

# What's Poverty Got To Do With It?



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*Jim Vidak, County Superintendent of Schools*

G - N - L

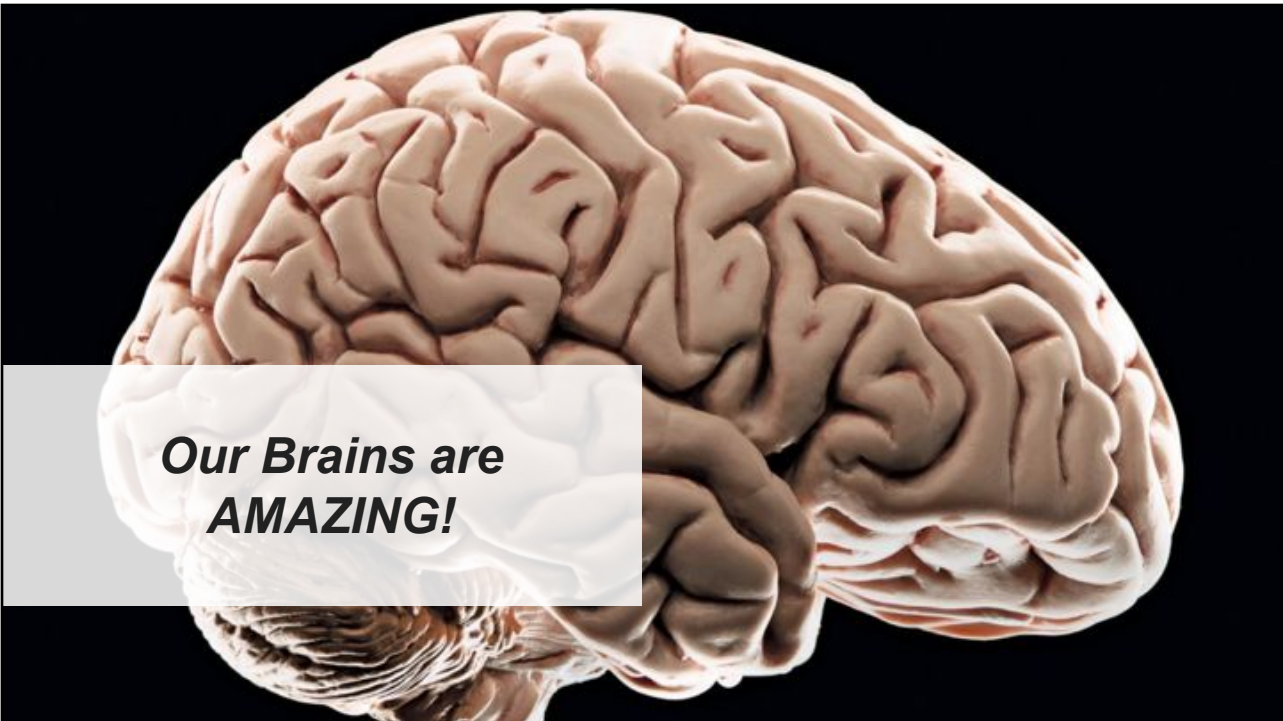
- G – Grateful for ?
- N – New Learning ?
- L - Looking Forward to What Will bring Joy ?



# Objectives

## — Understanding:

- *The Nature of Poverty*
- *How Poverty Affects Behavior and Academic Performance*
- *School Wide Success Factors*
- *Classroom-Level Success Factors*



***Our Brains are  
AMAZING!***

Why???



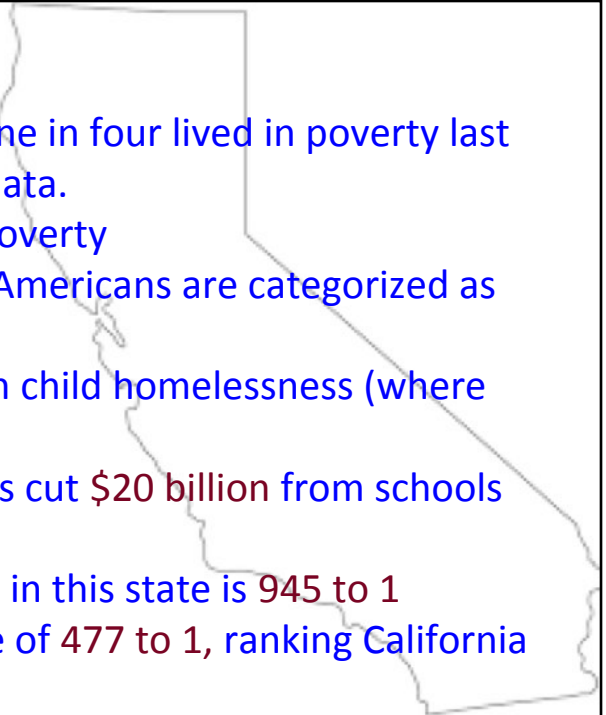
- Humility
- Forgiveness
- Empathy
- Optimism
- compassion

- Sadness
- Joy
- Disgust
- Anger
- Surprise
- Fear

- Sympathy
- Patience
- Shame
- Cooperation
- Gratitude

## STATISTICS

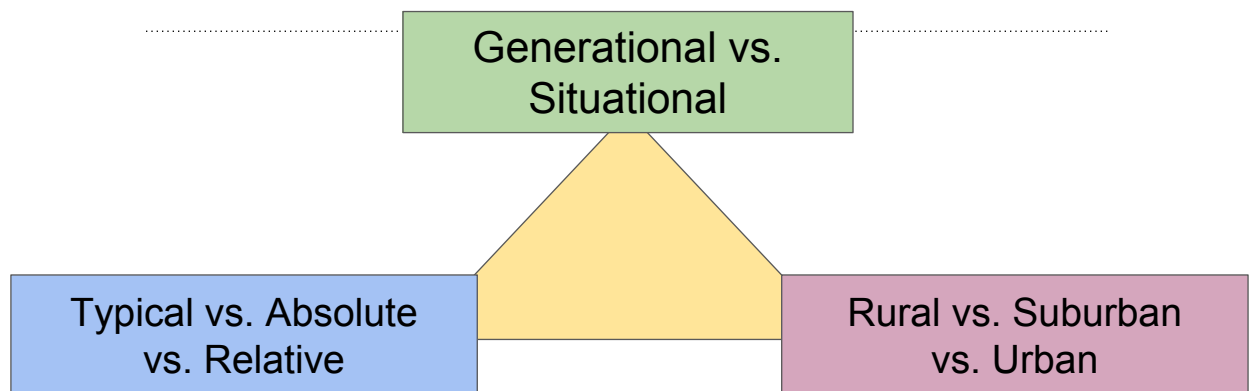
- 2.2 million children in California –one in four lived in poverty last year according to new U.S. Census data.
- 6 million Californians are living in poverty
- 69% of Latinos and 71% of African Americans are categorized as “income poor”
- California ranks 40<sup>th</sup> in the nation in child homelessness (where 50<sup>th</sup> is the worst).
- In the past four years, California has cut \$20 billion from schools and colleges.
- The ratio of students per counselor in this state is 945 to 1 compared with the national average of 477 to 1, ranking California last in the nation.



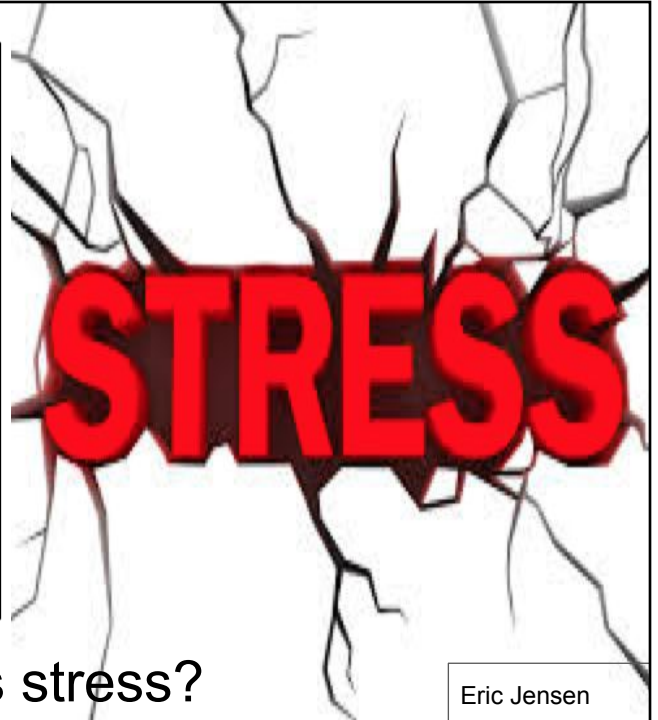
# Poverty is...

A chronic *condition* affecting the *mind, body* and *soul* resulting from multiple adverse economic *risk factors*.

## The Common Faces of Today's Poverty



Stress is a  
physiological  
*Response* to a  
*perception* of a  
lack of *Control*  
over an *Aversive*  
*Situation* or  
*Person*



What is stress?

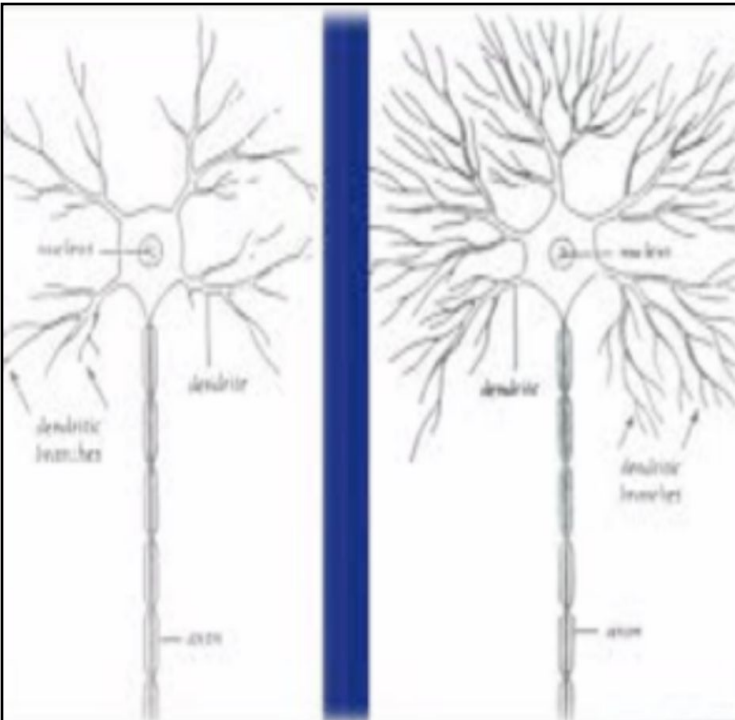
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## Chronic Stress effects...T or F?

1. Creates emotional problems ( )
2. Lowers IQ, reading scores ( )
3. Drastic memory loss ( )
4. Shortens dendrites ( )
5. Causes neuron death ( )
6. Fosters inappropriate attachments ( )



Eric Jensen



## Distress Shrinks Key Brain Cells

Dendrites taken from rat PFC show effects of distress. How much exposure to distress (in time) would you predict it would take for neurons to wither as shown?

- a) 2 hrs./day for 2 months
- b) 30 min./day for 7 weeks
- c) 1 hr./day for 10 weeks
- d) 10 min./day for 5 days

Eric Jensen

### The DATA Says...

**Distress is linked to 50% of all absences and causative in 17%.** Johnston-Brooks, Et al. 1998

**Distress affects attention, focus and concentration,** Erickson, Et al. 2003

**Increased allostatic load impairs cognition, creativity and memory.** Lupien Et al. 2001

**Social judgment skills are diminished.** Wommack Et al. 2004

**Early life distress may create lifelong health problems.** McEwen 2003

**Distress reduces neurogenesis, memory and accelerates aging.** DiBellis Et al. 2001

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## How many students drop-out of school in the U.S.?

- a) 6 million per year
- b) 100 per hour
- c) 2,450 per month
- d) 7,000 a day

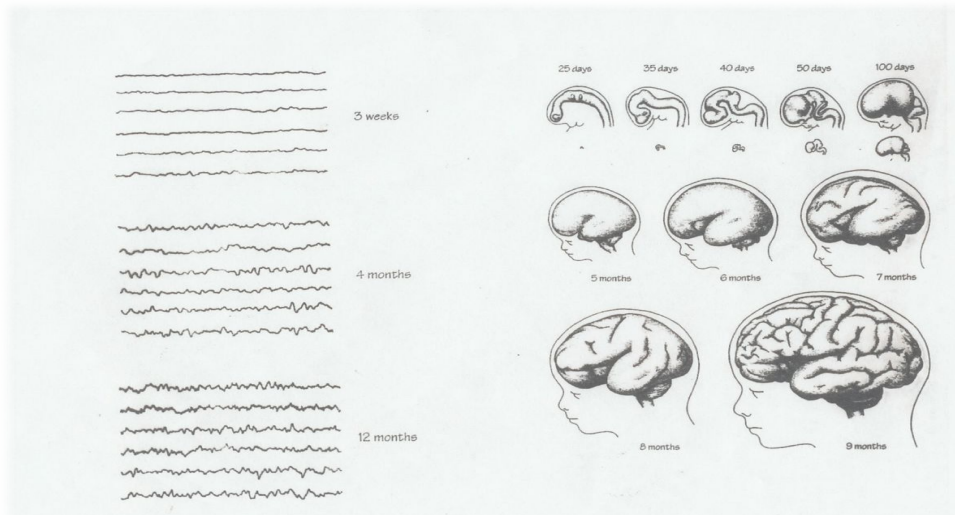
## What is the total in economic loss over the lifetime of each year's annual dropout class?

- a) \$90,000 per month
- b)  $\frac{1}{3}$  of a trillion
- c) \$50 billion per year
- d) \$17 per day per person



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## What's happening in there?





**Getting back to our  
brains...**

## Language Influence Cognition

Toddlers from middle and upper income families actually used more words *in talking to their parents than low SES mothers used in talking to their own children.*

(Bracey, 2006)



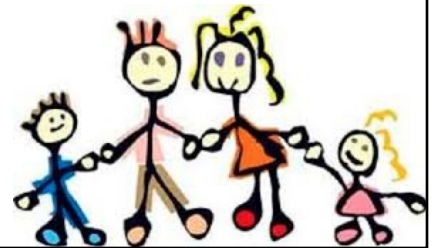
Which parents are more likely to:

- Know their child's teachers by name?
- Accurately identify their child's best and worst subject?
- Know how well their child is performing in classes?

a) poor

b) middle class

c) wealthy



Q: How long will it take me to get brain-changing progress?

A: It depends on your use of

1. the right strategy,
2. applied the right way,
3. over the right length of time.



***That's right; it depends on the teacher's skill set.***

Under controlled conditions, the earliest time point at which gray matter changes were detected in humans was

**24 hours later: 1 – day!**

## Solutions for Chronic & Acute Stress

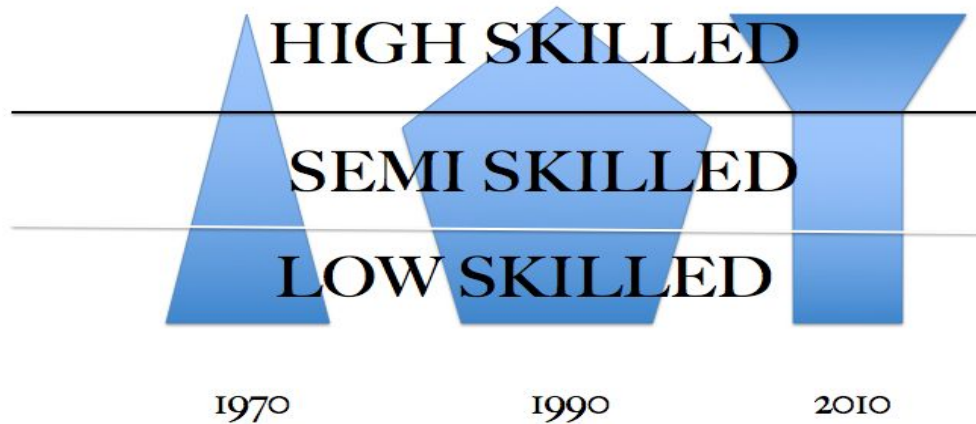
1. Strengthen the relationships especially with boys
2. Teach student coping skills weekly
3. Provide increasing amounts of choice in class
4. “Sell” the choice to ensure it’s noticed
5. More of them and less of you in front of the class
6. Give students a greater role in classroom decision making

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How can we increase student perception of control?



Why do we need change how we educate students?



INTERNATIONAL CENTER FOR LEADERSHIP IN EDUCATION (ICLE)

Better learning will come not so much from finding better ways for the teacher to *instruct...*

BUT

From giving the learner better opportunities to *construct.*

Adapted from Seymour Papert, 1990

DNA is NOT your destiny!

*If the apple doesn't fall far  
from the tree, it is our  
responsibility to go pick it up  
and move it!*



## Solutions to Working Memory Limitations in Students

1. Use the “pause” technique. Every few minutes, pause to let content sink in.
2. Chunk content into smaller chunks to aid understanding, then review.
3. Prime the learning to create an attentional bias to the content.
4. Do a fast physical activity first to activate frontal lobe uppers like dopamine and norepinephrine.

## What can you influence? (L, M, H)

1. \_\_\_ Parental support help and encouragement
2. \_\_\_ The student's effort/motivation ("Why do this?")
3. \_\_\_ Student IQ ("How smart am I?")
4. \_\_\_ Executive function skills sets ("How do we do it?")
5. \_\_\_ Attitudes/Mindsets ("Can I even do this?")
6. \_\_\_ Student's content knowledge ("What do I know?")
7. \_\_\_ Student emotional/social skills (school behaviors)
8. \_\_\_ School bullying (as victim or perpetrator)
9. \_\_\_ Classroom culture ("How will others respond?")
10. \_\_\_ Student responses (to what teachers say and do)

## Your Student's Working Memory Can (and should) be Improved!

The researchers said,

*"We found that 15 minutes of training per day for 5 weeks had significant effects on working memory and after 3 months, over 90% of the gains were preserved."*



Thorel L.B., Lindqvists, Bergman S., Bohin G., Kingberg T., (2009). Training and Transfer Affects in Pre School Children. *Developmental Science*, pp. 106-113

1. Games (e.g. Simon Says)
2. Clapping repeats
3. Repeat the directions
4. Partner/group practice with/# add-ons
5. Word basket: connect to content
6. Partner, buddy or teacher speaks, student write the content

Strategies to increase  
Working Memory

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**Stop** Telling Kids to *“Pay Attention!”* and  
Start Teaching Them...

*“HOW TO DO IT”*

# Building Attentional Skills

- Quick write practice
- Design, building or fine-motor handiwork with extended processes
- Well-coached sports
- Extreme high interest reading
- Playing a musical instrument
- “What’s different?” activities
  - cartoons where kids have to find differences between two pictures



## Strategies that Match How the Brain Learns BEST!

Storytelling

Metaphor, Analogy, Simile

Writing for Understanding

Music, Art

Rhythm, Rhyme, Rap

Visuals, Graphics

Projects

Problem-based Learning

Mnemonics

Hands-on Activities





Share one  
take-away from  
this presentation.

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*Thank you*