

Responding to Poverty



Frank J. Kros, MSW, JD
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***Effective Strategies to Support
Developing Minds***

POP
QUIZ!



True or False?

1. Babies are born with underdeveloped brains that are hypersensitive to stimulus.

Facts and Myths About Young Brains

1. Babies are born with underdeveloped brains that are hypersensitive to stimulus.

*True! Biological reality means a baby's head can be only so big in order to clear the birth canal. The "Fourth Trimester" happens immediately after birth. **Stress** is a big risk factor in the fourth trimester as newborns are developmentally vulnerable for 6-12 weeks. Tight wrapping and white noise mimic the conditions in utero and lots of skin-to-skin contact, rocking and bouncing minimize stress.*

Rosenfeld, J., 10 Amazing facts about the infant brain; Arrow (October 22, 2015).

True or False?

2. The fastest rate of brain development during the entire human life span occurs between age 3 and age 6.

Facts and Myths About Young Brains

2. The fastest rate of brain development in the entire human life span occurs between age 3 and age 6.

False! The fastest rate of brain development occurs from Birth until age 3. In the first 90 days alone, a baby doubles its brain volume and the cerebellum grows by 110%.

Movement is key here!

Rosenfeld, J., 10 Amazing facts about the infant brain; Arrow (October 22, 2015).

True or False

3. Teacher-driven instruction in math, science and reading in pre-school results in children being better prepared for K-5 learning.

Facts and Myths About Young Brains

3. Teacher-driven instruction in math, science and reading in pre-school results in children being better prepared for K-5 learning.

False! Research has consistently shown that decreasing play and exploration and increasing teacher-driven instruction (including use of scripted “Curriculum Kits”) results in: 1) Less learning during the K-5 grades; 2) decreased curiosity and creativity; 3) Increased boredom; 4) Shorter attention span and; 5) Higher stress.

Fisher KR, Hirsh-Pasek K, Newcombe N, Golinkoff RM. Taking shape: supporting preschoolers' acquisition of geometric knowledge through guided play. *Child Dev.* 2013 Nov-Dec;84(6):1872-8. doi: 10.1111/cdev.12091. Epub 2013 Mar 27. PMID: 23534446.

True or False

4. Bilingual language skills learned from birth to age 8 provide a child significant developmental advantages.

Facts and Myths About Young Brains

4. Bilingual language skills learned from birth to age 8 provide significant developmental advantages.

True! At birth, babies are capable of learning any language. Developing two or more languages by age 8 results in improved executive function skills like organization and attention. It may also delay dementia in later life.

Marian,V., The cognitive benefits of being bilingual, Cerebrum (October 31, 2012).

True or False

5. Pre-school programs may be stressful for young children.

Facts and Myths About Young Brains

5. Pre-school programs may be stressful for young children.

True! Researchers found that the more time kids spent in non-maternal care during the first 4.5 years of life, the more behavioral problems they developed. In addition, kids who spent more time in preschool centers were rated as less socially competent by their mothers and kindergarten teachers. *Researchers attributed this result to the availability of consistent adult caretakers with whom children could form healthy attachments and whom could guide social interactions with other young children. When adequate staffing and research-supported strategies are used, however, the preschool experience has many benefits.*

Côté, S.M., Larose, MP., Geoffroy, M.C. *et al.* Testing the impact of a social skill training versus waiting list control group for the reduction of disruptive behaviors and stress among preschool children in child care: the study protocol for a cluster randomized trial. *BMC Psychol* 5, 29 (2017). <https://doi.org/10.1186/s40359-017-0197-9>; Geoffroy, M-C; Cote, SM; Parent, S; and Seguin, JR; (2006) Daycare attendance, stress, and mental health. *Canadian Journal of Psychiatry*, 51: 607-615; Loeb S, Bridges M, Bassok D, Fuller B, and Rumberger R. (2007) How much is too much? The influence of preschool centers on children's social and cognitive development. *Economics of Education Review*. 26(1): 52-66.)

Pop Quiz! Quick Lessons

1. Stress in the first 90 days after birth is an especially high risk factor for undeveloped brains in the “Fourth Trimester.”
2. Physical movement in the first three years of life is critical to the cerebellum, it is that organ’s “window of opportunity.”
3. Teacher-driven instruction in pre-school does not improve a child’s academic performance in K-5 nor does it improve standardized test scores (which are primary reasons many preschools use it).

Pop Quiz! Quick Lessons

4. Children are primed for learning multiple languages from birth-8 and gain significant developmental advantages if they are bilingual by age 10.
5. Inadequately staffed and underfunded preschool centers are often highly stressful for children.



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*Effective Strategies to Support
Developing Minds*

Today's Agenda: 2 BIG Ideas

- 1. Poverty in Your Community:
It's Worse Than You Think.**
- 2. How Poverty Impacts Brain Development:
What Can We Do?**



Today's Agenda: 2 BIG Ideas

1. Poverty in Your Community: It's Worse Than You Think.



Learning Partners!

1. 2-4 People in each Learning Partner group.
2. *Organize your Learning Partner Group so that you can:*
 - a. *Easily talk with one another and;*
 - b. *Clearly see the screen.*
3. *“Be my Learning Partner?”*



Learning Partner Dialogue



***Greet your partners and share:
“What does “poverty” mean to you?”***

Today's Itinerary: 2 Big Ideas

1. It's Worse Than You Think



You Predict...



What percentage of U. S. children lived in poverty in 2019?

One in every six children in the United States lived in poverty
in 2019.

That's 12 million children.

17%

Source: Population Reference Bureau, analysis of data from
the U.S. Census Bureau, Census 2000 through 2019
American Community Survey.



Quick Poverty Facts: USA



- The United States ranks **near the bottom** of dozens of advanced nations in terms of the well-being of its children, according to data from before the coronavirus epidemic.
<https://www.washingtonpost.com/education/2020/10/06/us-ranks-near-bottom-advanced-nations-child-wellness-new-report>
- Children are the **largest class of people who are poor in the United States**. Poverty elevates a child's risk of experiencing behavioral, social and emotional and health challenges. Child poverty also reduces skill-building opportunities and academic outcomes, undercutting a young student's capacity to learn, graduate high school and more.
<https://datacenter.kidscount.org/data/tables/43-children-in-poverty-100-percent-poverty#detailed/1/any/false/1729,37,871,870,573,869,36,868,867,133/any/321,322>
- Children in poverty are more likely to suffer from **mental health problems** than other children.
(National Center for Children in Poverty, 2011)

Child Poverty and COVID-19

“We find that child poverty increased by an average of 1.8 percentage points based on family reports in 2020 and 2021. This translates to roughly 1.2 million more children living in poverty than in 2019.”

Chen, Y., Thomson, D. (June 3, 2021) Child Poverty Increased Nationally During COVID, Especially Among Latino and Black Children, Child Trends, www.childtrends.org.

Living in Poverty Where You Live

***How Is It Determined
Whether a Child Lives in
Poverty?***

2022 Poverty Guidelines for the 48 Contiguous States & the District of Columbia

Persons in Family	Poverty Guideline
1	\$13,590
2	18,310
3	23,030
4	27,750
5	32,470
6	37,190
7	41,910
8*	46,630
<i>* For families with more than 8 persons, add \$4,720 for each additional person.</i>	

Published January 2022 by the Office of the Assistant Secretary for Planning and Evaluation,
US Department of Health and Human Services, <https://aspe.hhs.gov/poverty-guidelines>

Learning Partner Work



What Could You Afford in Your Community?

- You are a single parent with *3 dependent children ages 9, 8 and 3.*
- You work full-time and earn \$28,000 annually.
- After withholding, you take home \$2,000.00 per month.
- What could you afford—and not afford—in *your community* on that income?

What Could You Afford in Your Community?

\$2,000 Available	Monthly Cost
Housing	
Utilities	
Food	
Clothing	
Transportation	
Cell Phone	
Medical/Dental Care	
Child Care	
Internet Connection	

Learning Partner Work



Work with your Learning Partners to create a budget for this family of 4 at \$2,000 per month.

What Could You Afford in Your Community?

\$2,000 Available	Monthly Cost
Housing	
Utilities	
Food	
Clothing	
Transportation	
Cell Phone	
Medical/Dental Care	
Child Care	
Internet Connection	

A Few Notes

A \$28,000 income is **above** the federal poverty line. From that perspective, you are considered “not poor.”

<https://www.childrensdefense.org/2019/new-census-data-reveals-continued-child-poverty-crisis-in-america/>



A Few Notes

Working at minimum wage, 40-hours per week *every week of the year* will earn you **\$24,960** in Illinois.

<https://www.childrensdefense.org/2019/new-census-data-reveals-continued-child-poverty-crisis-in-america/>



A Few Notes

More than **70%** of all poor children in the United States come from working families.

<https://www.childrensdefense.org/2019/new-census-data-reveals-continued-child-poverty-crisis-in-america/>



“Children living in poverty are those who experience deprivation of the material, spiritual, and emotional resources needed to survive, develop and thrive, leaving them unable to enjoy their rights, achieve their full potential or participate as full and equal members of society.”

National Center for Children in Poverty

Child Poverty is a Challenging Start

“Poor children are at greater risk for worse health, less productivity, and harms to well-being that extend into adulthood and subsequent generations. Timing and duration of poverty matter and influence life course outcomes, especially for education, health, and lifetime productivity.”

Schickedanz A, Dreyer BP, Halfon N. Childhood Poverty: Understanding and Preventing the Adverse Impacts of a Most-Prevalent Risk to Pediatric Health and Well-Being. *Pediatr Clin North Am.* 2015 Oct;62(5):1111-35. doi: 10.1016/j.pcl.2015.05.008. PMID: 26318943.

It's Worse Than You Think

- *By almost any measure, child poverty in the United States is high for our country's relative wealth.*
- The federal poverty guidelines, on which many states also rely, are restrictive, especially for families.

It's Worse Than You Think

- *12 million children in the U.S. (and more than 457,000 Illinois children) lived below the federal poverty guidelines prior to the pandemic. That number is estimated to be 13.2 million during the pandemic.*
- Poverty is a significant barrier to healthy child development and well-being.

Today's Agenda: 2 BIG Ideas

2. How Poverty Impacts Brain Development: What Can We Do?



How Poverty Impacts Brain Development

1. Experience-Dependent Neuroplasticity
2. *The Upstairs Brain and the Downstairs Brain*
3. How to Respond? “Regulate and Stimulate”

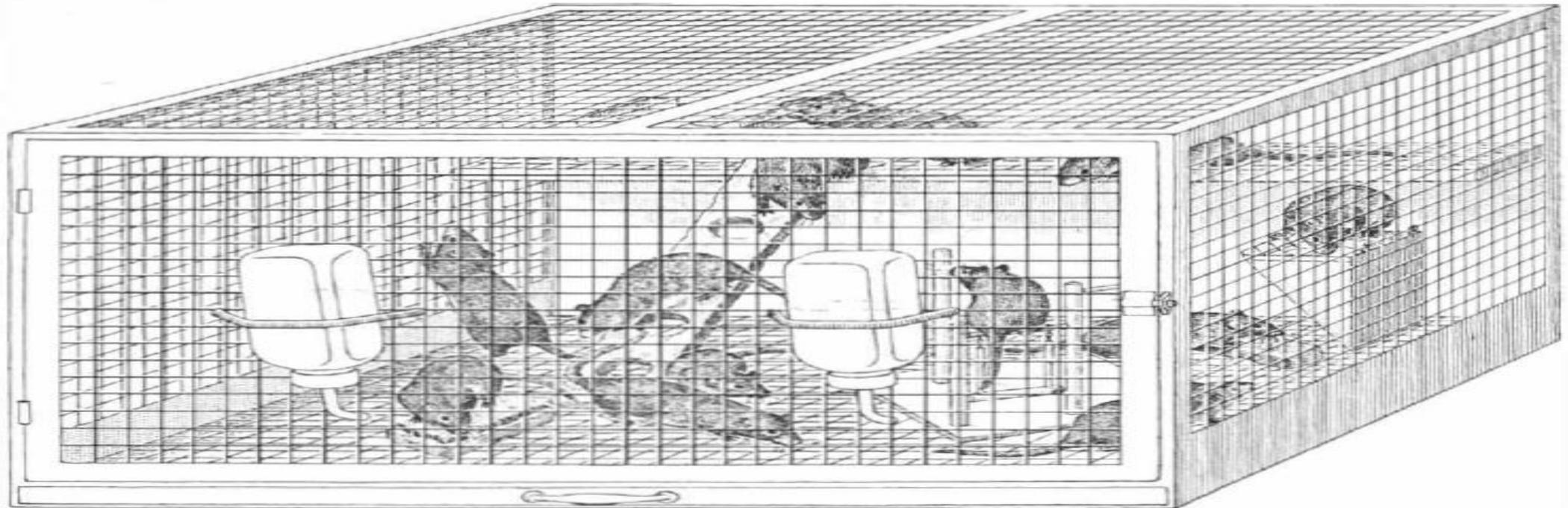
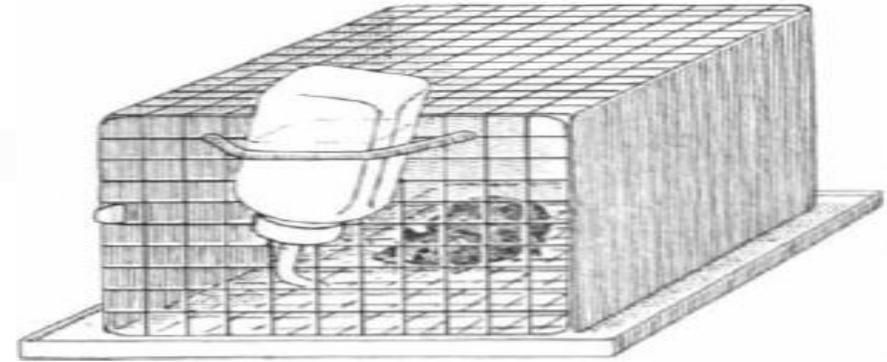
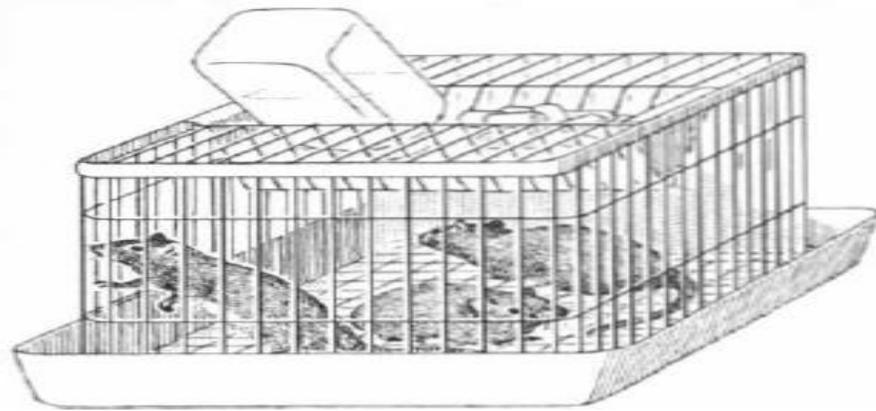


How Poverty Impacts Brain Development

Experience-Dependent Neuroplasticity

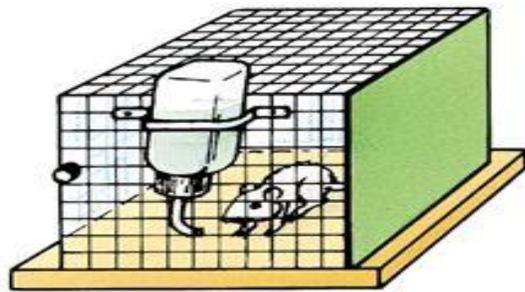


Experience-Dependent Neuroplasticity

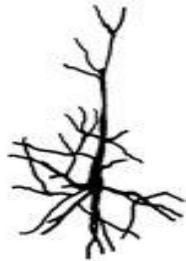


Experience-Dependent Neuroplasticity

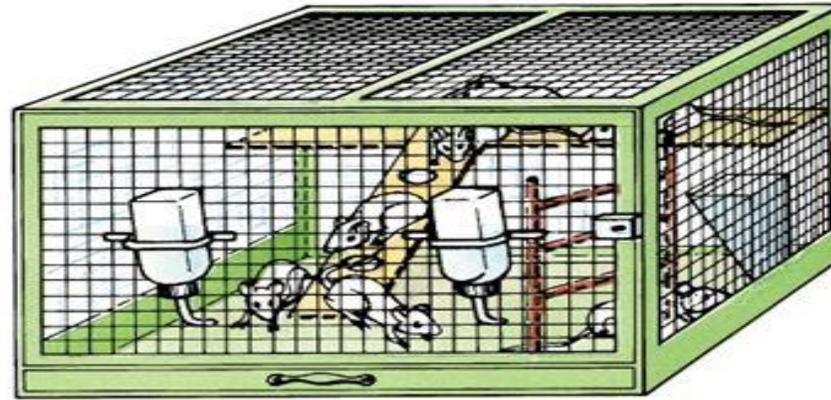
Rosenzweig and Bennett (1972)



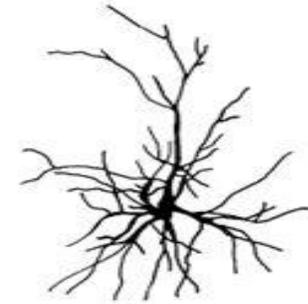
Impoverished environment



Rat brain cell



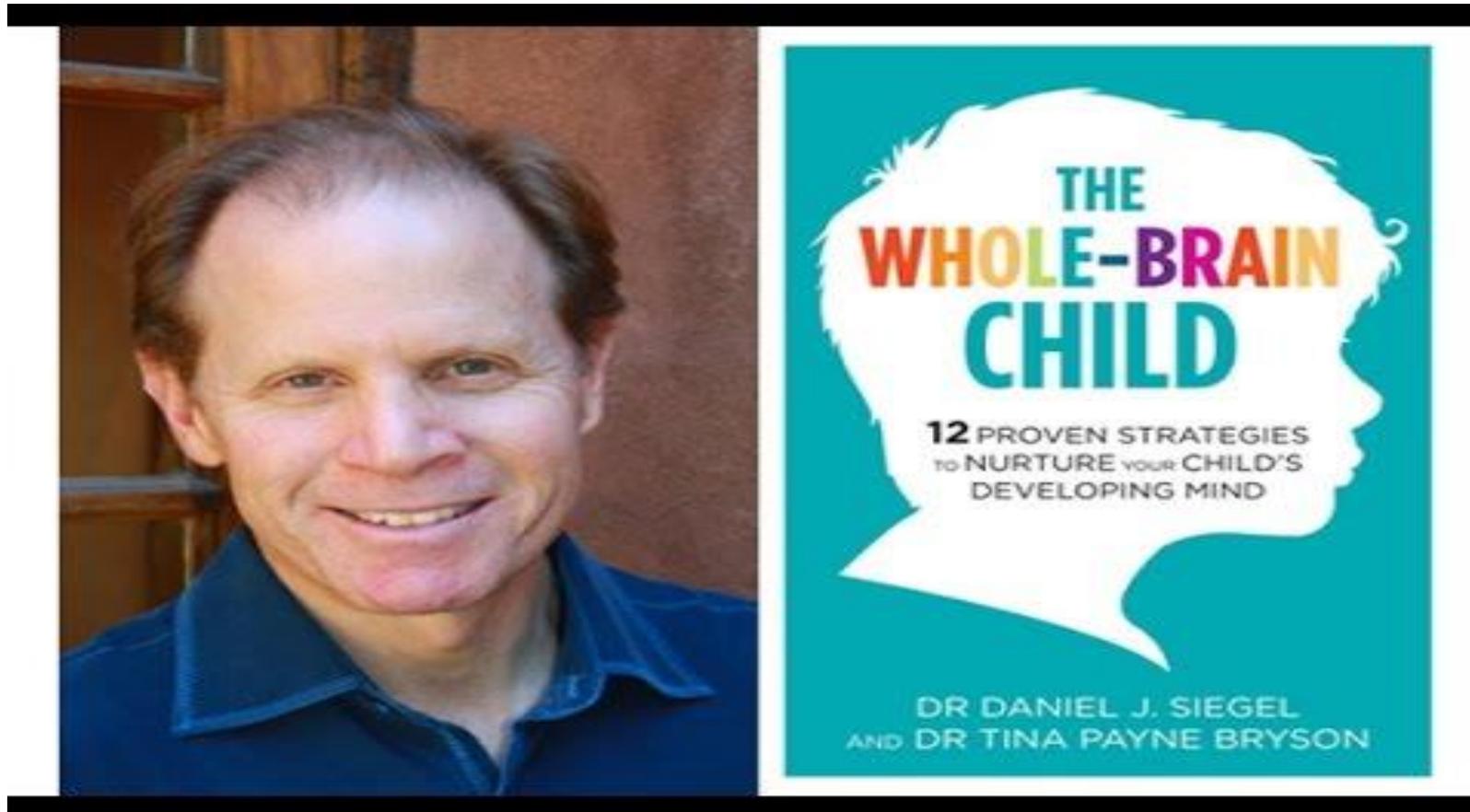
Enriched environment



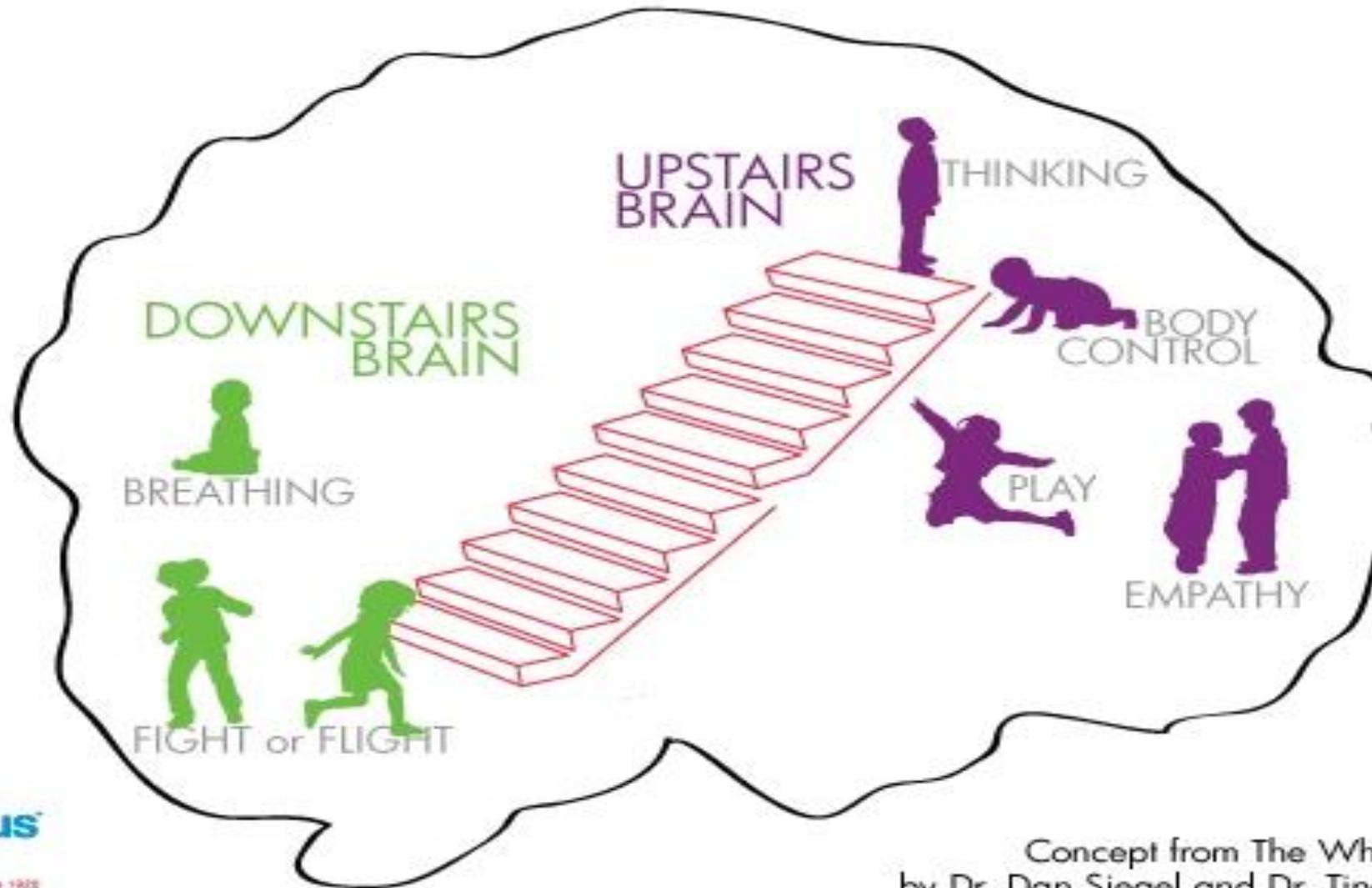
Rat brain cell

How Poverty Impacts Brain Development

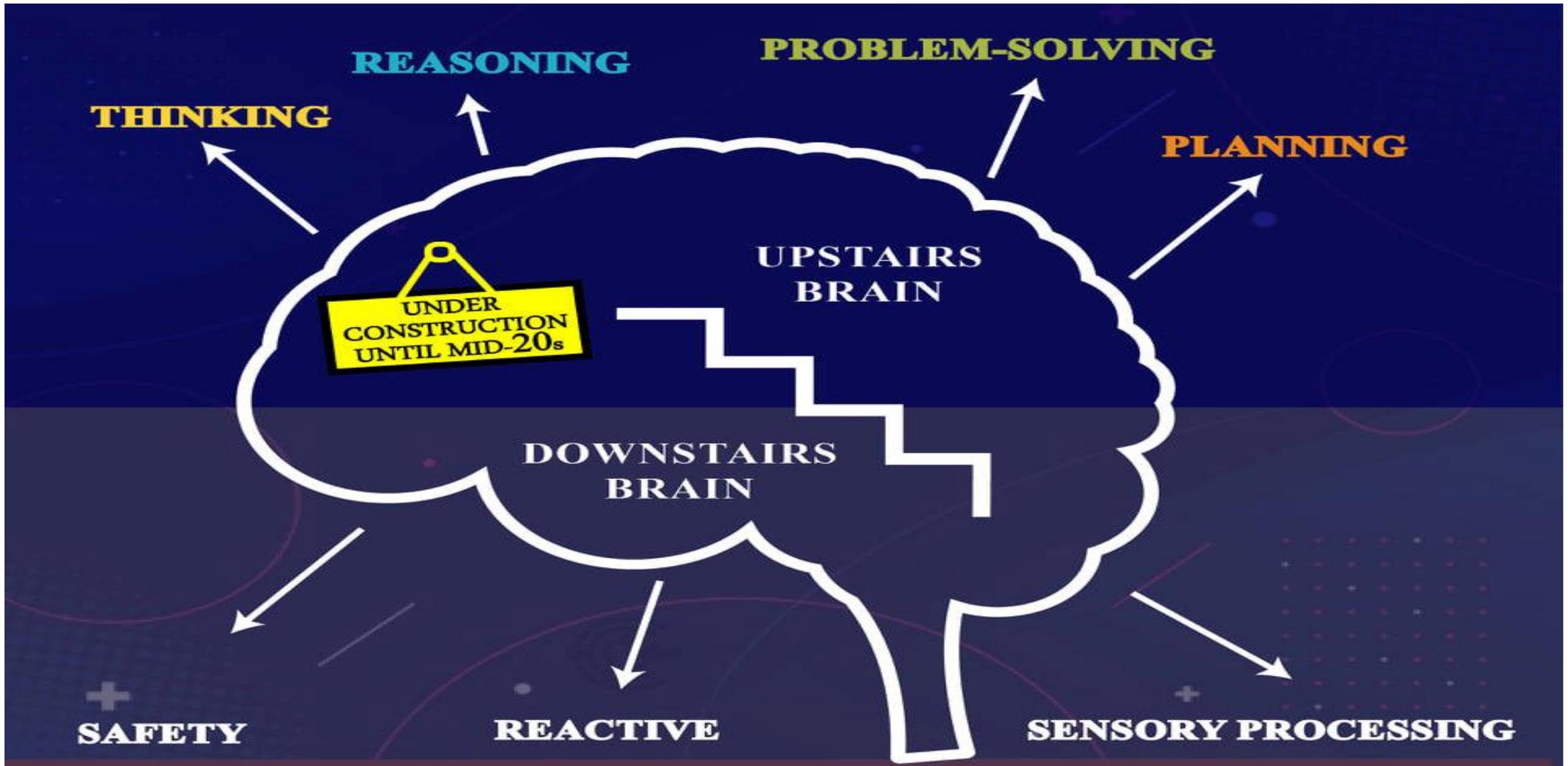
The Upstairs Brain and the Downstairs Brain



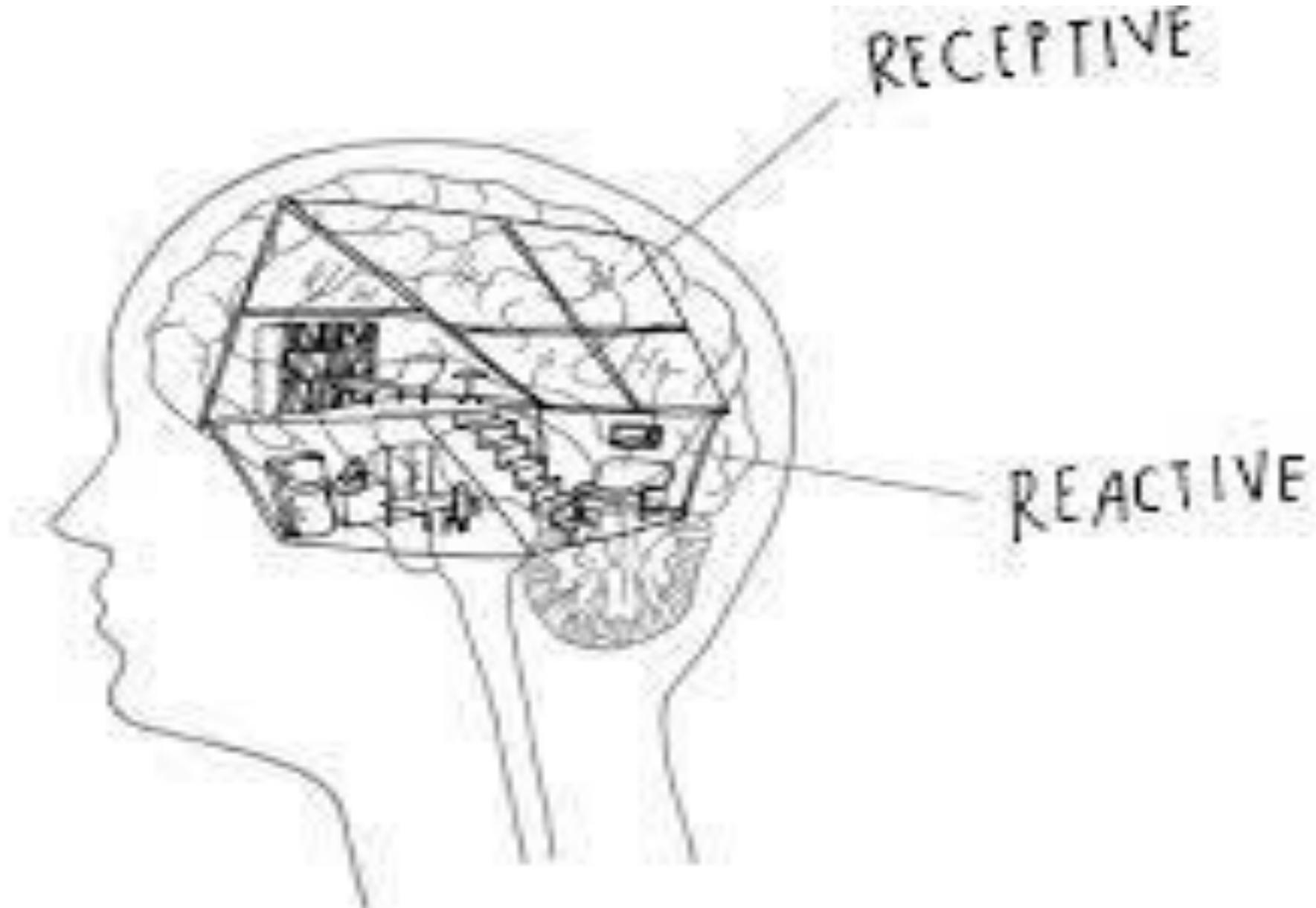
The Upstairs Brain and the Downstairs Brain



The Upstairs Brain and the Downstairs Brain



The Upstairs Brain and the Downstairs Brain



The Upstairs Brain and the Downstairs Brain

Young children experiencing the stresses of poverty will develop a strong and reactive *Downstairs Brain*-- but may experience delays in the development of their *Upstairs Brain* compared with their non-impooverished peers.



The Upstairs Brain and the Downstairs Brain

This is because of Experience-Dependent Neuroplasticity. The brain develops in response to the environment(s) it is exposed to in life.



CONCEPTION



Danger

Fight
Flight
Freeze

Survive
Worst
Conditions

Childhood Experience

Adaptation

Adult Functioning



Safety

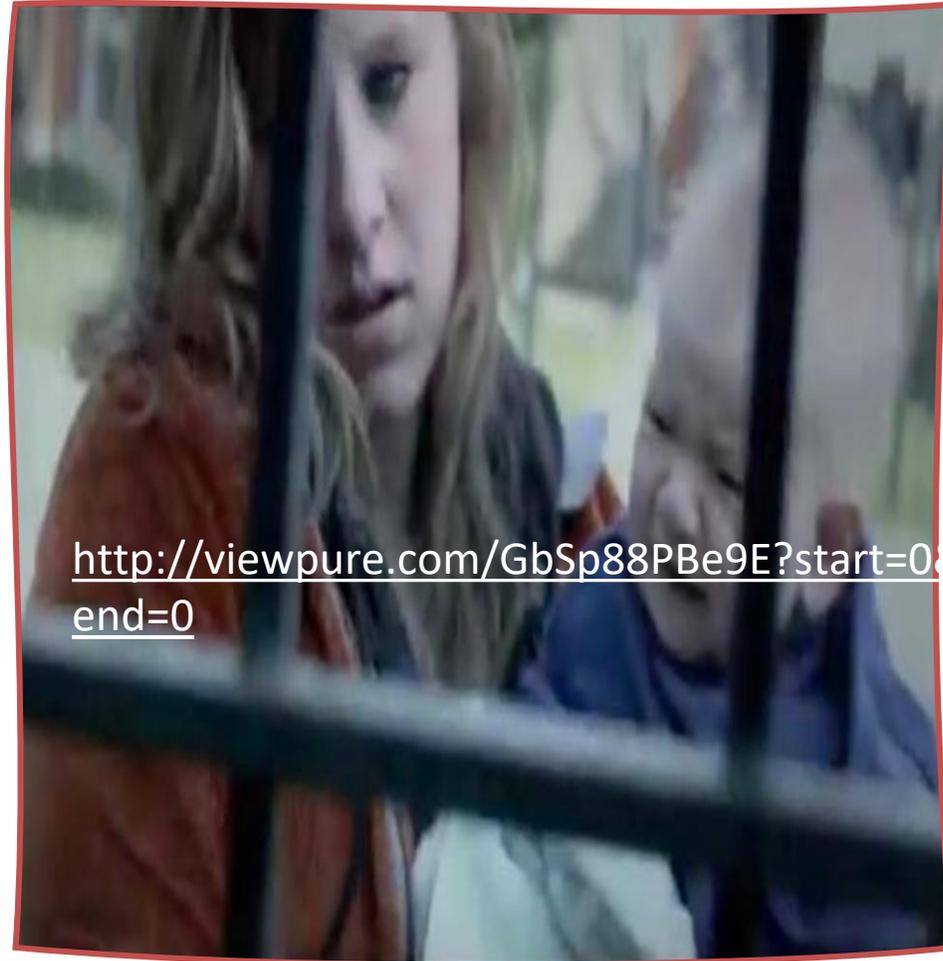
People
Process
Possibility

Survive Best
Conditions -
*Vulnerable in
Worst*

Experience shapes the foundation of our brains, bodies, and our lives.
It sets up a cascade of perceptions, behaviors, and risks that stay with us through life.



Environments Shape Brains



Learning Partner Dialogue

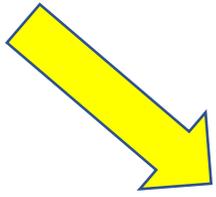


In Your Own Words, Describe How Poverty Impacts Child Development.

What Can We Do?

“Regulate and Stimulate”





The Key Protective Factors

Internal Skills

- Self-Regulation Skills
- Stress Management/Coping Skills
- Problem Solving Skills
- Social Skills with Peers
- Social Skills with Adults
- Self-Esteem
- Self-Efficacy*

External Supports

- Supportive Family Environment (Physical and Emotional Safety)
- Nurturing Parenting Skills (Strong Attachment and Bonding)
- Stable Family Relationships
- Employment and Socioeconomic Stability
- Adequate Housing
- Access to Health Care and Social Services
- Positive and Accessible Relationships in Community
- Spiritual Activities and Supports
- Communities that Support Families and Take Responsibility for Preventing Highly Stressful/Traumatic Experiences

*Racine, N. et al., (2020) Development of trauma symptoms following adversity in childhood: The moderating role of protective factors, Child Abuse & Neglect, Volume 101,104375,ISSN 0145-2134. * Self-Efficacy = A person's belief in their ability to succeed in a certain situation. Albert Bandura.*

Protective Factors are Powerful!

“The link between exposure to cumulative adversity and child trauma-related distress varied as a function of protective factors:

- 1) There was a positive association between adversity and child trauma-related distress for children who had low levels of protective factors;***
- 2) But not for those with high levels of protective factors.”***

Racine, N. et al., (2020) Development of trauma symptoms following adversity in childhood: The moderating role of protective factors, Child Abuse & Neglect, Volume 101,104375,ISSN 0145-2134.

What Can We Do?

Regulate



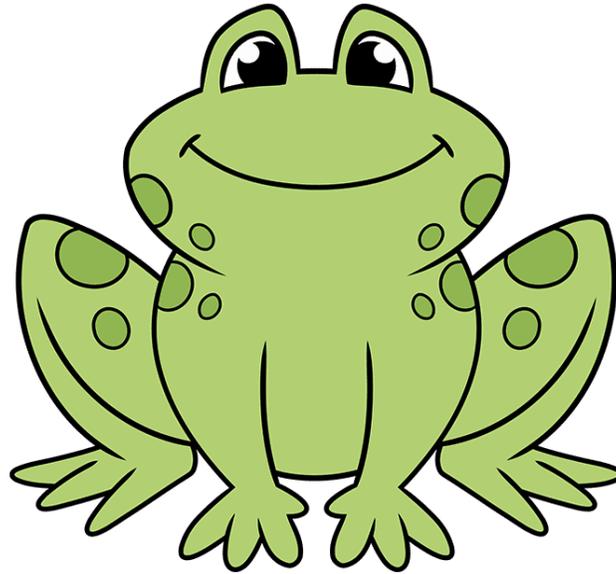
Regulate

1. Create and Maintain a Safe Learning Environment (*Physical, Emotional and Social*).
2. *Frogs and Bellies.*
3. *Teach IF/THEN Statements.*
4. *Touch and Move.*



Regulate

Frogs and Bellies.



Not So Helpful Responses to Stress

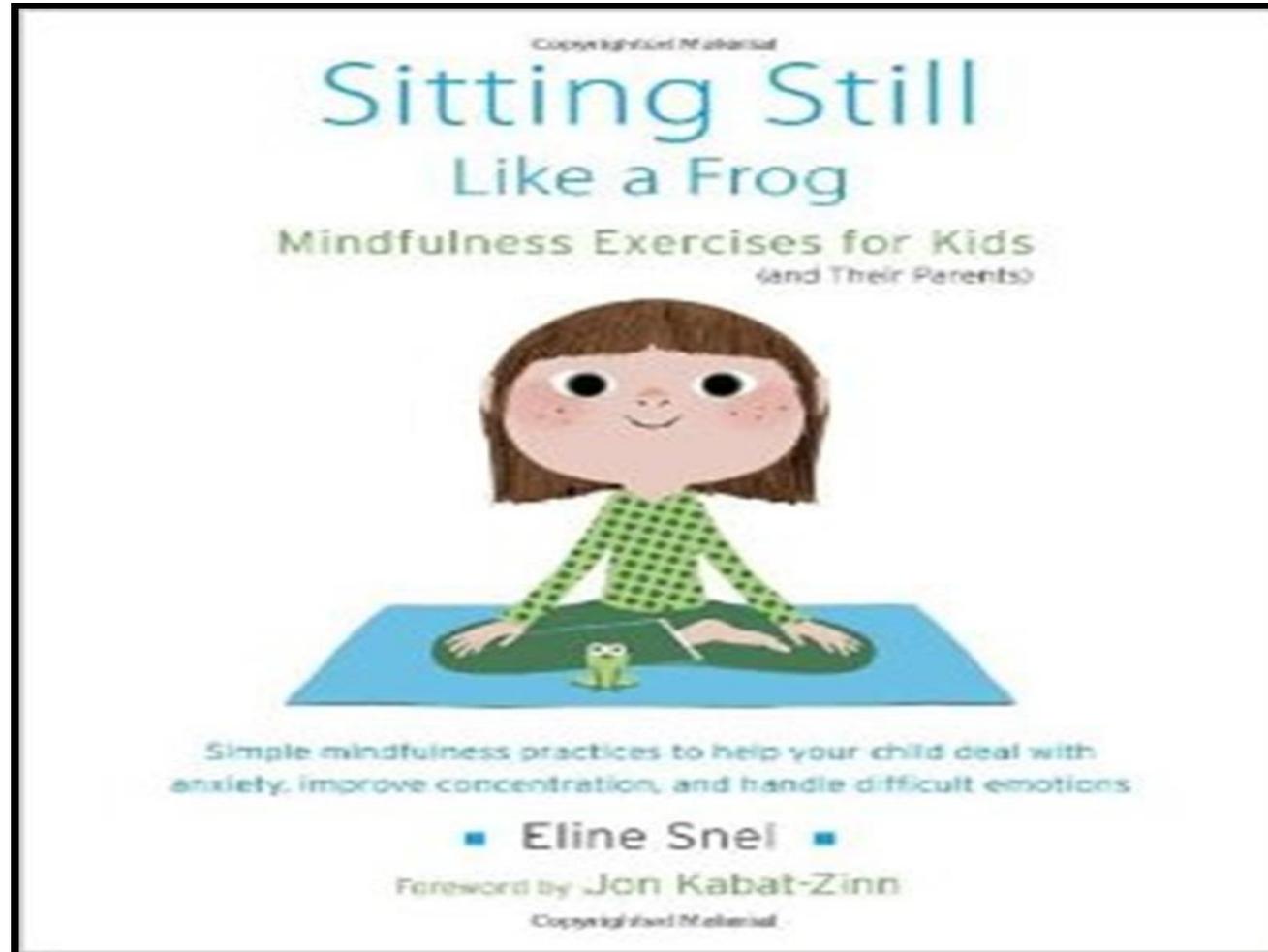
- “Calm Down.”
- “Stop Crying.”
- “Go to Time Out.”

Instead of these common statements, provide children with a specific tool to help them manage stress and anxiety. The nervous system acts automatically, especially when it comes to worry (which often stems from fight or flight reflexes). They are not choosing to feel anxious.

They just do.

Sit Still Like a Frog

<https://www.youtube.com/watch?v=m5RkzsbaPiE>



Belly Breathe!

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



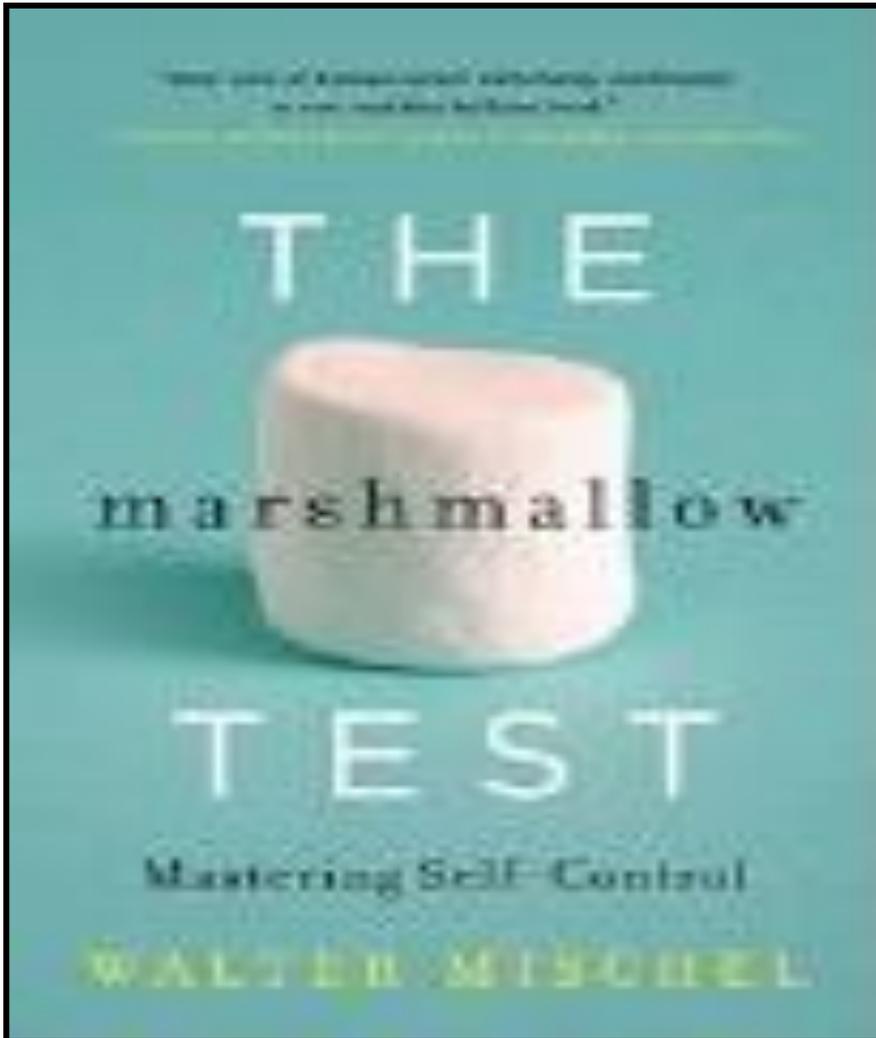
https://www.youtube.com/watch?v=_mZbzDOpyIA

Regulate

Teach IF/THEN



Help Children Build Self-Control!



The Stanford Marshmallow Experiment



Some children ate the marshmallow immediately. Others waited up to 15 minutes for the researcher to return. Children who waited the full 15 minutes achieved 1) Higher educational attainment; 2) Higher SAT scores; 3) Lower BMI; 4) Rated more competent by parents.

The “Marshmallow Test”

<https://www.youtube.com/watch?v=GzUS9N5aeFs>

YouTube: Marshmallow Test reproduced by David Walsh

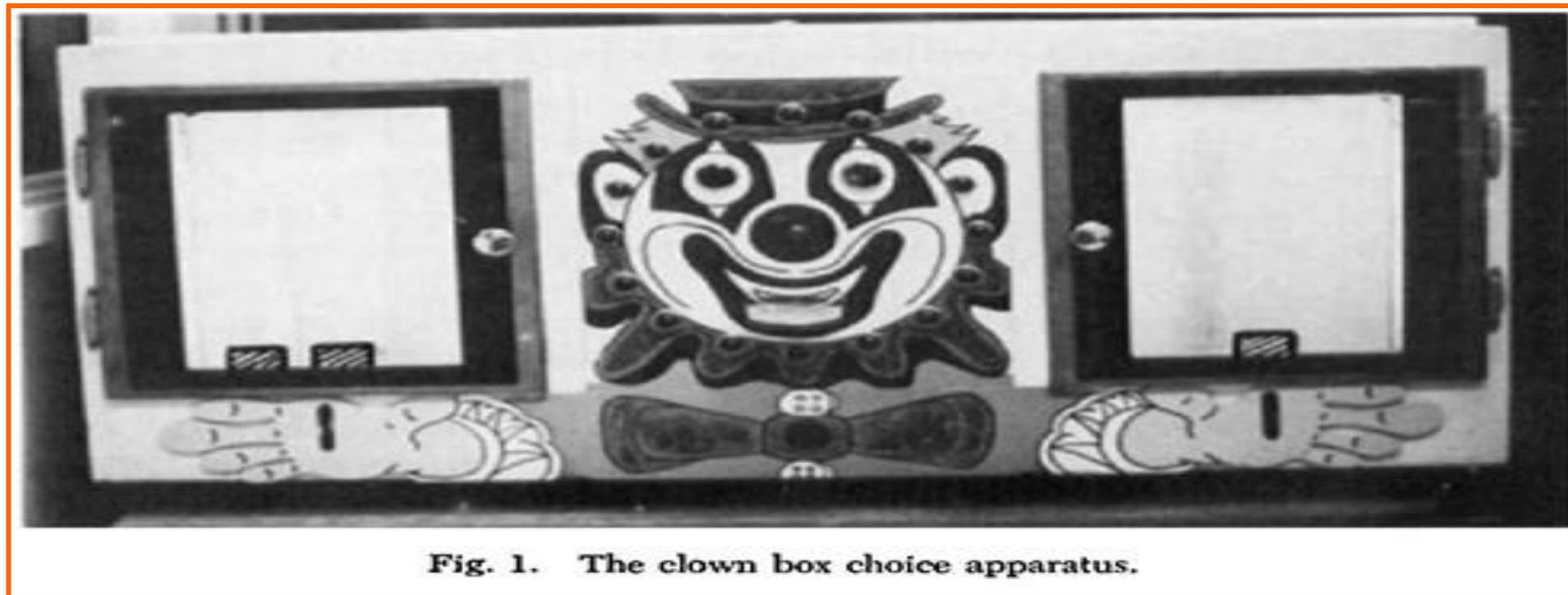


Meet Mr. Clown Box



Fig. 1. The clown box choice apparatus.

Mr. Clown Box



“IF Mr. Clown Box makes that *bzzt* sound and asks me to look at him and play with him, THEN I will just look at my work, not him and say: No, I can’t, I’m working.”

W. Mischel, “Processes in Delay of Gratification,” in Advances in Experimental Social Psychology, edited by L. Berkowitz, vol. 7 (New York, Academic Press, 1974) 249-292.

If/Then “Temptation Inoculation”

- Adapted from The Marshmallow Test by Walter Mischel (2014, Little, Brown and Company, New York, NY)
- ***Effective for recurring impulsivity and/or when temptations or triggers cannot reasonably be eliminated.***
- Anticipate the temptation or distraction and make a mini-plan to cope using the If/Then format (i.e., Use a “suppression strategy.”)
- ***Convert the plan to self-talk and then rehearse, rehearse, rehearse!***

IF/Then “Temptation Inoculation”

IF _____,

Then _____.

Thinking about the reward for avoiding the temptation or distraction is important. It might be praise, self-congratulation, fist bump, sticker, etc.

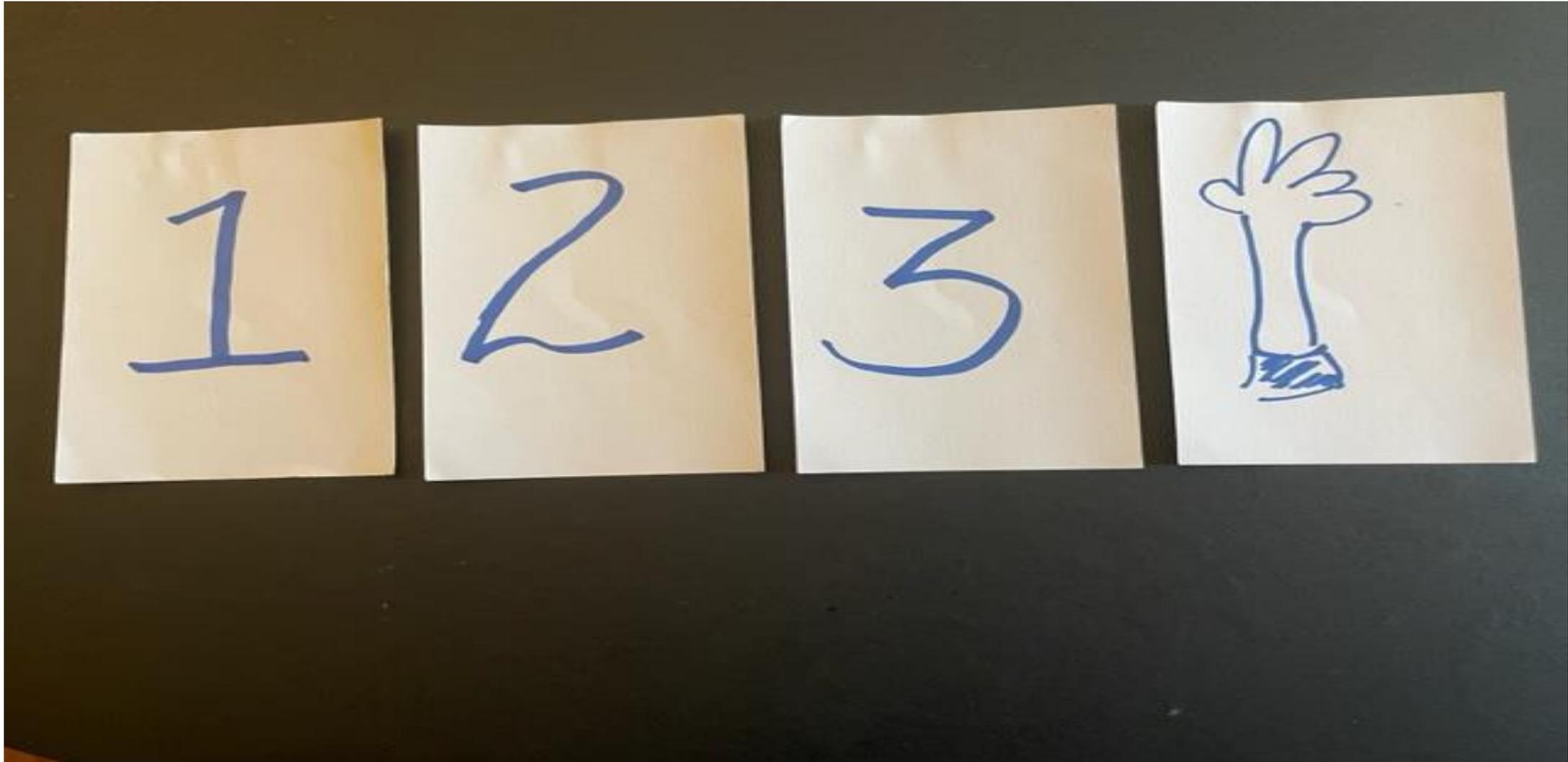
If/Then “Temptation Inoculation”

“**IF** my neighbor takes my toy,
THEN I will go tell my teacher.”

If/Then “Temptation Inoculation”

IF I know the
answer to the
QUESTION, THEN
I will count my cards.

If/Then “Temptation Inoculation”



Regulate

Touch and Move.



Help Children Regulate

Leverage the Power of Touch



Help Children Regulate

Leverage the Power of Touch.

A. Build a baby's love of her/his own body. Stroke her tummy and hair when reading, playing, or even diapering. Studies have shown that babies who are not often touched have brains that are smaller than normal for their age, and interacting closely also helps direct her attention to your speech.



Help Children Regulate

Leverage the Power of Touch.

B. Respond promptly with touch when a baby cries. Soothe, nurture, cuddle, and reassure her so that you build positive brain circuitry in the limbic area of the brain, which is involved in emotions. Your calm holding and cuddling, and your day-to-day engagement with an infant, signal emotional security to the brain.



Help Children Regulate

Leverage the Power of Touch.

C. Give her a body massage. This can lower an infant's stress levels and enhance his feelings of well-being and emotional security. Loving touches even promote growth in young babies: Research has shown that premature babies who are massaged three times daily are ready to leave the hospital days earlier than babies who do not receive massages.



Help Children Regulate

Play games that involve the infant's hands.

Games like patty-cake, peekaboo, this little piggy, or even puppets engage an infant and capture her attention. Using your hands shows infants how we physically interact with our world — plus, hands-on activities are simply more fun for both of you!



Touch and Move

Prepare safe environments that encourage crawling.



Touch and Move

Prepare safe environments that encourage crawling.

A mobile infant is developing a complex set of skills. She will begin to understand spatial parameters and vocabulary such as under, over, big, little, near, and far, plus the relationship between objects of different shapes and sizes (those that are big versus little, for instance). She will start to establish mental maps of her environment and a comfortable relationship with the world in which she lives.



What Can We Do?

Stimulate



Stimulate

1. Create and Maintain a Safe Learning Environment (*Physical, Emotional and Social*).
2. *Start with Yourself.*
3. *Use More Visualization.*
4. *Have a Hilarious Conversation. Sing.*
5. *Praise for Repetition, Not Recognition.*



Stimulation

Start with Yourself.



High Quality Teachers Can Move Students “Beyond Poverty”

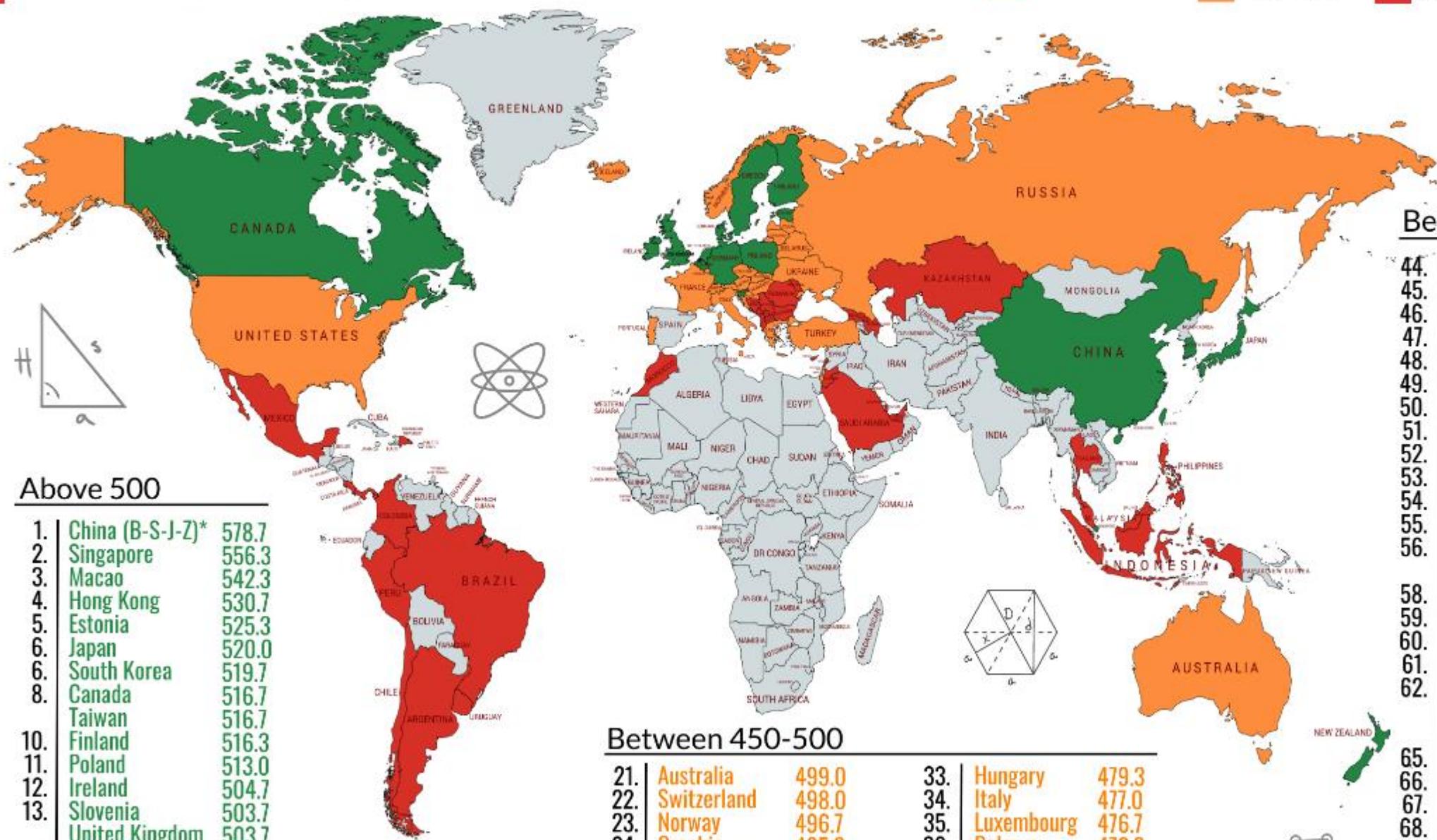
Two of the most significant factors influencing student success are:

- 1) The neighborhood that kids live in and;
- 2) 2) The *quality of the teachers* students have in their educational careers, at every grade level.

Teacher Quality = Massive Impact

Replacing the lowest performing 5-8 percent of teachers in the United States with average teachers would put our nation's PISA academic scores among the top three countries in the world, compared with number 17 in 2011. (In 2018, the U.S. ranked 25th).

Hanushek, E.A. (2011) The economic value of higher teacher quality. *Economics of Education Review*, 30, 466-479.



Above 500

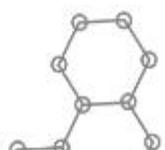
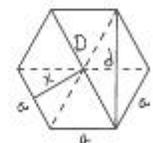
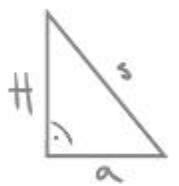
1.	China (B-S-J-Z)*	578.7
2.	Singapore	556.3
3.	Macao	542.3
4.	Hong Kong	530.7
5.	Estonia	525.3
6.	Japan	520.0
6.	South Korea	519.7
8.	Canada	516.7
	Taiwan	516.7
10.	Finland	516.3
11.	Poland	513.0
12.	Ireland	504.7
13.	Slovenia	503.7
	United Kingdom	503.7
15.	New Zealand	502.7
16.	Netherlands	502.3
17.	Sweden	501.0
18.	Denmark	500.3

Between 450-500

21.	Australia	499.0	33.	Hungary	479.3
22.	Switzerland	498.0	34.	Italy	477.0
23.	Norway	496.7	35.	Luxembourg	476.7
24.	Czechia	495.3	36.	Belarus	472.3
25.	United States	495.0	37.	Croatia	471.7
26.	France	493.7	38.	Slovakia	469.3
27.	Portugal	492.0	39.	Israel	465.0

Below 450

44.	Serbia	442.3
45.	Cyprus	438.0
46.	Chile	437.7
47.	Un. Arab Emirates	433.7
48.	Malaysia	431.0
49.	Romania	428.0
50.	Bulgaria	426.7
51.	Moldova	424.3
52.	Uruguay	423.7
53.	Brunei	423.0
54.	Montenegro	422.0
55.	Albania	419.7
56.	Jordan	416.0
	Mexico	416.0
58.	Costa Rica	414.7
59.	Qatar	413.3
60.	Thailand	412.7
61.	Colombia	405.3
62.	Kazakhstan	402.3
	Azerbaijan	402.3
	Bosnia and Herz.	402.3
65.	Peru	401.7
66.	Brazil	400.3
67.	North Macedonia	400.0
68.	Argentina	395.0
69.	Georgia	387.0
70.	Saudi Arabia	386.0
71.	Indonesia	382.0
72.	Lebanon	376.7



High Quality Teachers Can Move Students “Beyond Poverty”

When students from poverty have above-average teachers (those whose average student gains is at least 1.5 years' worth of learning each year), research shows that these students gain *two full standard deviations in academic scores.*

Ferguson, R. (1998) Can schools narrow the test score gap? In C. Jencks & M. Phillips, Eds., The black-white test score gap: Why it persists and what can be done (p.318-374). Brookings Institution.

High Quality Teachers Can Move Students “Beyond Poverty”

The UTD Texas School Project, which observed more than 500,000 students in grades 3-7 in over 1,000 schools, found that students from poverty with higher-qualified teachers *outperformed* their non-impooverished peers.

Rivkin, S.J., Hanushek, E. A., & Kain, J.F. (2005) Teachers, schools and academic achievement. *Econometrica*, 73(2), 417-458.

High Quality Teachers Can Move Students “Beyond Poverty”

In the case of early childhood education, this topic is even more relevant due to the crucial opportunity to support social, emotional, and cognitive skills during this period of life. In this sensitive developmental period, high-quality early childhood educators provide important future benefits for children, especially those living in poverty.

Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. (2019). Nurturing nature: How brain development is inherently social and emotional, and what this means for education. *Educational Psychologist, 54*(3), 185–204.

Start with Yourself

1. **Reflect**: Am I a High-Quality Teacher?
2. **Research**: What Skills Work with Children Experiencing Poverty?
3. **Reach-Out**: What Can I Do to Expand My Skills?



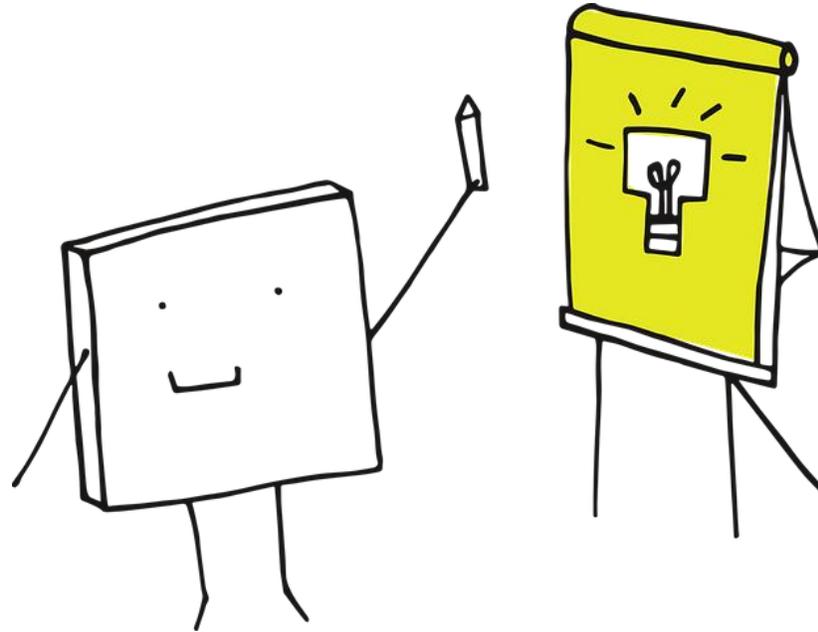
Research: What Skills Work with Children Experiencing Poverty?

Research suggests that high performing preschool teachers:

- A) Believe it is important to establish nurturing relationships with their students;
- B) Foster positive relationships with the families of the children they work with in the classroom;
- C) Nurture the social-emotional development of their children in the classroom and;
- D) Provide differentiated instruction to meet the needs of all their students.

Stimulation

Use More Visualization.



What is Working Memory?

“Working memory refers to how we hold on to and work with information that short-term memory stores. It’s part of a group of skills called executive functions.”

www.understood.org

A Short-Term v. Working Memory Exercise

“3 Letters”



Why Does Working Memory Matter?

You can't get to Long-Term Memory without using Working Memory.

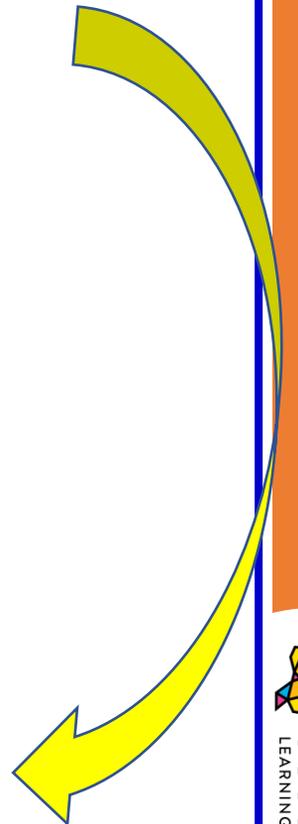
It is the “Gateway to Learning.”



A Big Bang for Your Buck!

Working Memory training has a crazy good research effect size of 1.41.

Effect Size	Learning Impact
0.00-0.20	Negligible, unclear effects
0.20-0.40	Small-moderate effects
0.40-0.50	Typical 1-year growth effects
0.50-0.75	Moderately strong effects
0.75-2.00	<i>Extreme positive effects</i>



Au, Buschkuhl, Duncan & Jaeggi (2015) Improving fluid intelligence with training on working memory: a meta-analysis. *Psychon Bull Rev.* Apr; 22(2): 366-77.

The Strangest Secret

Working Memory may be the single most important skill required for children to learn well.



But many of us are not taught much about this skill or how to build it!

How Do I Improve Working Memory in My Children?

Stimulation

**Use More Visualization
(Don't Always Show the Pictures)**



Visualization Example

1. Encourage children to create a picture in their mind of what they've just read or heard.
2. *For example, read a scene from a story without showing the children the illustrations.*
3. Ask your children imagine what the scene should look like, and then describe it.
4. *As children get better at visualizing, they can draw the image in addition to describing it.*

Visualization

Let's Try It!

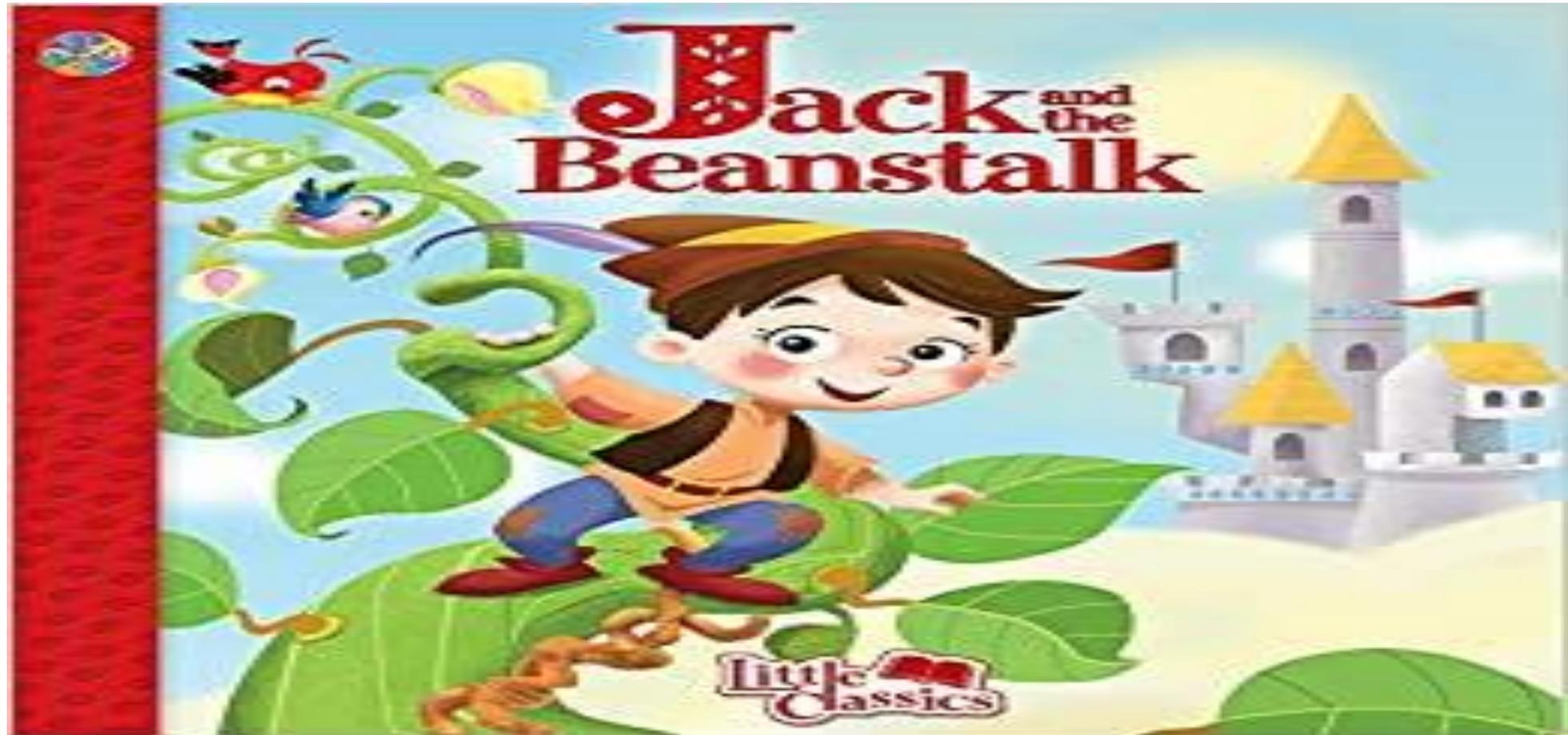
Use More Visualization

This is the story of a poor boy named Jack. Jack's mother told him to sell their cow so they would have money for food. On his way, he met a stranger who offered to buy his cow for some magic beans. Jack was curious and he sold the cow for the magic beans. When he went home without any money, his mother was angry with him. However, Jack planted his beans in the garden and went to bed. When he woke up, he saw the world's largest beanstalk. It had grown all the way up to the clouds. *Jack climbed all the way to the top of the beanstalk and saw a strange land with a large castle.*

Draw what Jack saw at the top of the beanstalk!

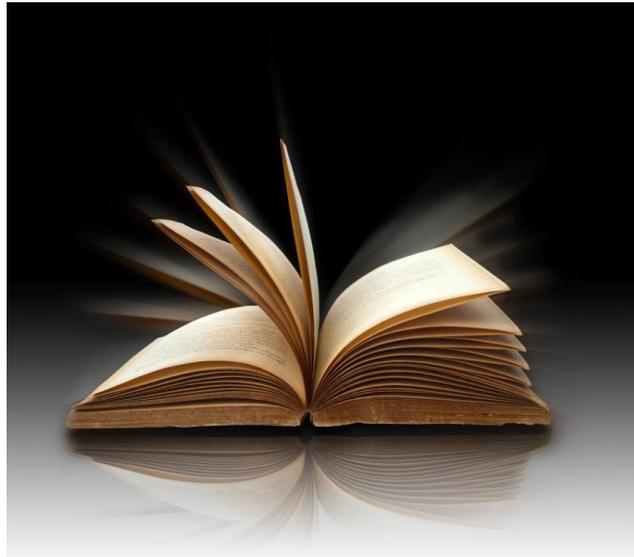
Use More Visualization

Draw what Jack saw at the top of the beanstalk!



Visualization Example #2

Ask children to identify how many times a letter or a word appears in a paragraph.



Visualization

Let's Try It!

Visualization

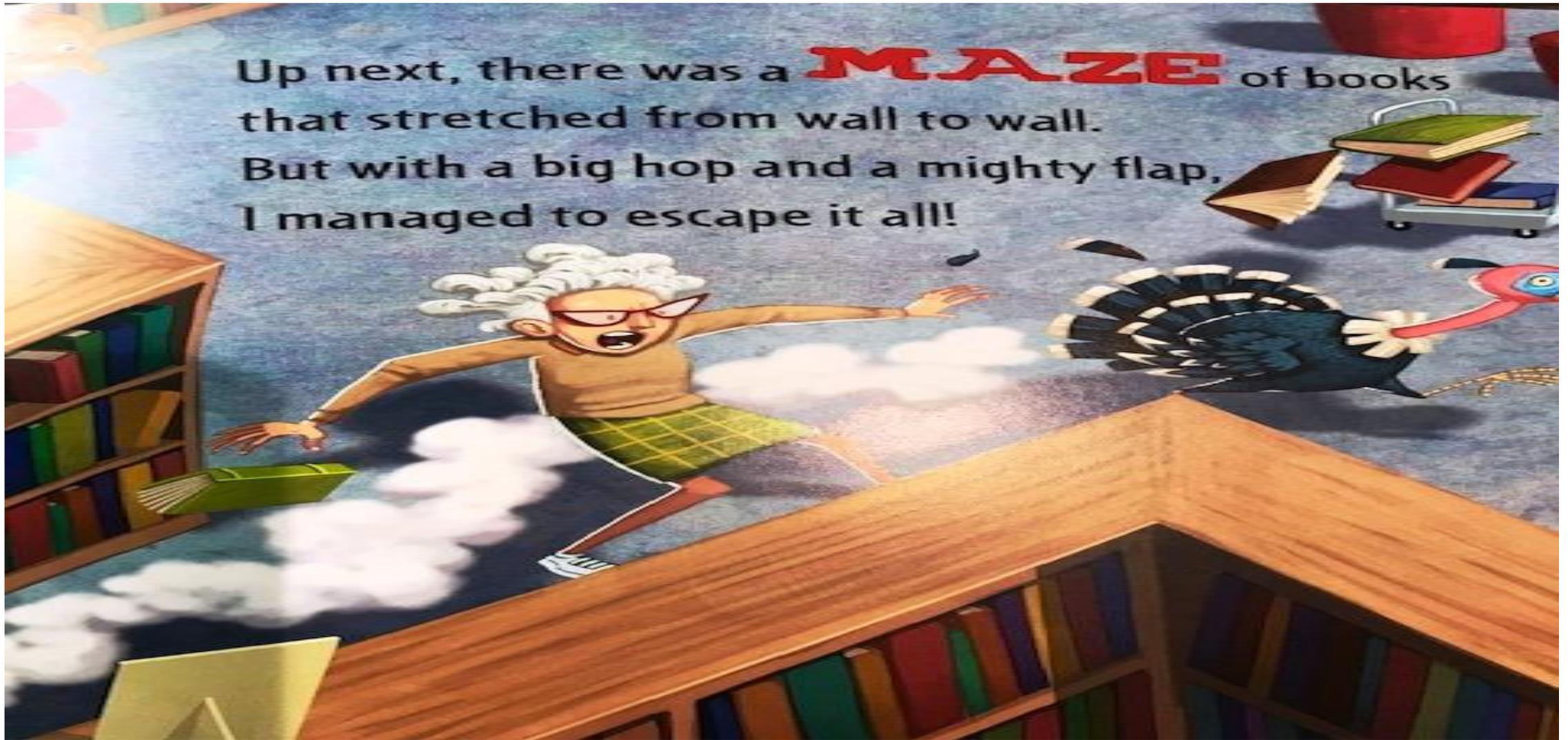
**How many “A”s are there in
the paragraph on the next
slide?**

(Both upper case and lower case)

Up next, there was a **MAZE** of books
that stretched from wall to wall.
But with a big hop and a mighty flap,
I managed to escape it all!



When You see the Letter “A” or “a” Circle It!



Stimulate

Have a Hilarious Conversation.



Quick Quiz!

What is the best toy to use with an infant (0-11 months)?

Baby's Best Toy?

YOUR FACE!



Stimulate

Bring Your “Big Face” and the “Baby Talk!”



Have a Hilarious Conversation

Bring Your “Big Face” and the “Baby Talk!”

Respond to infant coos with delighted vocalizations, and slowly draw out your syllables in a high-pitched voice as you exclaim phrases like “pretty baby.” This way of speaking is called “parentese,” and the exaggerated facial expressions and drawn-out vowels help the infant absorb all the sounds of our language. Infants mimic us with their very active “Mirror Neurons.”

Have a Hilarious Conversation

<https://www.youtube.com/watch?v=0IaNR8YGdow>

Stimulate

Sing.



Stimulate

Sing!

Enthusiastically croon those nursery rhyme songs you remember.

When you can, add body motions and finger play (like waving your arms during “You Are My Sunshine” or miming rain falling during “Rain, Rain, Go Away”).

This helps the infant connect sounds with large and small motor actions. Songs also enhance an infant’s learning of rhythms, rhymes, and language patterns. Music has well-established benefits to a growing brain!

Stimulation

Praise for Repetition, Not Recognition.

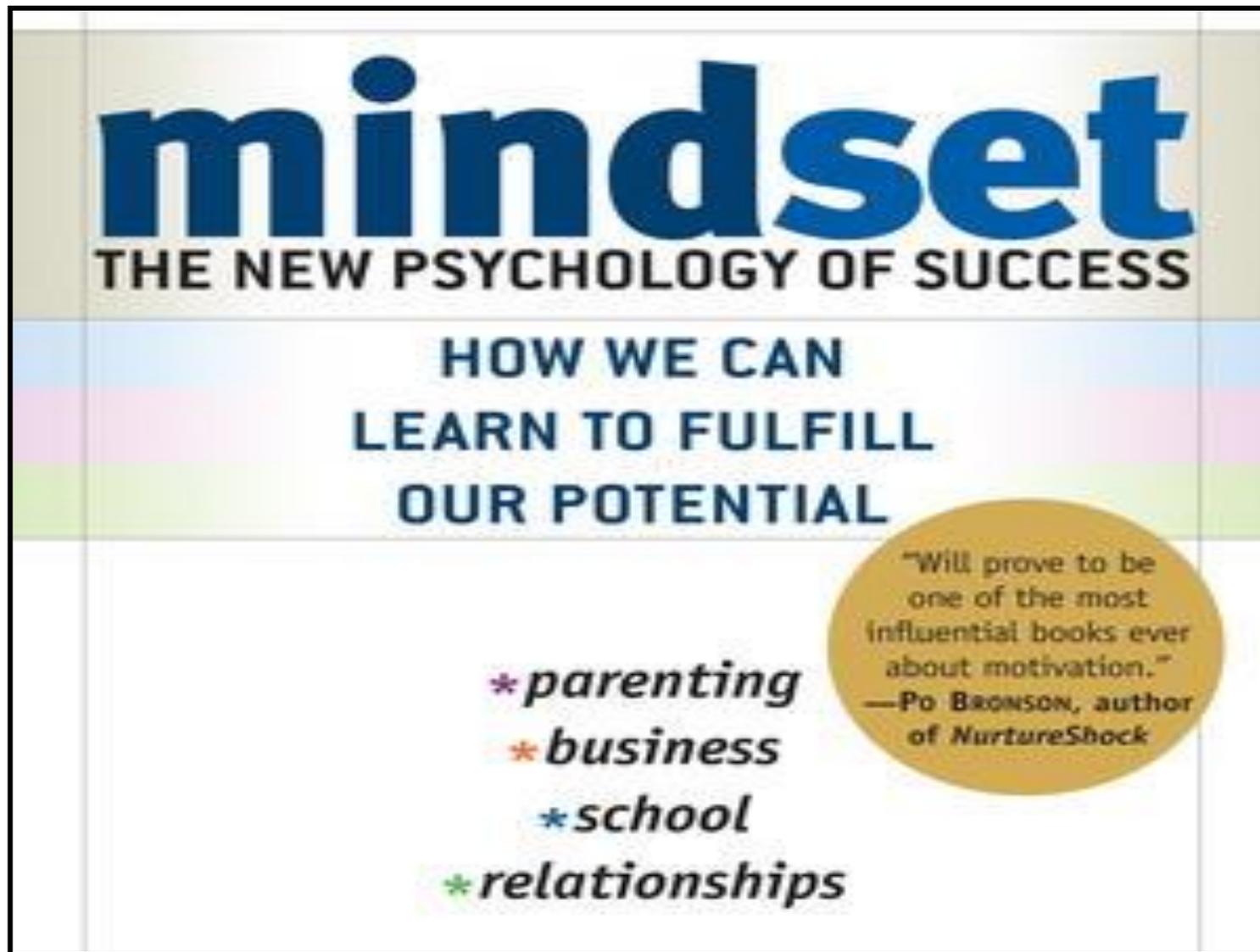


Praise for Repetition, Not Recognition.

Use Growth Mindset Language

Holding a growth mindset is positively related to better academic performance in almost every education system in the world.

Amadeo, K. (2022) U.S. education rankings are falling behind the rest of the world. Retrieved on August 24, 2022 from <https://www.thebalance.com/the-u-s-is-losing-its-competitive-advantage-3306225>.



Yeager, D.S., Hanselman, P., Walton, G.M. *et al.* A national experiment reveals where a growth mindset improves achievement. *Nature* **573**, 364–369 (2019). <https://doi.org/10.1038/s41586-019-1466-y>

Use Your Language to Develop the Right Mindset in Your Students Around Learning

“Don’t tell your kids they are smart (or not smart).”

More than three decades of research shows that a focus on praising effort – not on praising or criticizing intelligence or ability – is the key to building success in school and in life.”

— Carol Dweck, PhD.

Mindset Development

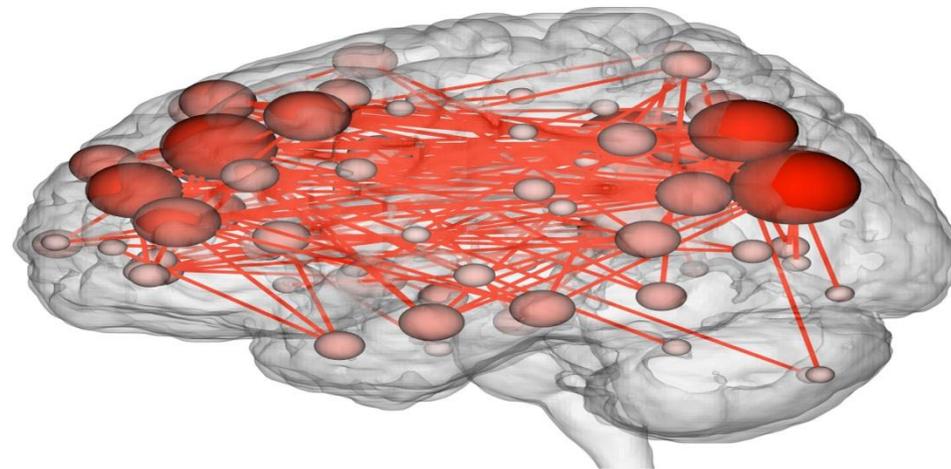
“An overemphasis on intellect or talent – and the implication that such traits are innate and fixed– leaves children vulnerable to failure, fearful of challenges, and unmotivated to learn.”

– Carol Dweck



What We Say to Our Students Develops in Them One of Two “Mindsets” About Their Ability to Learn:

- 1. A “Fixed” Mindset, or**
- 2. A “Growth” Mindset**



FIXED Mindset (Wrong One)

Often developed by students whom are told how smart they are or told they are not smart!

*Intelligence is a **fixed trait** — you only have a certain amount and that's that.*

Mistakes are attributed to a **lack of ability. Learned Helplessness ensues.**

“If I struggle or have to work hard at this, I am dumb.”



Growth Mindset (Right One)

Intelligence is **malleable** and **can be developed** through strategy acquisition and selection, hard work and persistence.

Mistakes are attributed **to the wrong strategy, effort or perseverance.**

“If I work hard enough, I can learn this.”



Growth Mindset

Growth Mindset

- ***Focus on learning not outcomes***
- ***Good performance takes hard work***
- ***Hard work is good-it's how you get better***
- ***Effort = Good indicator of learning ability***
- ***Make the most of deficiencies***
- ***Capitalize on mistakes***

Fixed Mindset

- **Focus on grades/performance**
- **Good performance comes naturally**
- **“If I have to work, then I’m not smart at this”**
- **Effort = Indicator of poor learning ability**
- **Conceal and hide deficiencies**
- **Conceal and hide mistakes (shame)**

Talk Strategy: Growth Mindset

Adults can engineer a growth mindset in students by:

***Praising them** for strategy selection, effort and persistence (rather than for being/not being smart, talented, etc.);*

- a. Strategy acquisition and selection. Choosing a successful way to solve a problem.*
- b. Effort. Hard work is good.*
- c. Persistence. Sticking to your goal despite obstacles and even failure.*

A Mindset Study in Less than 5 Minutes



Carol Dweck - A Study on Praise and Mindsets

<https://www.youtube.com/watch?v=NWv1VdDeoRYch>



NEW YORK TIMES BESTSELLER

Tiny Changes,
Remarkable Results

Atomic Habits

An Easy & Proven Way to
Build Good Habits & Break Bad Ones.

James Clear

Read by the Author

Unabridged

Growth Mindset AFFIRMATIONS

When I  **PRACTICE**,
I *see* great
results!

©Kirsten's Kaboodle 2016

 When I
put forth
more
effort, I
IMPROVE!

©Kirsten's Kaboodle 2016

I am
CAPABLE
of doing
difficult
things! 

©Kirsten's Kaboodle 2016

When I  **practice**,
my *neural*
connections get
STRONGER!

Kirsten's Kaboodle

©Kirsten's Kaboodle 2016

I take care of
my **BRAIN** by
getting enough sleep,
eating healthy foods,
and drinking plenty
of water! 

©Kirsten's Kaboodle 2016

I don't always
get what I *wish*
for, but **DO**
get what I 
WORK FOR!

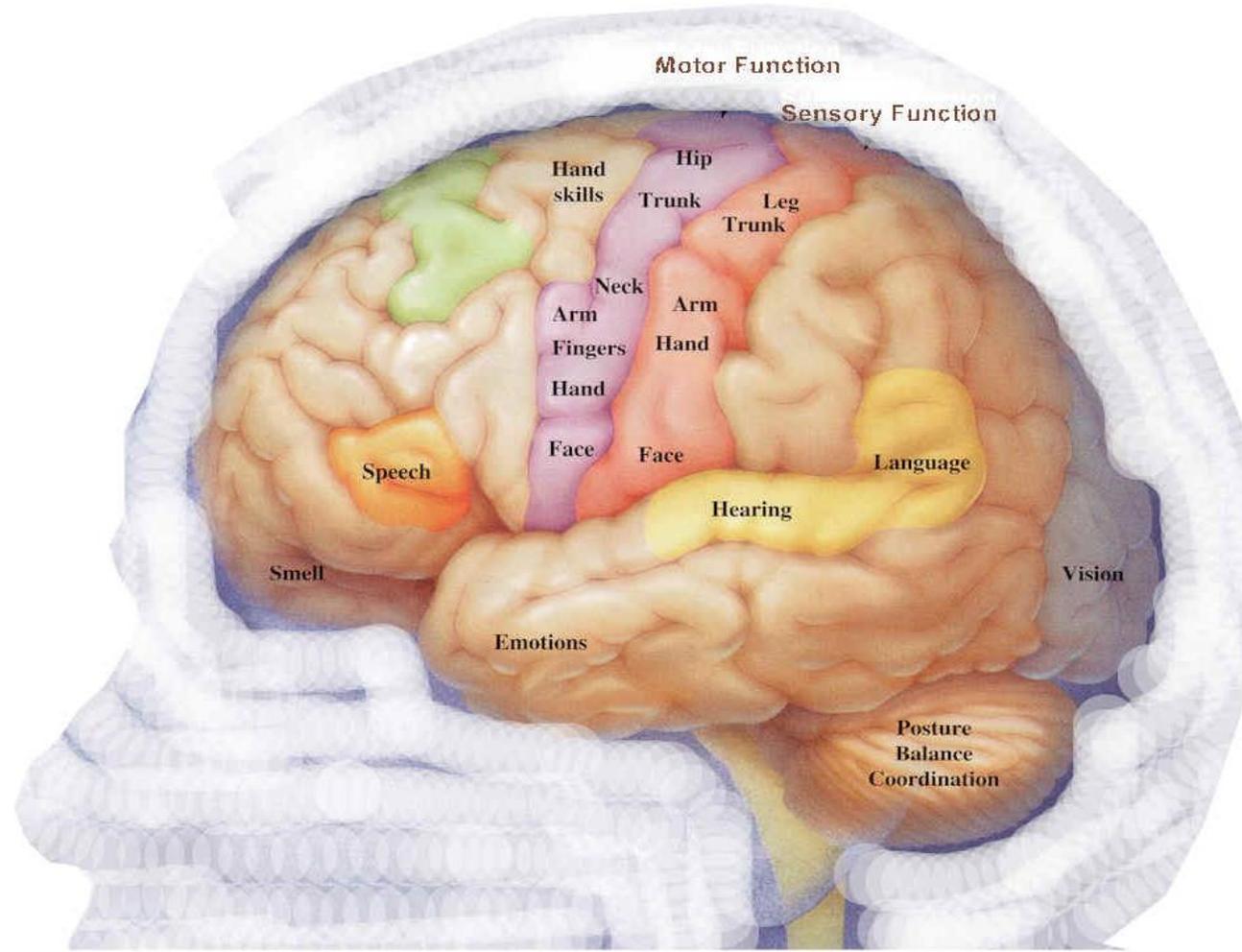
©Kirsten's Kaboodle 2016

What's the Purpose of Praise?

To motivate the student to repeat the behavior being praised!



Quick Brain Test



Answer Out Loud...



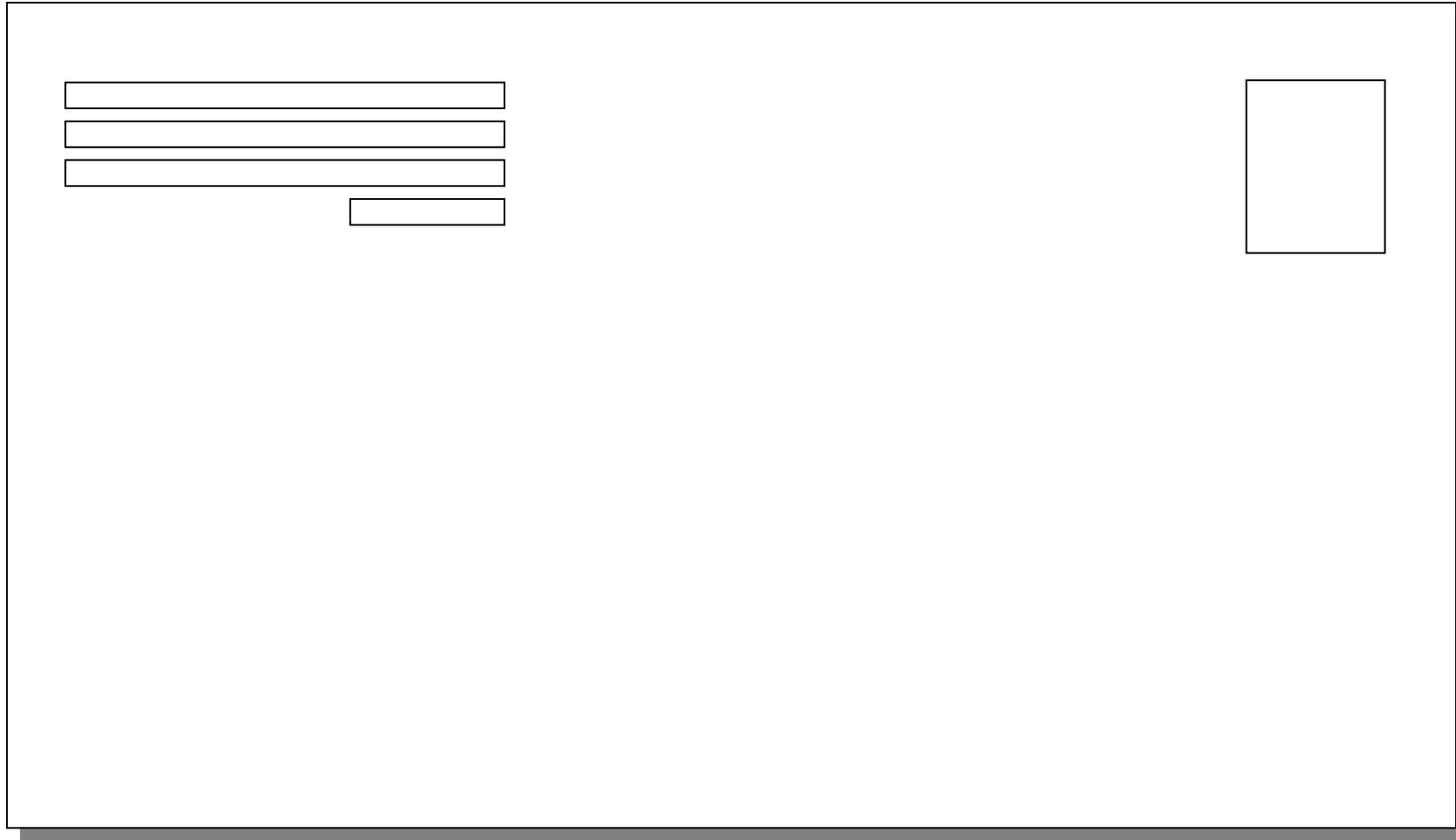
As Fast as You Can!



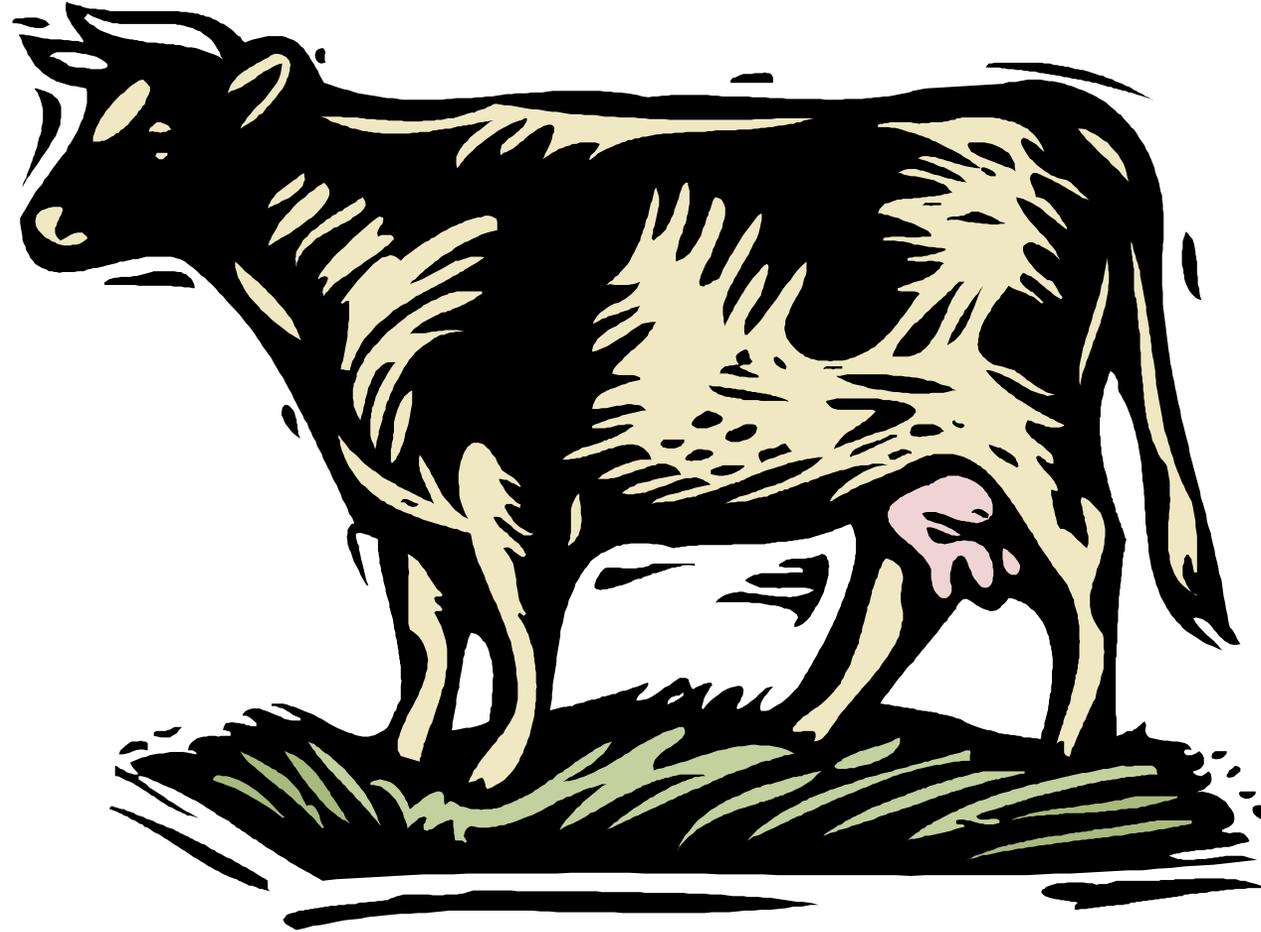
Ready?



What Color is This Envelope?



What Do Cows Drink?



An Important Brain Rule...

Associations in the brain are real, physical brain structures.

Neurons that repeatedly connect to transfer the same information are heavily insulated.

We call these insulated connections “Habits” of thinking, feeling and behaving.

This insulation happens through repetition.



What's the Purpose of Praise?

Praise = Motivate the student to repeat the behavior being praised

Therefore, you must deliver praise in practical, concrete terms so that repetition is easy!

Growth Mindset

Adults can engineer a growth mindset in children by praising them for Strategy Acquisition and Selection (choosing a successful way to solve a problem).

“You tried a lot of different solutions on that puzzle until you finally solved it.”

Growth Mindset

Adults can engineer a growth mindset in students by praising them for Effort (doing his or her very best under any circumstances).

“You worked very hard putting the toys away. That hard work helps everybody get to have a snack sooner. Thank you.”

Growth Mindset

Adults can engineer a growth mindset in students by praising them for Persistence

(working toward her or his goal despite obstacles, setbacks and even failures).

“That was a challenging craft you put together in Art class. When your first try didn’t work, you did not get frustrated but started over.”

Personal Reflection: Growth Mindset



1. What are the most common praise statements you provide your students?
2. How frequently do you praise them?
3. How would you modify those statements to focus on strategy selection, hard work and persistence?

(3 minutes)

Final Thought: Build-Out the Upstairs

Set and Maintain High Expectations

“Students from poverty were 53% less likely to complete college when their teachers had lower expectations for them.”

Boser, et al., (2014). The power of the Pygmalion effect. Center for American Progress.

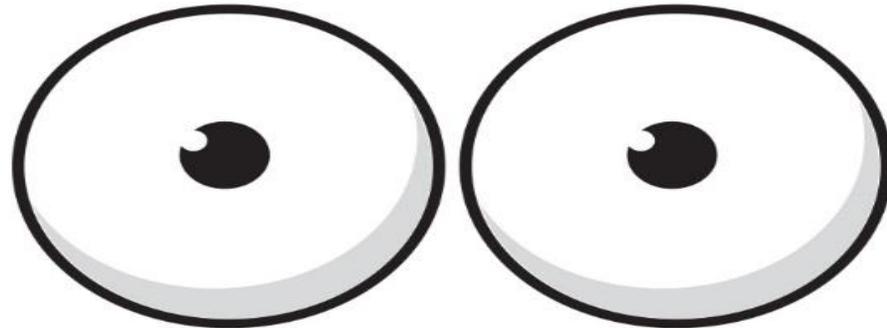
Build-Out the Upstairs

Set and Maintain High Expectations

1. Believe that change is possible.
2. *Be aware of biases, stories, and identity.*
3. Boost your personal and professional expectations.
4. *Hold yourself accountable for raising the bar.*
5. Erase the deficit mindset.

Jensen, E. (2022). Teaching with poverty and equity in mind. ASCD, Arlington, VA.

“Once we learn to see things differently, the things we see look different.”



Thank You EPEL!



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