06/Education.pdf.**

Policy Statement and Recommendations to Assist States and Their Public and Private Local Early Childhood Programs in Preventing and Severely Limiting Expulsions and Suspensions in Early Learning Settings **http://www2.ed.gov/policy/ gen/guid/school-discipline/letter-suspension-expulsion-policy.pdf.**

ED/DOJ Discipline Package. Developed by the US Departments of Education and Justice, this resource assists states, districts, and schools in developing solutions to enhance school climate and improve school discipline policies and practices, including guidance for schools on meeting their legal obligations under federal civil rights law to administer student discipline without discriminating against students on the basis of race, color, or national origin. **http:// www2.ed.gov/policy/gen/guid/school-discipline/ index.html.**

The School Discipline Consensus Report: Strategies from the Field to Keep Students Engaged in School and Out of the Juvenile Justice System presents a comprehensive set of consensus-based and field-driven recommendations to improve conditions for learning for all students and educators, better support students with behavioral needs, improve police-schools partnerships, and keep students out of the juvenile justice system for minor offenses. **http://csgjusticecenter.org/wp-content/ uploads/2014/06/The_School_Discipline_ Consensus_Report.pdf.**

Addressing the Out-Of-School Suspension Crisis: A Policy Guide for School Board Members. Provides school board members with background information on school discipline, questions to ask, action steps, and research on addressing school discipline issues. **http://www. nsba.org/Board-Leadership/Surveys/Out-of-School-Suspension-Policy-Guide/Out-of-School-Suspension-Report.pdf.**

Data

Office of Civil Rights Data Collection (CRDC). Provides wide-ranging education access and equity data from a sample of US schools, including information on suspension and expulsion rates at school and district levels. **http://ocrdata.ed.gov/Home.**

UCLA Civil Rights Project Discipline Data Tools. Provides reports on the latest national discipline data and spreadsheets that states, districts, and schools can use to look at their CRDC discipline data and view trends. **http://civilrightsproject.ucla.edu/resources/projects/center-for-civil-rights-remedies/school-to-prison-folder/federal-reports/are-we-closing-the-school-discipline-gap.**

Forum Guide to Crime, Violence, and Discipline Incident Data. Offers guidance on improving the effectiveness of efforts to collect and use disciplinary incident data, including reporting accurate and timely incident data to the federal government. Provides recommendations on what types of data to collect, why it is critical to collect such data, and how to implement and manage an incident database. **http://nces.ed.gov/pubs2011/2011806.pdf.**

Practices

Systems Integration: Child Welfare and Juvenile Justice

Empty Seats: Addressing the Problem of Unfair School Discipline for Boys of Color

MODEL PROGRAMS GUIDE
General

National Clearinghouse on Supportive School Discipline. Provides educational practitioners with the resources needed to facilitate the reduction of exclusionary discipline practices to stem the pipeline to prison and the implementation of supportive school discipline practice. **http://supportiveschooldiscipline.org/.**

Closing the School Discipline Gap. Looks at policies and practices in school that result in discipline disparities and provides remedies that may be implemented at federal, state, and district levels. **http://civilrightsproject.ucla.edu/news/news-and-announcements/2015-site-news/announcing-new-book-with-groundbreaking-studies-on-school-discipline.**

Revising Codes of Conduct

School Discipline Consensus Report (pages 71–90), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

Dignity in Schools' Model Code, **http://www.dignityinschools.org/our-work/model-school-code.**

Dignity in Schools' Sample of Revised Codes of Conduct, **http://www.dignityinschools.org/category/tags/revised-code-conduct .**

Making School Climate Improvements

Supportive School Discipline Webinar on Conditions for Learning (featuring Carencro), **https://safesupportivelearning.ed.gov/events/webinar/ssd-webinar-series-conditions-learning.**

School Climate Measurement, including a compendium of school climate surveys, **https://safesupportivelearning.ed.gov/topic-research/school-climate-measurement.**

School Climate Implementation, **https://safesupportivelearning.ed.gov/topic-research/program-implementation.**

School Discipline Consensus Report (pages 23–108), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

Implementing Tiered Interventions

The Technical Assistance Center on Positive Behavioral Interventions and Supports, **https://www.pbis.org/.**

National Center on Intensive Interventions, **http://www.intensiveintervention.org/.**

School Discipline Consensus Report (pages 109–81), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

"Social Emotional Learning," *From Policy to Practice* 1, no. 1 (Alexandria, VA: NASBE, October 2013), **http://www.nasbe.org/wp-content/uploads/FPP-Social-Emotional-Learning.pdf.**

Implementing Restorative Practices
Defining Restorative, **http://www.iirp.edu/pdf/Defining-Restorative.pdf.**

Restorative Practices: Fostering Healthy Relationships & Promoting Positive Discipline in Schools, **http://www.otlcampaign.org/restorative-practices.**

Restorative Classroom Circles, **http://restorativeclassroomcircles.wikispaces.com/home.**

Restorative Justice, Implementation Guidelines, **http://www.promoteprevent.org/sites/www.promoteprevent.org/files/resources/Restorative%20Justice_implementation%20guidelines.pdf.**

School Discipline Consensus Report (pages 79-83), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

NASBE *From Policy to Practice* Brief on Social Emotional Learning, **http://www.nasbe.org/wp-content/uploads/FPP-Social-Emotional-Learning.pdf.**

Supportive School Discipline Webinar, **http://safesupportivelearning.ed.gov/events/webinar/stemming-school-prison-pipeline-applying-restorative-justice-principles-school.**

Partnering with Health Systems
School-Based Mental Health: An Empirical Guide for Decision-Makers, **http://rtckids.fmhi.usf.edu/rtcpubs/study04/SBMHfull.pdf.**

Education and Systems-of-Care Approaches: Solutions for Educators and School Mental Health Professionals, **http://csmh.umaryland.edu/Resources/Briefs/SystemOfCareBrief.pdf.**

School Discipline Consensus Report (pages 157–66), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

Partnering with Law Enforcement
To Protect and Educate: The School Resource Officer and the Prevention of Violence in Schools, **https://nasro.org/cms/wp-content/uploads/2013/11/NASRO-To-Protect-and-Educate-nosecurity.pdf.**

Supportive School Discipline Webinar, **http://safesupportivelearning.ed.gov/events/webinar/intersection-school-safety-and-supportive-discipline-navigating-roles-and.**

School Discipline Consensus Report (pages 183–267), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

Partnering with Courts
Dear Colleague Letter on Correctional Education (December 8, 2014).

The National Evaluation and Technical Assistance Center on Education Children and Youth Who Are Neglected, Delinquent, and At-Risk (NDTAC), **www.neglected-delinquent.org.**

School Discipline Consensus Report (pages 269–323), **http://csgjusticecenter.org/youth/school-discipline-consensus-report/.**

Webinar: Overall Effort of Judge Teske in Clayton County, GA, **http://safesupportivelearning.ed.gov/events/webinar/making-case-positive-approaches-discipline.**

Webinar: Addressing Truancy, **http://safesupportivelearning.ed.gov/events/webinar/addressing-truancy-innovative-approaches-systemically-increasing-attendance-and.**

Support
The Collaborative for Academic, Social, and Emotional Learning. Provides information, disseminates research reviews, provides professional development, and develops tools to help schools adopt social and emotional learning programs with a proven record of effectiveness. **http://www.casel.org/.**

National Association of State Boards of Education. Provides information about NASBE's efforts to strengthen state boards' capacity to adopt and implement state education policies that limit the use of suspension, expulsion, and criminalization of students and instead emphasize supportive climate-building practices and more positive disciplinary measures. **http://**

www.nasbe.org/project/school-discipline/.

National Center on Safe Supportive Learning Environments. Includes information on training and technical assistance, products and tools, and latest research findings on making school climate improvement and addressing factors that affect the conditions for learning, such as bullying, discipline issues, harassment, violence, and substance abuse. http://safesupportivelearning.ed.gov/.

National PBIS Center. Offers information and strategies on implementing, evaluating, researching, and training on positive behavior intervention supports (PBIS). Specific resources are available for schools, families, and community members. http://www.pbis.org/.

Supportive School Discipline Communities of Practice. Provides a portal for all education and justice stakeholders to access SSDCoP resources, including event information and tools, and related resources. It also provides active SSDCoP community members with access to secure pages where they can share resources privately. http://ssdcop.neglected-delinquent.org/.

Websites

American Civil Liberties Union (ACLU), **School-to-Prison Pipeline http://www.aclu.org/.racial-justice/what-school-prison-pipeline.**

Children's Rights Litigation Committee **http://apps.americanbar.org/litigation/committees/childrights/.**

Dignity in Schools Campaign **http://www.dignityinschools.org/.**

Ending the Schoolhouse to Jailhouse Track **http://safequalityschools.org/.**

Fix School Discipline **http://www.fixschooldiscipline.org/.**

The California Endowment: Social-Emotional Health for Students **http://www.calendow.org/in_schools/reducing_use_of_harsh_discipline.aspx.**

The Civil Rights Project: School Discipline **http://civilrightsproject.ucla.edu/research/k-12-education/school-discipline.**

The Council of State Government's School Discipline Consensus Project **http://csgjusticecenter.org/youth/projects/school-discipline-consensus-project/.**

The Equity Project at Indiana University **http://www.indiana.edu/~equity/resources.php**

The Urgency of Now: The Schott 50 State Report on Public Education and Black Males **http://blackboysreport.org/.**

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