Creating a Trauma-Informed Community: A Learning Symposium on Mental Health Well-Being in the Western Suburbs
KEYNOTE PRESENTATION:

What is a Trauma-Informed Community?

Laura Porter, Co-Founder
Ace Interface
N.E.A.R. FLOURISHING

Neuroscience, Epigenetics, ACEs, Resilience

The Magnitude of the Solution
Beyond Resilience... Flourish

To Flourish: “To Prosper with Sustained, Continuous, Steady, Strong Growing Well”
Adapted from the research of Martin Teicher, MD, Ph.D
By Washington Family Policy Council
Hardwired for Anticipated World

Dangerous

Conception

BRAIN
Prepares for anticipated world

TOXIC STRESS

“Brawn over Brains”
Focused: Fight, Flight or Freeze

OUTCOME
Individual & species survive the worst conditions

Dissonance between biological expectations & social reality fuels problems

Safe

“Process over Power”
Multi-focused: Relational

OUTCOME
Individual & species survive in good times; vulnerable in poor conditions

Adapted from the research of Martin Teicher, MD, Ph.D
Unique Experiences of the World
How might we systematically build on the strengths of people affected by early adversity?

- Obsessive or Enthusiastic?
- Irritable or Passionate?
- Decisive or Impulsive?
- Observant or Hypervigilant?
- Competitive or Aggressive?
- Lacking Empathy or Rational?
- Independent or Detached?

Krista Goldstine-Cole 2012
Epigenetics

“The experiences of a parent, before even conceiving offspring, markedly influence both structure and function in the nervous system of subsequent generations.”

Dr Brian Dias, Emory University, 2014
Epigenetics

“Parents with their own genetic vulnerabilities can pass on protection to the next generation provided that they are given the right support.”

Van der Kolk, 2014, The Body Keeps the Score, p. 157
“Self regulation depends on having a friendly relationship with your body. Without it you have to rely on external regulation – from medication, drugs like alcohol, constant reassurance, or compulsive compliance with the wishes of others.”

What Helps Individuals Self-regulate?

Activate Social Engagement:
1. Healing Power of Community Expressed in Music, Rhythm, Theatre
2. Exercise & Play
3. Practicing Connection

Calm Physical Tensions in Body:
1. Massage, Movement, Breathing
2. Mindfulness, Reflection, Yoga
3. Tapping Acupressure Points
4. Biofeedback, Neurofeedback
5. Eye Movement Desensitization & Reprocessing
Trauma-Informed School Discipline

- Wait a Day
- Wait an Hour
- Ready to Talk
Adverse Childhood Experiences

The Adverse Childhood Experience (ACE) Study is a retrospective and prospective population health study designed to examine the childhood origins of many of our nation’s leading health and social problems.
Adverse Childhood Experience Study

- Largest Study of its Kind
- Over 17,000 participants
- Over 100 Peer-Reviewed Journal Articles
- Helps Us Understand Drivers of Population Wellbeing
- Shifting the Paradigm of Global Health Promotion
Dr. John Snow 1854

Cholera Death is Caused by Miasmas

1. New Way of Thinking
2. Shoe Leather Epidemiology
3. Lives Saved
Stress Categories Considered in ACE Study

**Abuse**
1. Child physical abuse (28%)
2. Child sexual abuse (21%)
3. Child emotional abuse (11%)

**Neglect**
4. Physical Neglect (10%)
5. Emotional Neglect (15%)

**Indicators of Family Dysfunction**
6. Mentally ill, depressed or suicidal person in the home (19%)
7. Drug addicted or alcoholic family member (27%)
8. Parental discord – indicated by divorce, separation (23%)
9. Witnessing domestic violence against the mother (13%)
10. Incarceration of any family member (5%)

ACE Score = # of Categories
ACEs are Common in Illinois

- Majority $\geq 1$
- 21% $\geq 3$
- 5.5% $\geq 6$

Note: both more people with ACE Score of 0 and more people with ACE Score of $\geq 6$
Higher ACE score (dose) → Larger Percent of Population Affected (response)

Dose-response is a direct measure of cause and effect.

A classic causal relationship
More ACE = more health problems
The diagram illustrates the impact of adverse childhood experiences (ACEs) across different life stages, from preconception to death. The pyramidal structure shows:

- **Historical Trauma / Intergenerational Adversity** at the base.
- **Adverse Childhood Experience** below it.
- **Social, Emotional & Cognitive Functioning** further up.
- **Health Risk & Behaviors** above that.
- **Disease, Disability & Social Problems** at the next level.
- **Early Death** at the peak.

The diagram indicates that as ACEs accumulate, they lead to adaptations, neurodevelopmental influences, and ultimately death. The process is not linear but rather involves complex interactions and feedback loops.
ACEs, Smoking and Lung Disease

% with Health Problems

- Early Smoking Initiation
- Current Smoking
- COPD

ACE Score
- 0
- 1
- 2
- 3
- 4 or more

© 2015 Ace Interface
ACEs Drive Rates of Expensive Health Conditions

The most expensive health conditions:
1. Mental disorders
2. Heart disease
3. Cancer
4. Trauma
5. Pulmonary conditions

Heart disease and trauma ranked 1st and 2nd for total spending
Cancer ranked 1\textsuperscript{st}, heart disease 2\textsuperscript{nd} highest for per-person costs

(Olin, 2006)
Treatment: Mental Health Condition

<table>
<thead>
<tr>
<th>Number of ACE Categories</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7.3</td>
</tr>
<tr>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>15.5</td>
</tr>
<tr>
<td>4 or 5</td>
<td>19.3</td>
</tr>
<tr>
<td>6,7, or 8</td>
<td>24.5</td>
</tr>
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</table>
Cardio Vascular Disease

% of Population with CV Disease

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4.9</td>
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<tr>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>3</td>
<td>5.6</td>
</tr>
<tr>
<td>4 or 5</td>
<td>9.4</td>
</tr>
<tr>
<td>6, 7, 8</td>
<td>8.1</td>
</tr>
</tbody>
</table>
History of Cancer

% Ever Had Cancer

ACE Score

- 0: 8.2%
- 1: 8.6%
- 2: 11%
- 3: 11.8%
- 4 or 5: 10.3%
- ≥6: 15.6%
Work-Related Injury/Illness in Past Year

% with Injury/Illness

ACE Score

0 1 2 3 4, 5 6, 7, 8

3.6 5 7 6.1 8.9 10.1
ACEs & Suicide Attempt

% Attempted Suicide

ACE SCORE

0 1 2 3 4 or +
Common Chronic Conditions

25% of the U.S. population has one or more of five major chronic conditions:

1. Mood disorders
2. Diabetes
3. Heart disease
4. Asthma
5. Hypertension

Expenses for people with one chronic condition twice as great as for those without any chronic conditions.

(Olin, 2006)
Diabetes

Percent Diagnosed with Diabetes

ACE Score

0: 6.1
1: 7.5
2: 8
3: 7.5
4 or 5: 7.9
≥6: 11.7
Asthma

Percent of Population with Asthma

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>Asthma</th>
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<tbody>
<tr>
<td>0</td>
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<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3.9</td>
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<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>7.5</td>
</tr>
<tr>
<td>≥5</td>
<td>12</td>
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</tbody>
</table>
Hypertension

Odds Ratio 1.64

Percent with Hypertension

ACE Score

0 1 2 3 4 or 5 ≥6

25.1 23.6 26.7 25.9 31.6 33.2
ACEs and Relationship Problems
(Divorce, Family Problems, Sexual Dissatisfaction)

Percent with Problems

ACE Score

© 2013 ACE Interface
ACEs and Unemployment

ACEs & History of Homelessness

25-54 yr Old Adult Population

2010 BRFSS – Preliminary; Based on < Full Year of Data
Co-Occurring Chronic Conditions

People with chronic conditions tend to have other conditions and illnesses.

When the other illnesses are added in, total expenses for people with any of five major chronic conditions rise to 49% percent of total health care costs.
ACEs and Co-Occurring Problems

- Health & Social Problems
  - Panic Reactions
  - Depression
  - Anxiety
  - Hallucinations
  - Sleep Disturbances
  - Severe Obesity
  - Pain
  - Smoking
  - Alcoholism
  - Illicit Drug Use
  - IV Drug Use
  - Early Intercourse
  - Promiscuity
  - Sexual Dissatisfaction
  - Amnesia (Childhood)
  - Problems with Anger
  - Perpetration of Family Violence

- Affect Regulation
- Somatic Issues
- Substance Use
- Sexuality
- Memory
- Arousal

ACE Interface, 2016
Impact of ACEs on Student Learning
ACE Score and Delayed Language Development
In 3-4 Year Old Children in Head Start

Percent with Delayed Language Development

<table>
<thead>
<tr>
<th>ACE Score 0-1</th>
<th>ACE Score 2-3</th>
<th>ACE Score 4 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>Boys</td>
<td></td>
</tr>
</tbody>
</table>

ACE Interface
Among Elementary Students with 3 or more ACEs
The Risk of Multiple Problems Increase

- Academic failure: 3 times
- Poor Health: 4 times
- Severe Attendance Problems: 5 times
- Severe Behavior Problems: 6 times

*Courtesy of Chris Blodgett, PhD
Washington State University*
Percent of Elementary Students with One or More School Problems (Academic, Health, Attendance, Behavior) by ACE Score

<table>
<thead>
<tr>
<th>ACE Score</th>
<th>Percent with one or more concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Score 0</td>
<td></td>
</tr>
<tr>
<td>ACE Score 1</td>
<td></td>
</tr>
<tr>
<td>ACE Score 2</td>
<td></td>
</tr>
<tr>
<td>ACE Score 3 or more</td>
<td></td>
</tr>
</tbody>
</table>

ACE Interface
6 students with no ACE
5 students with 1 ACE
6 students with 2 ACEs
3 students with 3 ACEs
7 students with 4 or 5 ACEs
3 students with ≥6 ACEs

Average High School Classroom
42% have ≥ 3 ACEs
Results Oriented Decision Making: Data

- Not Safe at Home
- Not Welcome at School

Among Adjudicated Youth with High ACE Scores, 85% were first suspended from school in second grade.
Unconditional Positive Regard

When I saw you
I fell in love, and
you smiled
because you knew.

William Shakespeare
## Functional Days

### POORHLTH

During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?
Adult Adversity Compounds Effects

Adults with $\geq 3$ ACEs

Plus

Major Stress Categories:

1. Homelessness
2. Incarceration
3. Chronic illness
4. Separation/Divorce
5. Severe Depression
6. Work-related Injury/ Illness

% with 15-30 Disability-
Interrupted Days a Month

Number of Adult Major Stress Categories Added to ACE Score of $\geq 3$
Parent ACE Scores Predict Child ACE Scores

Children of Parents with ACE Scores ≥4, are:

1. 6.3x more likely to experience household substance abuse
2. 10.4x more likely to experience homelessness
3. 12.7x more likely to experience neglect
4. 44x more likely to be exposed to intimate partner violence

Progressive Nature of Adversity

**EARLY TRAUMA & STRESS**
- Predictable patterns of brain development, traits & behaviors
  - Slowed language & reading
  - Lateralization
  - Diminished IQ
  - Poor decision making skills
  - Memory Problems
  - Attention problems
  - ADD
  - ADHD
  - Aggressive behavior
  - Social isolation among peers
  - Poor understanding of social cues = conflict

**ADULT STRESS**
- Low-wage jobs
- Unemployment
- Public Assistance
- Prison
- Teen Pregnancy
- Chronic health problems
- Debilitating mental illness
- Victimization

**NEXT GEN RISK**
- Special education
- School failure
- Dropping out
- Social & Relational Problems
- Suspension
- Expulsion
- Delinquency
- Incarceration

Significant risk of early use/abuse of: alcohol, tobacco, illicit & prescription drugs

ACE Interface
### Outcomes Attributable to ACEs

#### Risk
- Smoking
- Heavy drinking
- Obesity
- Risk of AIDS
- Taking painkillers to get high
- Obesity

#### Prevalent Disease
- Cardiovascular
- Cancer
- Asthma
- Diabetes
- Auto immune
- COPD
- Ischemic heart disease
- Liver disease

#### Poor Mental Health
- Frequent mental distress
- Sleep disturbances
- Nervousness
- MH problem requiring medication
- Emotional problems restrict activities
- Serious & persistent mental illness

#### Health & Social Problems
- Fair or poor health
- Life dissatisfaction
- Health-related limits to quality of life
- Disability that impedes daily functioning
- Don’t complete secondary education
- Unemployment
- History of adult homelessness

#### Intergenerational ACE Transmission
- Mental Illness
- Drugs or Alcohol Problem
- Multiple divorces, separations
- Victim of family violence
- Adult incarceration
“What’s predictable is preventable.”

Dr. Robert Anda
The Magnitude of the Solution
ACEs Are Not Destiny

People affected by ACEs are becoming the leaders of Self-Healing Communities
Core Protective Systems

“Nurturing the healthy development of these protective systems affords the most important preparation or ‘inoculation’ for overcoming potential threats and adversities in human development. Similarly, damage or destruction of these systems has dire consequences for the positive adaptive capacity of individuals.”

Ann Masten, 2009
“Restoring relationships and community is central to restoring well-being”

- Language gives us the power to change ourselves and others by communicating our experiences and finding common meaning.
- We have the ability to regulate our own physiology with basic activities: breathing, moving, touching, tuning to others.
- We can change social conditions and create environments where people can feel safe and thrive.

Van der Kolk, 2014, The Body Keeps the Score, p. 38
Partnerships: funders, subject matter experts, service providers and community members are partners who work in concert to support culture change. Partners link and leverage resources to generate conditions for community efficacy.

Process: The Self-Healing Communities process consists of four phases of community engagement. Use of the process provides increasing opportunity for community members to overcome or reduce the life challenges associated with adversity.

Principles: Use of the six principles of Self-Healing Communities’ work requires a fundamental understanding of meta-leadership and a commitment to consider everyone who wants to help as a leader of culture change.
Emergence: Culture of Health

Leadership Expansion

Results

Community

Focus

Learning

Appreciative Action: Finds Strengths Acts Upon Them