Understanding Adverse Childhood Experiences, Complex Trauma and What You Can Do About It!

Joe Neigel
Everett, WA
February 27, 2018
Our Learning Goals for Today

Gain a deeper understanding of how trauma impacts the lives, behaviors and opportunities of the students and families you serve.

Reflect on the ways working with people impacted by trauma affects you, and learn about tools to enhance your own resilience.

Grow your confidence and skill in supporting your students through the use of trauma informed practices and evidence-based kernels.
What Would You Like to...

SEE

HEAR

DO
Student of Concern

Think about a student for whom you have concern. Write down the following:

1. What worries do you have for this student?
2. What problem behaviors does this student exhibit, if any?
Adverse Childhood Experiences Study (ACES)

ACES began as a weight-loss study at Kaiser-Permanente in Southern California. It became the largest study ever completed that examined the health and social effects of traumatic childhood experiences over the lifespan.

- Middle class, average age of 57
- 80% white, 10% black, 10% Asian
- 74% some college
- 44% graduated college
- 49.5% men

Examines three general forms of abuse and household dysfunction.
The Adverse Experiences

**ABUSE**
- Physical
- Emotional
- Sexual

**NEGLECT**
- Physical
- Emotional

**HOUSEHOLD DYSFUNCTION**
- Mental Illness
- Mother treated violently
- Substance Abuse
- Incarcerated Relative
- Divorce
ACE Score Calculator

Finding Your ACE Score

While you were growing up, during your first 16 years of life:

1. Did a parent or other adult in the household often or very often:
   - Shout at you, yell at you, put you down, or humiliate you?
   - Add in a way that made you afraid that you might be physically hurt?
     - Yes
     - No
     If yes enter 1
     If yes enter 1

2. Did a parent or other adult in the household often or very often:
   - Hiss, call you names, or threaten you?
   - Ever hit you so hard that you had marks or were injured?
     - Yes
     - No
     If yes enter 1
     If yes enter 1

3. Did an adult or person at least 5 years older than you ever:
   - Push, kick, strike, or grab you or have you touch their body in a sexual way?
   - Attempt or actually have one, anal, or vaginal intercourse with you?
     - Yes
     - No
     If yes enter 1
     If yes enter 1

4. Did you often or very often feel that:
   - No one in your family loved you or thought you were important or special?
   - Your family didn’t look out for each other, feel close to each other, or support each other?
     - Yes
     - No
     If yes enter 1
     If yes enter 1

5. Did you often or very often feel that:
   - You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you?
   - Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
     - Yes
     - No
     If yes enter 1
     If yes enter 1

6. Were your parents ever separated or divorced?
   - Yes
   - No
   If yes enter 1

7. Was your mother or stepmother:
   - Often or very often pushed, grabbed, slapped, or had something thrown at her?
   - Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
   - Or Ever repeatedly hit at least a few minutes or threatened with a gun or knife?
     - Yes
     - No
     If yes enter 1
     If yes enter 1

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
   - Yes
   - No
   If yes enter 1

9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
   - Yes
   - No
   If yes enter 1

10. Did a household member go to prison?
    - Yes
    - No
    If yes enter 1

Now add up your “Yes” answers: ________ This is your ACE Score.
Calculating Your Score

1. Did a parent or other adult in the household **often:** Swear at you, insult you, put you down, or humiliate you? **OR** Act in a way that made you afraid that you might be physically hurt?
   
   Yes  No  If yes enter 1  ________

2. Did a parent or other adult in the household **often:** push, grab, slap, or throw something at you? **OR** Ever hit you so hard that you had marks or were injured?
   
   Yes  No  If yes enter 1  ________
Calculating Your Score

3. Did an adult or person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way? OR Try to or actually have oral, anal, or vaginal sex with you?

   Yes   No   If yes enter 1 ________

4. Did you often feel that no one in your family loved you or thought you were important or special? OR Your family didn’t look out for each other, feel close to each other, or support each other?

   Yes   No   If yes enter 1 ________
Calculating Your Score

5. Did you often feel that you didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you? OR Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

   Yes  No  If yes enter 1  _______

6. Were your parents ever separated or divorced?

   Yes  No  If yes enter 1  _______
Calculating Your Score

7. Was your mother or stepmother often pushed, grabbed, slapped, or had something thrown at her? OR Sometimes or often kicked, bitten, hit with a fist, or hit with something hard? OR Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

   Yes    No    If yes enter 1  _______

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

   Yes    No    If yes enter 1  _______
Calculating Your Score

9. Was a household member depressed or mentally ill or did a household member attempt suicide?

   Yes   No   If yes enter 1   ______

10. Was a household member ever incarcerated?

    Yes   No   If yes enter 1   ______
Did Anyone Score Zero?
ACEs in Snohomish County

- 0 ACEs: 0.00%
- 1 ACE: 22.90%
- 2 ACEs: 12.60%
- 3 ACEs: 9.20%
- 4 or More ACEs: 35.30%

Snohomish County, Washington
• Poor and near poor children are more likely to be exposed to ACES if their parents lack a high school education.

• They are also more than twice as likely to have three or more categories of trauma exposure compared to children not impacted by poverty.
Do You Really Know Maja?

https://www.youtube.com/watch?v=E_zaoQFWelS
Think about a student for whom you have concern. Write down an answer to the following questions:

1. What worries do you have for this student?
2. What behaviors does this student exhibit, if any?
3. Do you suspect this student has exposure to ACE?
ACE Study Findings

- ACEs are very common.
- They are well-concealed.
- Category exposure determines health outcomes across the population.
- ACEs are strong indicators of what happens in school and later in life.
The Science Behind ACES

- A child’s environment and experience shapes their behavior and health.
- Our brain is designed to prioritize survival.
- Hormones like Cortisol are released when our “Fight, Flight, or Freeze” response is triggered.
Toxic Stress

- Prolonged exposure to Cortisol and other stress hormones is toxic, and makes permanent changes to the brain.

- This means you may encounter young people perfectly suited to survive in their home environment, but who cannot turn-off their stress response in the classroom, community or other “normal” situations.
Toxic Stress

https://www.youtube.com/watch?v=rVwFkcOZHJw&t=2s
Not All Stress is Bad

• **Positive Stress** – Common stressful events that produce a mild stress response within the context of supportive families, schools and communities.

• **Tolerable Stress** – Living in a high stress environment, but buffered by a supportive family and community system.

• **Toxic Stress** – Continuous activation of the stress response system without a protective buffer, causing lasting damage and impairing parts of the brain responsible for learning, concentration and self-control.
Do you recognize these signs of traumatic brain development?

- **Hypervigilance** – On edge, always scanning for threats.

- **Display of ADHD-like symptoms**, including an inability to stay on task or follow directions, but meds don’t work.

- **Difficulty** identifying feelings or communicating needs.

- **Early onset** of sexualized behaviors and activity.

- **More impulsive**, aggressive and disruptive behaviors, including those leading to exclusion, suspension or expulsion.

- **Difficulty** with transitions.
More Trauma Symptoms

- Bullying & Teasing
- Sadness & Crying
- Withdrawal
- Concentration Problems
- Irritability
- Anger & Aggression
- Risk Taking – Substance Abuse
- School Avoidance
- Running
- Self-Harm
- Physical Complaints
- More Trauma Symptoms

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- Sadness & Crying
- Withdrawal
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- Irritability
- Anger & Aggression
- Risk Taking – Substance Abuse
- School Avoidance
- Running
- Self-Harm
- Physical Complaints
Other Negative Effects

<table>
<thead>
<tr>
<th>Trauma Induced Physiological Outcomes</th>
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<tbody>
<tr>
<td>Difficulty concentrating and negative thoughts</td>
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<tr>
<td>Hyperglycemia (fatigue, excessive thirst/urination)</td>
</tr>
<tr>
<td>Slower healing</td>
</tr>
<tr>
<td>Headaches, muscle tension, stomach aches and other somatic symptoms</td>
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<tr>
<td>Coordination problems</td>
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<tr>
<td>Weakened immune system</td>
</tr>
<tr>
<td>Higher blood pressure</td>
</tr>
<tr>
<td>Impaired memory</td>
</tr>
<tr>
<td>Decreased bone density and muscle tissue</td>
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<tr>
<td>Development of health risk behaviors</td>
</tr>
</tbody>
</table>
Trauma Even Impacts Self-Concept

- Hopelessness
- Body image
- Shame, guilt, self-blame
- Do not feel safe in this world
- Difficulty developing healthy relationships
- Dissociation
- Hard time with boundaries
- Hesitant to trust adults for support or attention
Graded Relationships in Health Risk Behaviors

• There is a strong dose/response relationship between a person’s ACE score and the likelihood they will adopt personal solutions that lead to serious health problems.

• Dose/Response is a direct measure of “cause and effect.”
Dose/Response:
More Gas = More Miles Travelled

Number of Miles You Can Drive (Response)

Gallons of Gas (Dose Gets Bigger)
ACES Impact Behavioral Health

46% increase from baseline.

440% increase from baseline.

820% increase from baseline.
ACES Impact Mental Health

With a Lifetime History of Depression

ACE Score

Women

Men

220% increase from baseline.

2,275% increase from baseline.
ACE lead to risk factors for the 10 most common causes of early death in the United States

- Alcoholism
- Violence
- Physical inactivity
- Illicit drug use
- Severe obesity
- Injected drug use
- Suicide attempts
- Smoking
- Depression
- More than 30 sexual partners
Reframing Our Point of View

• With an ACE score of 0, the majority of adults have few, if any, risk factors for these diseases leading to early death.

• With an ACE score of 4 or more, the majority of adults have multiple risk factors for these diseases or the diseases themselves.

*Much of what we see as problem behaviors should actually be viewed as a personal solution to an unrecognized prior adversity.*
ACEs Impact
Washington State Schools

We also know ACE drive:

- Special education needs
- Grade repetition
- Problems at school
- Educator burnout
Meet Mallory
Getting to Know Mallory

- Mallory is in 8th grade at Hidden River Middle School.

- Her counselor knows Mallory’s mother physically abused her in the past. As a result, Mallory's known ACE Score is “1.”

- Keep in mind - ACEs travel in clusters: Among people exposed to physical abuse, 84% report exposure to at least 2 additional ACEs.
Mallory’s Grades

Mallory appears to have trouble paying attention in class. She doesn’t turn in her homework and seems to have a hard time following directions - her grades reflect this.

• Students like Mallory are 1.5x as likely to report getting C’s, D’s and F’s.
Mallory has trouble making lasting friendships and is frequently the target of bullying behavior.

- 8th graders like Mallory are:
  - Nearly twice as likely (1.8x) to report being the victims of bullying.
  - 2.2x as likely to report missing days of school because they feel unsafe.
Mallory’s Mental Health

Mallory seems pretty disengaged in class and always looks tired. She can’t seem to remember facts or directions from 10 minutes ago.

- Students who report being physically abused by an adult are more than twice as likely (2.3x) to report being depressed on the most recent HYS.

- They are also nearly three times as likely (2.9x) to report contemplating suicide.
Mallory’s Personal Solutions

Mallory was caught bringing a flask of alcohol to school in 7th grade. She was suspended and hasn’t really engaged with any helping adults since then.

• 8th Graders like Mallory are 3.3x more likely to report current alcohol use.

• They are 3.3x more likely to indicate any other type of current drug use, including Marijuana use.
More than 1 in 5 8th graders in Snohomish County Schools indicated they have been intentionally hurt by an adult on the most recent Healthy Youth Survey.
Beyond ACES - Bullying

Emerging evidence suggests the negative impacts of childhood bullying on long-term adult health and wellness outcomes are more severe than the impacts of child abuse and neglect. *(The Lancet Psychiatry, Vol. 2, No. 6, p524–531, April 28, 2015)*

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**Bullying Impacts 8th Grade Mental Health**


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<thead>
<tr>
<th></th>
<th>Not Bullied</th>
<th>Bullied</th>
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</thead>
<tbody>
<tr>
<td>Depression</td>
<td>20.1%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>32.4%</td>
<td>60.0%</td>
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<tr>
<td>Consider Suicide</td>
<td>10.9%</td>
<td>31.7%</td>
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<tr>
<td>Suicide Attempt</td>
<td>5.4%</td>
<td>15.6%</td>
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ACE Effects in School

Low School Engagement

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<th>0 ACE</th>
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<th>3+ ACEs</th>
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Does Not Finish Tasks Started

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Highly Externalizing Behavior

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<th>3+ ACEs</th>
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<td>0%</td>
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<tr>
<td>30%</td>
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Contacted Home Due to Problems

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<tr>
<th></th>
<th>0 ACE</th>
<th>1 ACE</th>
<th>2 ACE</th>
<th>3+ ACEs</th>
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ACE Effects in School

Grade Repetition

Think about a student for whom you have concern. Write down the following:

1. What worries do you have for this student?
2. What problem behaviors does this student exhibit, if any?
3. Do you suspect this student has exposure to ACES?
4. All behavior has a function. Even though we might see this student’s behavior as a problem, how might it actually be a personal solution that helps them to get their needs met?
# Beyond the Hallways

Life-long Negative Outcomes Linked to ACEs

<table>
<thead>
<tr>
<th>Partial List of ACE Dose/Response Outcomes</th>
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<tbody>
<tr>
<td>Alcoholism &amp; alcohol abuse</td>
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<tr>
<td>Chronic obstructive pulmonary disease &amp; ischemic heart disease</td>
</tr>
<tr>
<td>Depression and other MH issues</td>
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<tr>
<td>Chronic Unemployment</td>
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<tr>
<td>High risk sexual activity</td>
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<tr>
<td>Illicit drug use</td>
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<tr>
<td>Intimate partner violence</td>
</tr>
<tr>
<td>Three or more marriages</td>
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<tr>
<td>Increased Pharmacy Use</td>
</tr>
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</table>
What Are the Implications?

To put it simply, childhood experiences are the most powerful determinants of who we become as adults.
**Population Attributable Risk**

- **PAR** = The difference in rate of a condition between an exposed population and an unexposed population.
- In this case, it is a calculation used by the CDC to estimate the proportion of a health outcome caused by ACE.
- Takes into account:
  - The increased risk due to each level of ACE
  - The prevalence of the number of ACE categories
**Population Attributable Risk**

Current Smoking

- Smoking Not Attributable to Ace: 78.3%
- Smoking Attributable to ACE: 21.7%

Risk data from Felitti, et. al: PAR analysis: RE Voorhees
Population Attributable Risk

Depression

54.2% (Not Attributable to ACE)

45.8% (Attributable to ACE)

Risk data from Felitti, et al: PAR analysis: RE Voorhees
Population Attributable Risk

Ever Using Illicit Drugs

- 32.1% not attributable to ACE
- 67.9% attributable to ACE

Risk data from Felitti, et. al: PAR analysis: RE Voorhees
Population Attributable Risk

Alcoholism

- 3.2% of self-reported alcoholism not attributable to ACE
- 96.8% of self-reported alcoholism attributable to ACE

Risk data from Felitti, et. al: PAR analysis: RE Voorhees
Population Attributable Risk

Reporting Having Attempted Suicide

- 0% of attempted suicide not attributable to ACE
- 100% of attempted suicide is attributable to ACE

Risk data from Felitti, et al: PAR analysis: RE Voorhees
How ACES Increase Suicide Attempts

- Less than 1 of 100 people with 0 ACEs attempt suicide
- 10 of 100 people with 3 ACEs attempt suicide
- 20 of 100 people with 4 or more ACEs attempt suicide
ACE Path

“Personal Solution”
ACEs Impact Mortality

ACE Score

Percent in Age Group

19-34  35-49  50-64  >=65

0  2  4  6  8  10  12  14  16  18  20  22  24  26  28  30  32  34  36  38  40  42  44  46  48  50  52  54  56  58  60

ACE Score

Percent in Age Group

19-34  35-49  50-64  >=65

0  2  4  6  8  10  12  14  16  18  20  22  24  26  28  30  32  34  36  38  40  42  44  46  48  50  52  54  56  58  60

ACE Score

Percent in Age Group

19-34  35-49  50-64  >=65
Maslow’s Hierarchy of Needs

- Maslow identified a hierarchy of needs to explain individual motivation.
- Students must meet needs at the lower levels of the pyramid before tackling higher levels.
- How do you intentionally address the Deficiency Needs of young people to unlock their “need to know and understand?”

Primary focus of education

Desire to become all that one can become
Self-expressions of creativity
Respect, achievement, mastery
Friendship, belonging to group
Stability, freedom from fear
Food, shelter, sleep, warmth
What About Us?

Whether you like it or not, most of you are on the ACEs frontline. Without proper boundaries and self-care, you are likely to experience the emotional residue of working with trauma impacted young people and families.

- **Physical** – loss of sleep, not eating well, low energy
- **Emotional** – anxiety, sadness, numbness
- **Behavioral** – absent minded, losing things
- **Cognitive** – diminished concentration, loss of focus, hypervigilance
- **Interpersonal** – mistrust, withdrawal
- **Spiritual** – workplace frustration, feeling lack of support, not satisfied
Self-Care Is Not Easy!

- While you cannot eliminate stress from your life, you can take care of yourself so that stress does not overwhelm you.
- Self-care is not a sign of weakness. It is a preventive measure, not just something we do when feeling completely overwhelmed.
- What is your stress temperature this week? What is it usually?
- Where on your body do you feel stress? Stress can affect the whole body!
- Begin the Self-Care Assessment.
What Did You Notice?

• What made an impression on you about this activity?
• What did you notice while completing the checklist?
• How did you feel after the checklist was completed?
• What thoughts do you have about the areas where you are doing well?
• What are areas that you would like to Change/improve?
Taking care of yourself should be enjoyable. If it feels like a chore, try something else!

Self-Care: An Ethical Obligation

2 minutes
• Breathe
• Stretch
• Daydream
• Take your stress temperature
• Acknowledge an accomplishment
• Say no
• Compliment yourself
• Share a favorite joke

5 minutes
• Listen to music
• Have a cleansing cry
• Chat with a colleague
• Sing out loud
• Jot down dreams
• Step outside for fresh air
• Enjoy a snack or coffee

10 minutes
• Evaluate your day
• Write in a journal
• Call a friend
• Meditate
• Tidy your work area
• Assess your self-care
• Draw a picture
• Dance
• Listen to soothing sounds
• Surf the web (but avoid media)
• Read a magazine

30 minutes
• Get a massage
• Exercise
• Eat lunch with a colleague
• Take a bubble bath
• Read non-work related literature
• Spend time in nature
• Go shopping
• Practice yoga
• Watch your favorite TV show.
Let’s Talk About Boundaries

• What are boundaries and why are they important?
• What do boundaries do for us?
• What do boundaries do for the people we serve?

Finding **boundaries** that are strong enough to protect us but flexible enough to allow us healthy connections with others is key to our professional, psychological and emotional health.

For teachers, setting appropriate boundaries includes making sure that your needs are being met and that you’re protecting your energy.
Let’s Talk About Triggers

What is a trigger?

What happens when we are triggered?

- Don’t judge or fear your emotions. If you don’t recognize your feelings, you can’t change them, negatively impacting your relationships, job performance, and overall happiness.
Let’s Talk About Triggers

The following list includes some of the most common emotional triggers, meaning you react when you feel as though you aren’t getting or will not get one of these needs met.

<table>
<thead>
<tr>
<th>Acceptance</th>
<th>Respect</th>
<th>Be Liked</th>
<th>Be Understood</th>
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</thead>
<tbody>
<tr>
<td>Be Needed</td>
<td>Be Valued</td>
<td>Be In Control</td>
<td>Be Right</td>
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<tr>
<td>Be Treated Fairly</td>
<td>Attention</td>
<td>Comfort</td>
<td>Freedom</td>
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<tr>
<td>Peacefulness</td>
<td>Balance</td>
<td>Consistency</td>
<td>Order</td>
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<tr>
<td>Predictability</td>
<td>Love</td>
<td>Safety</td>
<td>Autonomy</td>
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<tr>
<td>Fun</td>
<td>New Challenges</td>
<td>Independence</td>
<td>Other?</td>
</tr>
</tbody>
</table>

Which three needs, when not met, are most likely to trigger a reaction in you?

Why Do Kids Fall Apart with Me?

Students almost always feel something else before they get angry. They might first feel afraid, attacked, offended, disrespected, forced, trapped, or pressured. If any of these feelings are intense enough, they will interpret the emotion as anger.

• Think of a student you are working with who became angry recently. What could they have been feeling?
• What do you think your students and parents really want?
Have You Felt Angry In the Classroom?

- What were you really feeling?
- What physical warning signs did you experience (tenseness, irritation, clenched teeth, changed language)?
- Anger is a normal emotion, but may also be a symptom of compassion fatigue.
We experience compassion fatigue – a **profound emotional and physical erosion** – when we are unable to refuel and regenerate ourselves. This is when our empathy shuts down.

- **Wishing** a student would just get over it (“Suck it up.”)
- **Blaming** students for their problems
- **Using anger** or sarcasm when trauma symptoms manifest
- **Lacking Empathy** or fearing what the student will start to talk about
- **Ignoring** clear signs of trauma or the student altogether.
What are some of my triggers?
Who can I turn to for support and comfort?
What do I need to feel nourished, healthy and strong?
What unhealthy or unhelpful strategies do I need to avoid?
What brings me comfort?
What’s a healthy distraction for me when I need to take a break?

Visit: snocochilrenswellnesscoalition.com
• **Trauma-informed classrooms and campuses** can create environments where injured brains have the best opportunity to heal and thrive.

• **Research on resiliency and neuroplasticity** teach us that every student can bounce back from adversity.

• **Evidence-based Kernels** can lead us from intuitive responses to intentional action in our schools and communities.
How Wolves Change the Behavior of Rivers

https://www.youtube.com/watch?v=ysa5OBhXz-Q
"If all you have is a hammer, everything looks like a nail."

- Abraham Maslow
• Kernels are low or no-cost to implement.

• This means we can **unleash access** to strategies that support safety, relationship and skill building essential to our student’s readiness to learn.

• Kernels give us a way to implement evidence-based practices that will **interrupt the ACES trajectory**, move us from intuition to intention, and **improve classroom outcomes**.
Kernels are Our Wolves

• A kernel is the smallest unit of scientifically proven behavioral influence.
• Kernels produce quick easily measured change that can grow into much bigger change over time.
• They can be used alone OR combined with other kernels to create new programs, strategies or policies.
• Combinations of Kernels are considered “behavioral vaccines.”
• “Planted” Kernels create a culture.
• **Mood** is your internal emotional state.

• **Affect** is how you externalize your emotions through verbal and non-verbal cues.

• Research shows that *trauma-impacted youth are particularly aware of changes in affect*, which triggers the survival brain, decreasing their capacity to think and learn.

Attachment, Self-Regulation & Competency
Your Pain is My Pain

• **Mirror Neurons** help us to instinctively understand the actions of others and prime us to imitate what we see.

• This neural mechanism is involuntary and automatic.

Rubber Hand Illusion

https://www.youtube.com/watch?v=iPFSgLDCvAs
Rubber Hand Illusion
• Traumatized youth often have difficulty communicating, so their behaviors may become a front for conveying unmet needs or unregulated affect.

• Adults may respond to the most distressing symptom, rather than the student’s underlying emotion or need.

• Ask - “What’s happening here?” rather than, “What’s wrong with this child?”

Attachment, Self-Regulation & Competency
• **Being predictable** by having **consistent responses to student behavior** is vital to establishing safety and reducing a child’s need to exert control.

• **An intentional focus on building success, rather than establishing limits** – which may be associated with powerlessness or vulnerability – **should be your priority**.

• Children may initially react to both negative or positive responses.

Attachment, Self-Regulation & Competency
Building routines and rituals, particularly around trouble areas, can make school fun, safe for all and predictable.

Research shows that establishing routines enhances student:

- Feelings of safety;
- Ability to build trust and feelings of reliability within a relationship; and
- Anticipation of an event, which reduces stress.

Attachment, Self-Regulation & Competency
The alterations in brain chemistry that have resulted from our changing diet during the last 50 years contributes to trends of depression, bipolar disorder, autism, violence and academic problems.

**Challenge: Brain Nutrient Deficiency**

<table>
<thead>
<tr>
<th>Omega 6</th>
<th>Omega 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potato chips</td>
<td>Mackerel, Salmon or herring</td>
</tr>
<tr>
<td>Bread</td>
<td>Range fed meats</td>
</tr>
<tr>
<td>Cookies</td>
<td>Cod liver oil</td>
</tr>
<tr>
<td>Crackers</td>
<td>Flaxseed oil</td>
</tr>
<tr>
<td>Salad dressings</td>
<td>Flaxseed ground</td>
</tr>
<tr>
<td>Margarine</td>
<td>Walnuts, Pecans, Brazil Nuts</td>
</tr>
<tr>
<td>School food</td>
<td>Pumpkin seeds</td>
</tr>
<tr>
<td>Fast Food</td>
<td>Tofu (moderation)</td>
</tr>
<tr>
<td>Snacks</td>
<td>Green leafy veggies (Spinach)</td>
</tr>
<tr>
<td>Prepared foods</td>
<td>Tahini (sesame seed spread)</td>
</tr>
<tr>
<td>Grain fed meats</td>
<td>Hummus (chickpea spread)</td>
</tr>
<tr>
<td>Hydrogenated fats</td>
<td>Eggs (non-grain feed)</td>
</tr>
</tbody>
</table>
Omega-3 Supplementation

• Omega 3 has no harmful effects
• Well-documented evidence for Reducing aggression, depression, anxiety, bipolar disorder, post partum depression and borderline personality disorder
• 2002 Oxford University study and 2009 Dutch Corrections study of found Omega-3 supplementation achieved a 37% reduction in episodes of inmate aggression.
• In 2006, the American Psychiatric Association recommend that all psychiatric patients receive at least 1 gram of omega-3 per day to reduce symptoms of mental illness.
Fish Consumption and Major Depression
Annual Prevalence by Country

- New Zealand (5.8%)
- Canada (5.2%)
- France (4.5%)
- W. Germany (5.0%)
- United States (3.0%)
- Puerto Rico (3.0%)
- Korea (2.5%)
- Taiwan (0.8%)
- Japan (0.12%)

$r = -0.84$
$p < 0.005$

Hibbeln, Lancet 1998;351:1213
Homicide mortality and availability of linoleic acid (en\%)
Combined Australia, United Kingdom, Canada Argentina and USA data from 1961-2000

\[ r = 0.93 \]
\[ r^2 = 0.86 \]
\[ F = 583 \]
\[ p < 1 \times 10^{-40} \]

[from 12 seed oils as en\% of all commodities available for food consumption]

Hibbeln et al. Lipids 2004; 23: 1207-1213
• **Power poses** – brief, non-verbal, dominant poses lasting 2 minutes in duration are shown by research to decrease cortisol levels by 25% and increase testosterone by 20%. This results in:
  
  • Reduced anxiety
  
  • Increased self-confidence and self-esteem
  
  • Improved ability to deal with stress
Power Poses
• **Physical play** – increases a child’s ability to have healthy relationships by teaching basic skills for making and playing with friends.

• **Non-Directive Play** – improves the relationship with the parent, increases the happiness and contentment of the child, and results in greater attention span, improved creativity and resourcefulness.

• **Caretaker/child play** – is associated with lower rates of delinquency, substance abuse problems and psychiatric disorders such as depression and anxiety problems.
Why haven’t we heard this before?!
Connection and relationship are vital to improving outcomes through CORE.

“Relationship is the evidence-based practice.”
– Chris Blodgett, WSU

Building Nurturing & Supportive Relationships is Key!
Activity: What do you need?

<table>
<thead>
<tr>
<th>Good Boss</th>
<th>Bad Boss</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Notices when I do a good job</td>
<td>• Controlling</td>
</tr>
<tr>
<td>• Trusts me</td>
<td>• Yells</td>
</tr>
<tr>
<td>• Patient</td>
<td>• Doesn't believe in me</td>
</tr>
</tbody>
</table>
Activity: What do THEY need?

Good Boss

- Notices when I do a good job
- Trusts me
- Patient

Bad Boss

- Controlling
- Yells
- Doesn't believe in me
The Marshmallow Experiment

- Feelings of reliability within a relationship improves self-control.

https://www.youtube.com/watch?v=JsQMdECFnUQ
• Also known as “handshakes.”
• Frequent friendly physical and verbal greetings impact social status and perceptions of safety and harm.
• They also affect behavior streams of aggression, hostility and politeness.
“Turtle Breathing” is a technique for helping children with controlling anger.

Trusted adults use this technique in conjunction with the scripted story, “Tucker Turtle Takes Time to Tuck and Think.”

This technique:

- Reduces anxiety
- Reduces temper tantrums
- Increases resiliency
- Increases self-control
Model remaining calm
Teach the child the steps of how to control feelings and calm down

**Step 1:** Recognize your feeling(s)
**Step 2:** Think “stop”
**Step 3:** Go inside your “shell” and take 3 deep breaths
**Step 4:** Come out when calm and think of a “solution”

Practice steps frequently

**Recognize and comment** when the child stays calm

Involv families: teach them the “Turtle Technique”
Turtle Breathing

Helping children with their anger

Anger is a normal and healthy emotion. Children need to learn how to manage their anger without hurting themselves or others. Here are seven ways to help a child cope:

1. Be firm and fair, without getting angry. Limits are part of loving.
2. Understand that anger usually stems from the frustration of not getting what they want or something.
3. Be clear. Tell the child what you want him or her to do in a specific situation. Try to avoid lectures. Say, “Try this instead.”
4. Coach the child on how to handle conflict.
5. Role model healthy ways to deal with anger.
6. Try to avoid spanking as it teaches hitting.
7. Be patient. Learning takes time.

Resources

www.vanderbilt.edu/casel - Free tools, videos, and information on children’s social emotional wellbeing.
www.banshaireducation.org - Resources for social emotional interventions with children.
www.schoolhealthbasis.ca - Resources for parents, teachers, and students on various topics.

1. share
2. play
3. ignore
4. ask nicely
5. say, “please stop”
6. get a teacher
7. trade a toy or item
8. wait and take turns

References

www.angeryourself.com - (March, 2010)
When any person receives specific, spoken recognition for engagement in a target act or behavior, it is widely demonstrated to:

- Improve school performance
- Improve adult/child interactions
- Improve organizational functioning
- Increase engagement in the noticed behavior
Verbal Praise As a Social Reinforcer

What are the social reinforcers in your classroom for this behavior?

Paying attention.
Verbal Praise As a Social Reinforcer

How about for this behavior?

Showing off.
Use the I-Feed-V mnemonic to guide your use of praise (Loveless, 1997):

- **I** = immediate
- **F** = frequent
- **E** = enthusiastic
- **E** = eye contact
- **D** = describe the behavior
- **V** = variety

Ratio of praise to criticism = 4:1 (Watson, 2004)

Positive outcomes for both social and academic behaviors (e.g., Broden et al., 1970; Craft et al., 1998; Ferguson, & Houghton, 1992; Gable & Shores, 1980; Sutherland, 2000; Sutherland et al., 2000).
Equality or Equity?

Equality doesn’t mean Equity.
Peer to Peer Notes

Notes of praise written from one peer to another, then read aloud or posted on a public display is widely shown to:

• Increase positive friendships
• Reduce neighborhood disorganization and crime
• Increase sense of safety
• Increase volunteerism
• Increase engagement in the noticed behavior
Adult to Child Notes

Notes from adults to children recognizing them for a specific action or behavior is demonstrated to help students of all ages to:

• Do better at school
• Be more socially competent
• Reduce ADHD, aggression and problem behaviors
• Increase engagement in the noticed behavior
A positive note sent home with a child for inhibiting an otherwise disruptive behavior is shown to:

• Reduce disruptive and aggressive behavior
• Reduce problems at home
• Increase engagement at school
Authority Figure Lottery

When an authority figure, like you or your Principal, sends a note home or calls a parent about a young person’s positive behavior, research shows that action results in:

- Increases in school and classroom engagement
- Reductions in disruptive behavior
- Reductions in aggression
Beat the timer makes daily routines run smoother, reduces parent/child conflict and reduces accidental attention to negative behavior.

Research shows that this simple game:

- Increases compliance
- Increases accuracy and completion of homework
- Helps with chores
Random Calling

This kernel is sometimes referred to as “Ritalin on a Stick” and is proven effective by research.

Random calling results in:

- Equality in participation
- Increased attention to the lesson
- Increased academic performance
- Decreased disruptive behavior
Public reprimands and humiliation are shown can create a trauma response and cause long lasting negative effects. Where possible, **low emotion** and **private reprimands** are a more effective strategy.

Research shows that this strategy:

- Reduces aggression
- Reduces disruptive behavior
- Reduces emotional responding
Copy Cat
(Paragraph Shrinking)

• After giving directions or talking with a student, ask him to repeat what was said in 8-10 words.
• Repeat if summary is poor.
• Praise if the summary is good.
• Helps with retention and understanding of what is said.
The attention kernel works for students and adults. It results in:

- Immediate reduction in transition time
- Increased academic engagement
- Reduced disruptive behavior
- Reduced aggression and bullying
- Reduced trauma response in traumatized people.
Premack’s Principle

Also known as Contingency Management, the Mystery Motivator, Granny’s Wacky Prizes, Prize Bowl and the Game of Life.

A reinforcement strategy that uses activities as positive reinforcement instead of words. This strategy results in:

• **Reduction in deviant behavior across the lifespan**
• **Reduction in problem behaviors at school**
• **Increases desirable behavior in all age groups**
• **Reduces addiction.**
• **Motivates youth and adults to do their best and improve**
• **Promotes self-regulation instead of excitement**
The Social Development Strategy

The goal...
Healthy behaviors for all children and youth

Start with...
Healthy beliefs & clear standards...
in families, schools, communities and peer groups

Build...
Bonding
- Attachment
- Commitment...
to families, schools, communities and peer groups

By providing...
Opportunities
- Skills
- Recognition...
in families, schools, communities and peer groups

And by nurturing...
Individual characteristics
Gratefulness Check-In

When teachers are asked what they are grateful for once per week, research shows:

- Increased in happiness
- Improved sleep
Brain on the Ball

Suitable for preschoolers through adults:

- Increases attention and improves academic achievement
- Reduces ADHD symptoms without medication and reduces disruptive behavior
Raine Arielle Hallie

We love our BALLS!
Dear Mr. Neigel,

Thank you for the Therapy Balls. I like them because I can get the energy out of my body. They are more comfortable than chairs.

Yours truly,

Olivia
2/14/10  

Dear Mr. Wellington,  

Thank you for the bike.  
I like my new bike because I can see the balls around.  

Best wishes in the world!  

Yours truly,  

Tijana
Many Other Kernels

- Graphic/Node Maps
- Choral Responding
- Peer to Peer Tutoring
- Nasal Breathing
- Private Reprimands
- More!
Behavioral Vaccines work like any other vaccine

If only SOME get vaccinated...

...the virus spreads.

If MOST get vaccinated...

...spreading is contained.

Healthy, non-vaccinated
Healthy, vaccinated
Not-vaccinated, sick, contagious

If we work together to provide effective community-wide behavioral vaccines to our young people, how will our resources be impacted?
Combined to Form a Behavioral Vaccine
Seattle Social Development Strategy

Adults instructed to greet and shake hands with five kids NOT in their classroom each day. They also gave out “caught you being good” tickets every day. 10 years later, kids who received this simple strategy had:

• Reduced ATOD initiation
• Reduced aggression
• Had significant improvement on achievement tests
• Were significantly less likely to have engaged in school misbehavior (i.e., cheating, truancy, or being removed from class for misbehavior)
Create a Behavioral Vaccine for Your Classroom

Relationship | Play | Omega-3 | Power Poses | Handshakes
Turtle Breathing | Verbal Praise | Social Development Strategy
Harmonica | Private Reprimands | Praise Board | Random Calling
Note Home for Inhibition | Gratefulness Check-in
Notes of Praise (Peer to Peer/Peer to Adult) | Granny’s Prizes
Remember These Important Strategies

• Traumatized children need to feel in control
• Provide choices: break large tasks into small ones
• Offer to help
• Be aware of triggers
• Don’t take it personally
• Don’t argue — if you feel like you’re escalating, check-in with yourself and take a break
• Breathe - be mindful
The Bottom Line

• Understanding ACES gives you the power to significantly impact the trauma trajectory of your students.

• Remember Kaiser Permanente’s diet and nutrition program dropouts? The researchers learned that their very successful intervention wasn’t just treating nutrition problems, it was treating personal solutions!

• If you take away a person’s solution before they learn a better one, you’re just digging a hole for them to fall back into.

• Do not lower your expectations for students with ACES.
People who receive encouragement and praise from others are more likely to bounce back from adversity.
Resources

Presenters: Joe Neigel - neigelj@monroe.wednet.edu

Kernels:  
http://promiseneighborhoods.org/kernels/  
Or  

ACES:  
http://www.cdc.gov/ace/index.htm  
Or  
http://www.acestudy.org/  
Or  
http://www.fpc.wa.gov/  
Or  
http://www.acestoohigh.com

ARC Training:  
http://www.traumacenter.org/research/ascot.php

Learn More At:  
www.snocochildrenswellnesscoalition.com
Bonus Strategies (if time allows...)
The Importance of Contact Support

- Growth cannot occur without supportive relationships.

https://www.youtube.com/watch?v=_3Xe7tuR4VE
Emmy Werner and Resilience

• Kauai Longitudinal Study began in 1955 and lasted for 40 years.

• Followed 698 children – the entire birth cohort for the year 1955 – from infancy to midlife at key periods of development.

• “High Risk” participants had complications at birth and lived in chronic poverty, in unstable households with poorly educated mothers with mental illness.

• 1/3rd of high risk children grew up to be competent, confident, caring adults that achieved success equal to, or exceeding, that of their more stable peers.
## Resiliency Risk Factors

<table>
<thead>
<tr>
<th>Risk Factors Negatively Impacting Resiliency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to social and economic disadvantage</td>
</tr>
<tr>
<td>Exposure to family conflict and marital dysfunction</td>
</tr>
<tr>
<td>Being male</td>
</tr>
<tr>
<td>Having a difficult temperament</td>
</tr>
<tr>
<td>Coming from a family with more than 4 children</td>
</tr>
<tr>
<td>Relationships with anti-social peers</td>
</tr>
</tbody>
</table>

(Do we have direct control over most of these risk factors?)
## Protective Factors Identified by Werner

<table>
<thead>
<tr>
<th>Positive temperament from birth.</th>
<th>Problem-solving and reading skills by age 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special talent that gives pride</td>
<td>Willingness to help others</td>
</tr>
<tr>
<td>Realistic goal setting</td>
<td>Close bond with at least one emotionally stable non-caregiver adult</td>
</tr>
<tr>
<td>Religious belief system that provides stability and meaning in life</td>
<td>Sought elders or trusted adults outside of the family for counsel – teachers most often cited by study participants</td>
</tr>
</tbody>
</table>
Meet Emmy Werner

- Distinguished Friend of the University Award at UC Davis.

https://www.youtube.com/watch?v=jzcLo-LHTms
The Resiliency Wheel

- Provide Opportunities for Meaningful Participation
- Increase Prosocial Bonding
- Set and Communicate High Expectations
- Set Clear, Consistent Boundaries
- Provide Caring & Support
- Teach "Life Skills"
How Resiliency Happens

Negative Outcomes vs Positive Outcomes

https://www.youtube.com/watch?v=1r8hj72bfGo
When Escalation Occurs

Approximately 55% of what we communicate is physiological, 38% through tone of voice and just 7% through words.

- Appear calm – don’t mirror agitated behavior
- Maintain a neutral expression
- Allow space – proximity can trigger aggression.
- Control your breathing
Verbal Strategies

- Lower your voice and keep your tone even
- Use active listening
- Give the student time to process and follow your directions
- Make time to debrief and repair the relationship
Active Listening is a structured form of listening and responding that focuses the attention on the speaker. Research shows this technique increases mutual understanding and respect, while building emotional support.

**Practice Active Listening Skills**

- **STEP 1**: Listen carefully to what the other person is saying while looking at them.

- **STEP 2**:
  - A) Repeat in your own words what they just said, **OR**
  - B) Guess at the meaning of what they said and tell them, **OR**
  - C) Say what you think they might be feeling

- **STEP 3**: Continue Steps 1 and 2 after they say something else.
• **Awkward Moment** is a researcher designed party game that teaches empathy. Evidence shows the game improves student ability to imagine another person's perspective. They also showed more interest in confronting detrimental social stereotypes. ($19 on Amazon)

• **Playing advocate** reduces the tendency to evaluate evidence in favor of one's own point of view. One classic educational approach is to assign students to take turns advocating both sides of a given debate.

• **Community Gardens** and **Cooperative Construction** are shown by research to increase social skills, cooperation, and communication.
Increasing Self-Efficacy
Helping students believe they can succeed

• **Enactive mastery** refers to a struggling learners’ recognition of the degree to which they succeed. Teachers can influence self-efficacy by planning tasks of “moderate challenge,” that is, tasks they can succeed on with moderate effort.

• **Vicarious experiences**, like observing a friend model a task, provides struggling learners with direct guidance about how to do something. Teachers can influence self-efficacy by regularly having learners observe models perform targeted skills or learning strategies.

• **Verbal persuasion** is a process of regularly stating that learners will succeed on specific tasks, and following up with specific feedback outlining what they did to be successful.
Increasing Academic Risk Taking

Students self-select tasks that vary in probability of success.

• **Trust and feelings of safety** in the teacher and the classroom are key factors influencing academic risk taking, while fear of failure is shown to create cautious behavior patterns.

• **Peer-based learning** facilitates academic risk taking by creating a smaller audience for failure.

• **Develop a classroom norm** or system that rewards students who support their classmates. Rewards can be as simple as extra points on assignments if the whole class applauds after a presentation.
Less Exhaustion

• **Short duration naps and resting with eyes closed** is an evidence based fatigue reduction strategy. Actual sleep is not needed to see beneficial outcomes. Extended naps may lead to sleep inertia, negatively impacting cognitive performance from minutes to hours.

• **Physical activity** is shown to elevate alertness. Stretching, walking, jogging in place, and other activities that increase the heart rate and body temperature can thwart perceived feelings of sleepiness and help maintain alertness.

• **Mental exercises** like engaging in conversation (talking) is shown by research to support alertness.
When Johnny had a good “Thought for the Day,” his dad helped him set it up on the computer and print multiple copies.

Johnny cut out each quote and signed his name on the back. Then he’d bring them to work the next day.

https://www.youtube.com/watch?v=IQlxLBqqFKc