

Keynote Speaker - Linda Kargas-Bone (Rich Brain, Poor Brain...)

*Maslow BEFORE Bloom*

## BUT THE AMYGDALAS KICK IN



Triggered by Stress

- Outside of school circumstances
  - \* homeless, violence, malnutrition,
  - \* emotional and physical neglect
- Inside school
  - \* threatening, physical barriers?, teasing/bullying
  - \* frustration, un-focused/a lot on mind, lack of social/friendship
  - \* difficult to build and maintain relationships (students & teachers)

Narrow parallel = "Fight or Flight"

- once a student is at this point, we are working extra to get them back

Almond Shaped Clusters

Triggered by stress

Unleash Cortisol

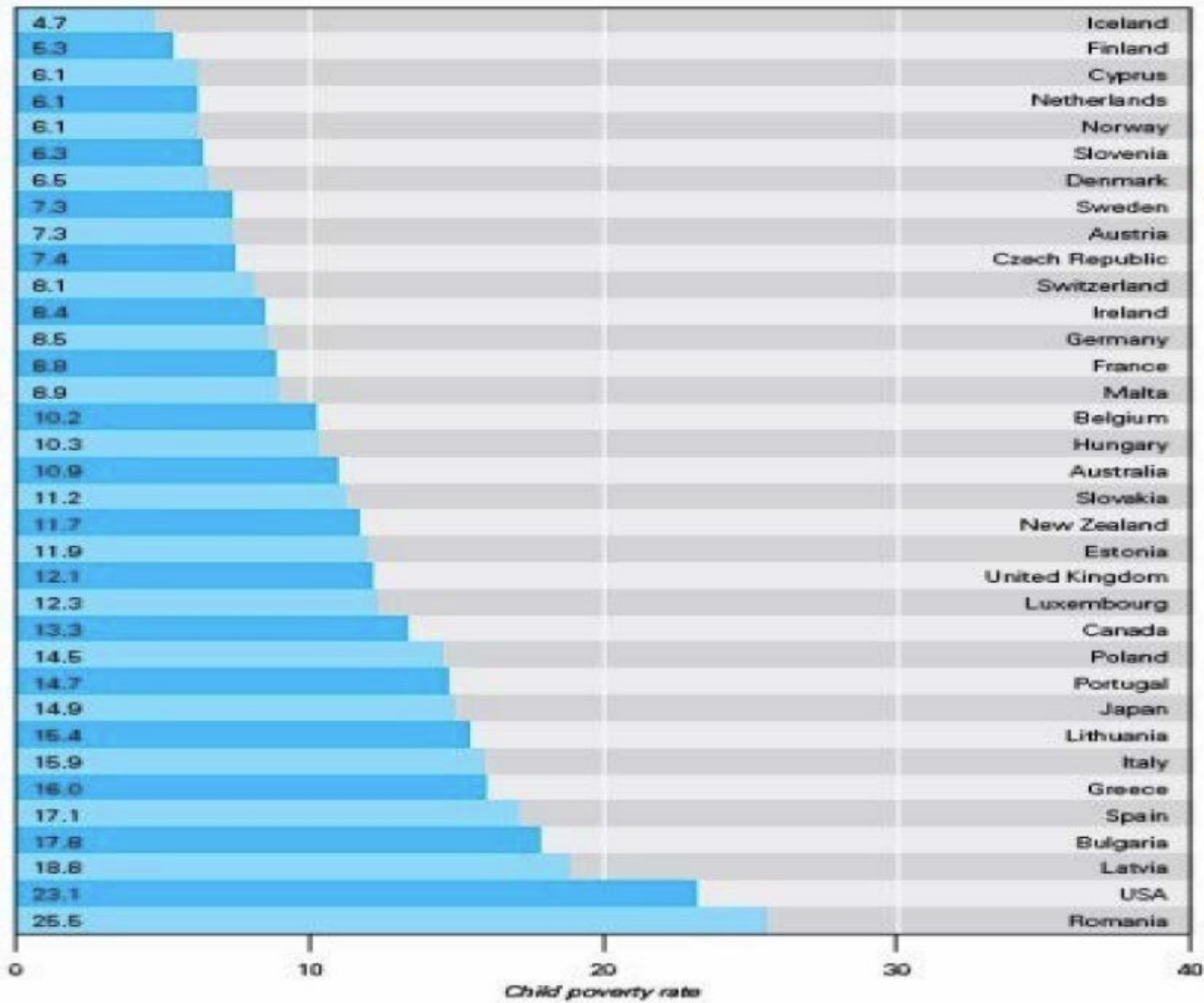
Shutting down higher order thinking

Damaging the brain

And poverty makes everything worse.

## THE CHALLENGE

**Cortisol, the stress hormone does so much damage to our brains as it seeps out: shutting down the pre-frontal cortex, impeding creativity: actually shrinking the hippocampus, the center of memory; and slowing neuro-genesis. But, when you recognize the fact that simply living in poverty triggers cortisol, even when there is no direct stressor like abuse or illness in a child's life, you have a huge problem. Dr. Linda Karges-Bone**



Interesting chart. After a while, data like this does begin meaning something, and such data should affect public schools.



## HIDDEN RULES AMONG CLASSES / FROM RUBY PAYNE'S "UNDERSTANDING POVERTY"

	POVERTY	MIDDLE CLASS	WEALTH
POSSESSIONS	People	Things	One-of-a-kind objects, legacies, pedigrees.
MONEY	To be used, spent.	To be managed.	To be conserved, invested.
PERSONALITY	Is for entertainment. Sense of humor is highly valued.	If for acquisition and stability. Achievement is highly valued.	Is for connections. Financial, political, social connections are highly valued.
SOCIAL EMPHASIS	Social inclusion of people he/she likes.	Emphasis is on self-governance and self-sufficiency.	Emphasis is on social exclusion.
FOOD	Key question: Did you have enough? Quantity important.	Key question: Did you like it? Quality important.	Key question: Was it presented well? Presentation important.
CLOTHING	Clothing valued for individual style and expression of personality.	Clothing valued for its quality and acceptance into norm of middle class. Label important.	Clothing valued for its artistic sense and expression. Designer important.
TIME	Present most important. Decisions made for moment based on feelings or survival.	Future most important. Decisions made against future ramifications.	Traditions and history most important. Decisions made partially on basis of tradition and decorum.
EDUCATION	Valued and revered as abstract but not as reality	Crucial for climbing success ladder and making money.	Necessary tradition for making and maintaining connections.
DESTINY	Believes in fate. Cannot do much to mitigate chance.	Believes in choice. Can change future with good choices now.	Noblesse oblige. ('Nobility Obliges')
LANGUAGE	Casual register. Language is about survival.	Formal register. Language is about negotiation.	Formal register. Language is about networking.
FAMILY STRUCTURE	Tends to be matriarchal.	Tends to be patriarchal.	Depends on who has money.
WORLD VIEW	Sees world in terms of local setting.	Sees world in terms of national setting.	See world in terms of international view.

<b>RICH BRAIN SOCIAL MEDIA FOOTPRINT</b>	<b>POOR BRAIN SOCIAL MEDIA FOOTPRINT</b>
<b>Inquisitive and Independent projects</b>	<b>Come to School Every Day Ready to Learn</b>
<b>Transformative experience</b>	<b>Think bigger</b>
<b>Focus on New Mosaic or Artwork in the site</b>	<b>Focus on Bus Safety</b>
<b>Competitive</b>	<b>High Standards</b>
<b>Video of Field Day or Thank you Tea for volunteers</b>	<b>Links to Test Scores</b>
<b>Upper School, Lower School Academy</b>	<b>Grade Levels Classrooms</b>
<b>Maximizing Creativity</b>	<b>Maximizing Respect</b>

Basically, these are those words and phrases one would likely see more often from schools or school-parallel social media sites comparing "rich brain" and "poor brain" schools.



My teacher  
thought I was  
smarter than I  
was – so I was.

Six-year-old

**Expectations  
Are  
Everything**



# **NOTHING IS POSSIBLE WITHOUT TEACHERS WHO EXPECT CHANGE**

**Teachers' expectations matter. A lot. So much so that they can change the ways that brains eventually develop. It is not simply a "feeling", it is a biological, emotional, and mental game changer. Teachers change brains when they change expectations**

Language

Experiences

Rich Brain

Vs

Poor Brain

Attitudes

Performance



# BELIEFS AND BENEFITS IN RICH BRAIN SITES



**NO  
LIMITS**

Language/Words are currency.

Experiences are taken for granted and extend in an endless continuum.

Attitudes reflect a belief not that one is “owed” anything but that one **OWNS EVERYTHING**.

Performances are natural and supported by the entire community and family systems and lead to lifelong success.

# LANGUAGE



\*According to the Hart and Ridley studies, there is a 30 million word gap between rich and poor children by the age of 3 ( Hart & Ridley)

\* While half of middle-income children in 4th grade are considered proficient, closer to 17% of low-income 4th graders earn proficient mark. (Annie E. Casey Foundation)

\* Early reading skills predict general academic performance, and early deficits reduce the likelihood of catching up later on. (Whitehurst, J., and Lonigan, C)

\*70% of poor children live in single parent families, while only 6% of affluent children live in single parent homes, a statistic that often means fewer opportunities for reading, language, and building word currency.



### Poor Brain Schools and Language

### Rich Brain Schools and Language

Children come to school with millions fewer words in their repertoire.

Children come to school speaking in complete sentences and often reading on their own already.

Children own fewer books of their own and school libraries at poor brain school often lack large media centers or media specialists because their locations are not attractive to specialists who might have to travel long distances to the sites.

Children own many books of their own and have diverse, well appointed school libraries. Their media centers are the center of the school and serve as “mini colleges” with a media center mentor ready to help with research.

Families and school sites may not possess the items that create a “culture of literacy”, such as books, magazine subscriptions, electronic readers, or a daily newspaper. Parents have ( typically) less formal education and may not enjoy reading themselves.

Families and school sites possess many items that create a “culture of literacy”, such as books, magazine subscriptions, electronic readers, and daily newspapers. Parents are ( typically) well educated and their children see them reading or using language to build connections and to improve their status.

There are fewer opportunities for travel or enrichment that build “schema” or language about subjects. For example, going to the beach builds schema for the marine environment. Rich brain families and schools

Travel is a natural extension of the curriculum. There are trips to the pumpkin patch in the Fall and to the holiday music shows at winter break and a Spring Break study trip.

Adults **may not have the time** nor luxury of interacting with children in social or personal ways that build expressive language. For example, a grandmother caring for several small children will be in “survival mode” making sure the children are all safe and fed. She may not have time to discuss the weather or to read a story.

Adults **provide or provide for a constant, interpersonal focus** on building language. Children are read to, taken to libraries, or offered extracurricular opportunities that build schema. Rich brain schools feature authors in residence, author studies, or book clubs.

Course syllabi in poor brain sites often reflect a “textbook only” curriculum. For example, in a gifted or honors class, there would not be a focus on reading multiple

Course syllabi in rich brain sites **include multiple literary sources, often done in thematic context.** For example, in a unit on the Revolutionary War, students might read



## PURPOSE OF THE INITIATIVE

- ⦿ To increase students' vocabulary and fluency through an embedded "Read Aloud" model.
- ⦿ Using classical and vetted children's literature tied to "high stakes" science and social studies standards.
- ⦿ Every teacher reading aloud from the same books every day.
- ⦿ One book per quarter.
- ⦿ Focus: Reading so that students can hear and absorb more words.

# Framing With Read Aloud...



- Reading Aloud is
- Free
- Fun
- Fair
- Accessible
- Available
- But after 3<sup>rd</sup> grade, only 50% of teachers read aloud daily!

# Framing the Context of School Wide Literacy...

- By the time a student leaves your elementary school, he or she would have experienced 24 of the best pieces of children's literature ...
- Tied to important standards.....
- Thus building schema and vocabulary...
- For some of the "toughest to teach" concepts and ideas.....

Grade	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
<b>2</b>  This is an example of a matrix for Read Alouds. The chart, which I don't have right now, does go between Kinder and at least 8th grade.	<b>Communities:</b>  <u>Because of Winn Dixie</u> <u>Kate DiCamillo</u>	<b>Culture Differences</b>  <u>Extra Credit</u> <u>Andrew Clements</u> (Girl) (Boy)	<b>Matter &amp; Inquiry</b>  <u>Charlie and the Chocolate Factory</u> Roald Dahl	<b>Habitats-Problem Solving</b>  <u>Charlotte's Web</u> E. B. White
<b>3</b>	<b>Time and Place SC Settings</b>  <u>Stranded</u> Idella Bodie (Boy)	<b>Revolutionary War</b>  <u>The Swamp Fox of the Revolution</u> <u>Stewart H. Holbrook</u> (Boy)	<b>Animals- Environments, Habitats</b>  <u>Rabbit Hill</u> Robert Lawson	<b>Civil Rights</b> <u>The Watsons Go to Birmingham</u> Christopher Paul Curtis  (Boy)

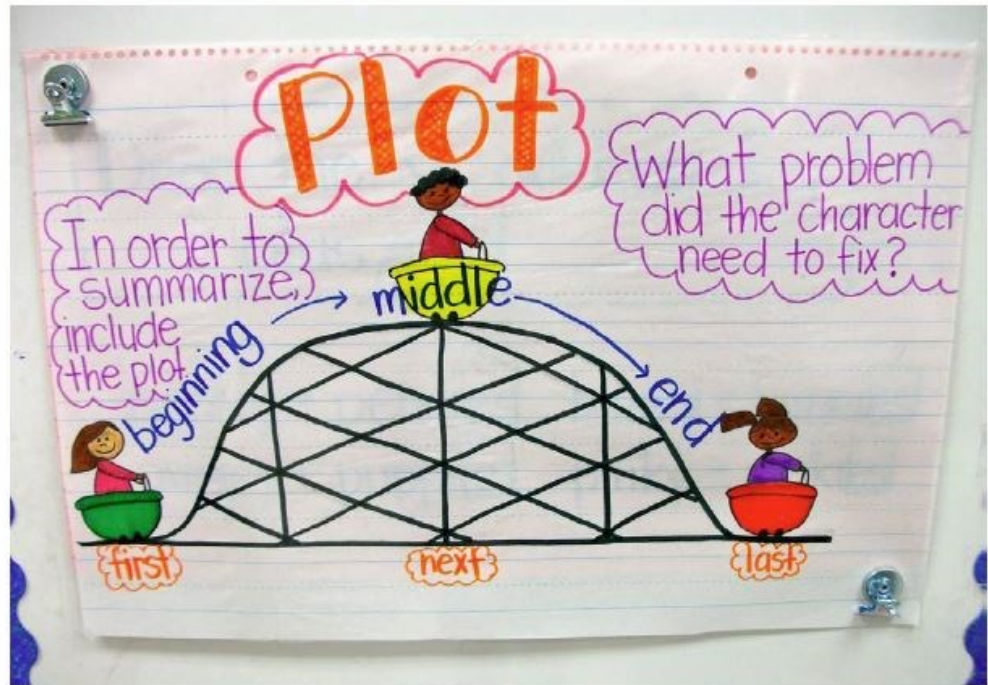


## MORE LANGUAGE, PLEASE

Anchor charts are a preferred strategy.

In wealthy sites, these features are  
1) Either taken for granted in students' preparation or 2)  
Routinely used in rigorous writing programs.

These fit beautifully with district ELA models! Pages 39-41.



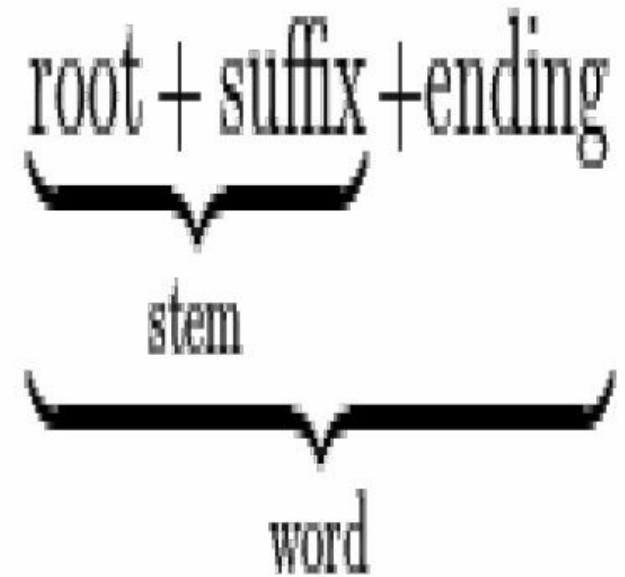
## IT IS GREEK ( OR LATIN) TO ME!

Exponential increases in vocabulary.

In wealthy homes and schools, these features are naturally acquired in dinner table conversation.

We must make it deliberate and daily to “catch up”.

Pages 41-43 in text.



# EXPERIENCES, EXPERIENTIAL LEARNING

An explanation was given here to differentiate and specify what was being meant by "Constructivism"; in that, students are the "creators" of their own unique knowledge and the connection(s) linking and understanding fact to fact, concept to concept, thought to thought. This does not mean that teachers and instruction/activity are not needed. While facilitation is a "fading" term, teachers are still an important piece in guiding learning and constructing opportunities to experience and grow.



Whether you call it “Experiential Learning” or “Social Learning Theory” or “Constructivism”, students who come from more affluent homes and who, by design and good fortune, attend more affluent schools, have advantages that their less wealthy peers do not enjoy. That is a very nice and politically correct way of saying, there are “haves and have nots” ( which my mother always said) in the world. Truth be told, this has always been the case. Remember the whole feudal system chart that most of us had to replicate in 9<sup>th</sup> grade world history?? It was like a 5 point item on the test!



Understanding our choice, the choice to see a barrier or to see a challenge. In one way (barrier) we may quit, the other (challenge) we may persevere. And, then you can make the choice to "may" anything, and choose to "do".

**When you challenge other people's ideas of who or how you should be, they may try to diminish and disgrace you. It can happen in small ways in hidden places, or in big ways on a world stage. You can spend a lifetime resenting the tests, angry about the slights and the injustices. Or, you can rise above it.**

**Carly Fiorina**



# EXPERIENCE THE DIFFERENCES



Rich Brain schools emphasize AP, Honors, and Challenges.

Poor Brain schools emphasize RTI, IEP, and Remediation.

We need to flip the equation.

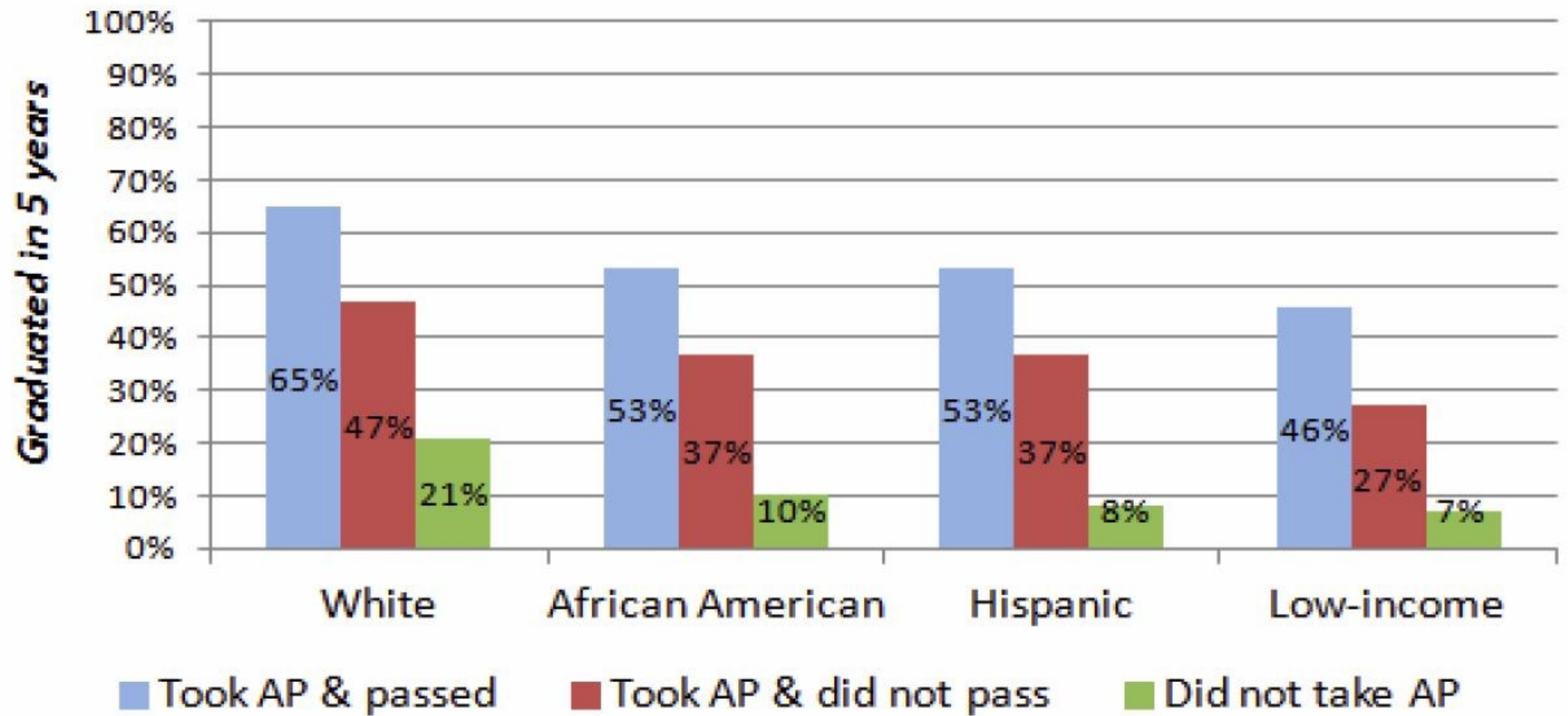
Rich Brain schools set up every experience with the expectation that kids are smart and only become smarter.

Yet, it appears that when students do take AP courses, whether they pass or not, there is a positive outcome. Being a part of a rigorous school experience changes students' performance and personal beliefs about what is possible

This is an interesting "turn" in thought. This may establish a reason for AP course teachers to STICK to high expectations and rigor, knowing that while a student may not get the credit, they will still receive a significant benefit.



**Graph 3: Impact of AP courses and AP exam performance on graduation from college within five years**



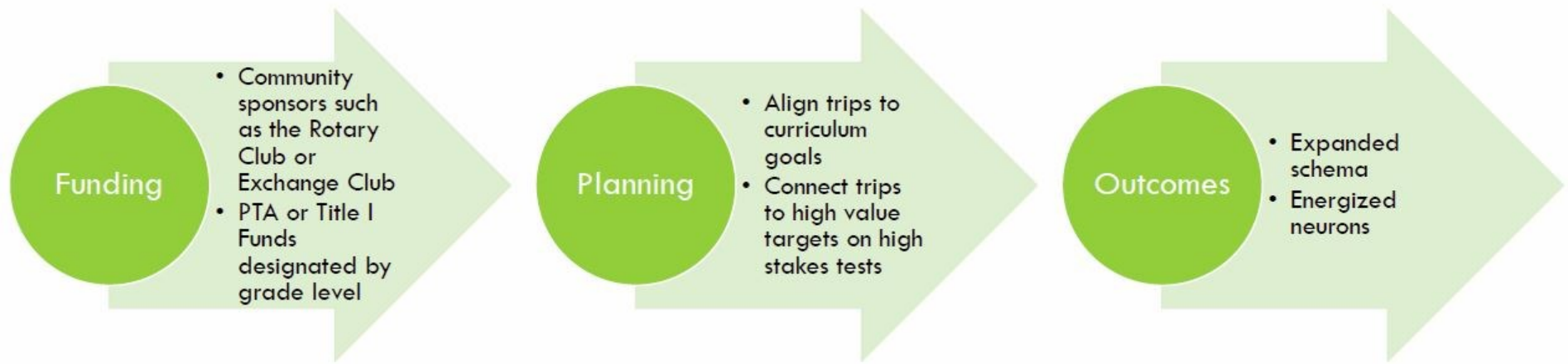
“Research shows that students who take rigorous courses in high school are more likely to get into, and succeed, in college. For a lot of students though, especially low-income and minority students, AP courses haven’t always been an option. North County principal Julie Cares says five years ago, only 10 percent of the school’s 2,000 students took any Advanced Placement classes. Less than one-fourth of seniors planned to attend a four-year college.”

“When I first came, there was a sense of, just low expectations,” she says. “A lot of students not only didn’t believe it was possible, but it didn’t even occur to them that was something they might do.” ( Scott, 2015)



I was invited to review course syllabi for an “Honors ELA “ course in a high poverty site that was under scrutiny by the state. The course syllabus listed only a textbook, no outside novels at all for a middle school honors course. In a more affluent school, just 10 miles away, the same course syllabus contained 8 outside novels, 2 per quarter. You might be thinking, “Well, the parents cannot afford the outside books, so teachers did not add them to the syllabus.” That might be the case, except for the fact that in a closet in the media center across the hall, gathering dust, sat class sets of hard backed, annotated novels by 25 different writers. Everyone in the school knew about them, and even about the Title I dollars used to purchase them, but they had never been checked out. I talked with the ELA teachers, who seemed uncomfortable with the whole idea of using the novels and this is what the department chair finally admitted: “Dr. B, I have not read most of those books myself, and so I would be one chapter ahead of the students. I am not going to be embarrassed in that way.”

# DON'T GIVE UP ON ROAD TRIPS!



So often, what separates a child from failure and success is a “small moment” in time, in which someone or something causes a shift in attitude. *He or she changes course, changes a decision, changes a mindset and often because a voice reminds him or her that something better is possible.*

Lareau’s work mentions “cultural guides” that help “rich brains” or what the study terms “upwardly mobile”, to find a way through or around stumbling blocks, all the while, asking for help and responding to the ( often unwritten) rules of the game.

## FAMILIES OF ORIGIN ARE POWERFUL

***If kids come to us from strong, healthy functioning families, it makes our job easier.***

***If they do not come to us from strong, healthy, functioning families, it makes our job **more important.*****

-Barbara Colorose



I know how to create my own destiny.

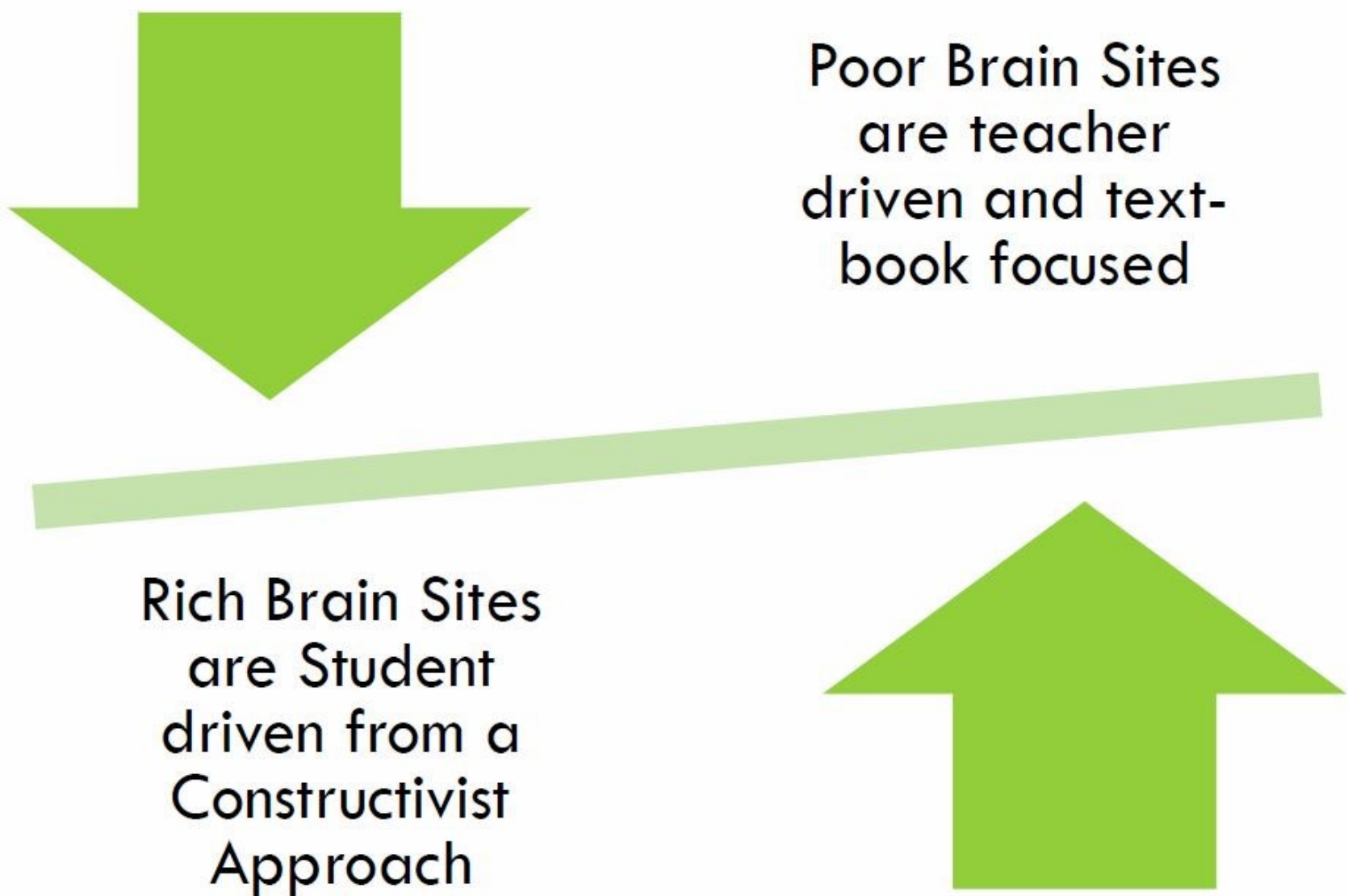


I know how to ask for clarification and guidance..



I understand my value and value myself.





Poor Brain Sites  
are teacher  
driven and text-  
book focused

Rich Brain Sites  
are Student  
driven from a  
Constructivist  
Approach

This should go up in every one of our schools.

# CHANGE YOUR WORDS- CHANGE YOUR MINDSET

I don't understand

*What am I missing?*

I give up.

**I'LL USE SOME OF THE STRATEGIES I'VE LEARNED.**

I made a mistake.

**Mistakes help me improve.**

This is too hard.

**THIS MAY TAKE SOME TIME AND EFFORT.**

It's good enough.

**IS THIS REALLY MY BEST WORK?**

I'll never be as smart as her.

*I'm going to figure out what she does and try it.*

I can't make this any better.

**I can always improve; I'll keep trying!**

I can't read

**I'm going to train my brain in reading**

I'm not good at this.

**I'm on the right track.**

## ATTITUDE ADJUSTMENTS

- \*Create a campus wide attitude that everyone has a path that includes higher education.
- \*Demonstrate strategies for setting goals and monitoring progress.
- \*Facilitate events and experiences that allow students to practice the right attitudes.
- \*Evaluate the tacit curriculum. What are you assuming that may be wrong?

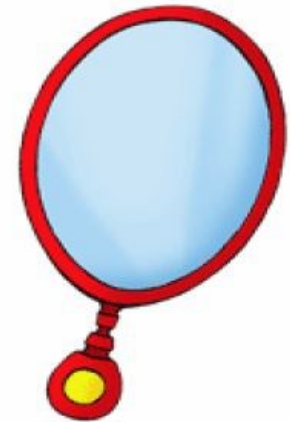
**Your  
*attitude*  
is like a  
price tag,  
it shows how  
*valuable*  
you are.**



## CRITICAL STRATEGY: MIRROR MIRROR IN MY HEAD

It was mentioned that these "neurons" also are innately engaged when we "really" look into someone else's eyes. In this way, if it's colleague to colleague or student to teacher, our honesty (in our eyes) gives us away. Our attitudes do show, they are reflected, .... and in this way, often students can tell if we even believe what we're dishing ourselves.

Mirror Neurons are nerve cells in the premotor cortex that respond when we perform an action and also when we see someone else perform that action. What does this matter to teachers in high poverty sites? It has to do with two things that all students need and poor students often lack: empathy and trust.

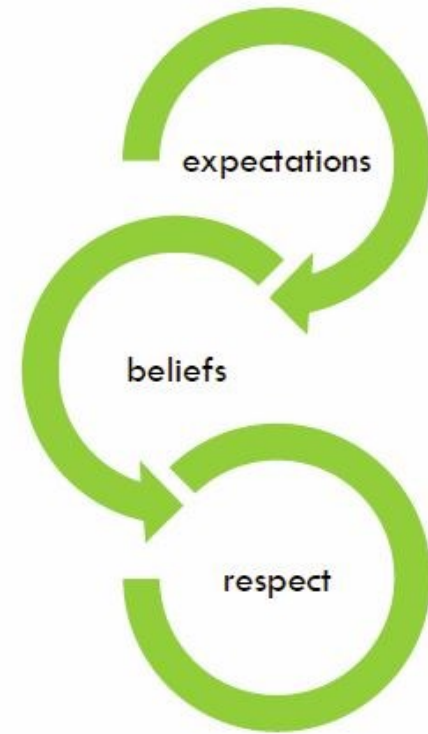


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# KIDS CAN READ YOUR MIND WITH MIRROR NEURONS



I AM READING  
YOUR  
MIND



*The mirror neuron system also appears to allow us to decode (receive and interpret) facial expressions. Whether we are observing a specific expression or making it ourselves (a frown of disgust, for example) the same regions of our brain become activated. And the better we are at interpreting facial expressions, the more active our mirror neuron system. These findings suggest that the mirror neuron system plays a key role in our ability to empathize and socialize with others, for we communicate our emotions mostly through facial expressions. Source:*

<http://www.brainfacts.org/brain-basics/neuroanatomy/articles/2008/mirror-neurons/>



# PERFORMANCES: RICH VS POOR

## Rich Brains and Praise

\*Rich brains aren't afraid to take risks because there is always "back up".

\*Rich brains deal in feedback, not praise.

\*Rich brains expect setbacks and are prepared for growth.

## Poor Brains and Praise

\* Poor brains avoid risk. There might not be another chance.

\*Poor brains expect a right or wrong answer.

\*Poor brains expect roadblocks and choose to avoid them.

**Rationale:** Praise feels good, but the right kind of praise *does good as well*. Random praise is like a “sugar high”, a quick surge of feel good chemicals and then a crash.


Brain-building praise is like protein, sustaining and building mass in the brain.

Learn the difference. See the differences in students.

Learning how to praise the right way is a first and critical step in building performance skills in all brains, but especially “poor brains”, wired to give up quickly when things become dangerous and difficult in academic territory. I suggest professional development that targets the skill of giving “growth praise”, or praise that builds neuro-connectivity and real confidence in taking risks.







Rich Brains and Praise

Feedback


Focus on  
growth

Fearless

Criticism

Focus on  
personality

Fearful



Poor Brains and Praise

**YOU CAN'T HAVE  
MILLION  
DOLLAR DREAMS WITH A  
MINIMUM WAGE WORK  
ETHIC.**

## A WORD ABOUT WORK ETHIC

It is a myth that kids in poverty lack work ethic.

Instead, they often lack motivation to apply work ethic, because they believe it does not matter.



# Low Emotional Intelligence

# High Emotional Intelligence

Aggressive  
Demanding  
Egotistical  
Bossy  
Confrontational



Assertive  
Ambitious  
Driving  
Strong-Willed  
Decisive

Easily Distracted  
Glib  
Selfish  
Poor Listener  
Impulsive



Warm  
Enthusiastic  
Sociable  
Charming  
Persuasive

Resistant to Change  
Passive  
Un-Responsive  
Slow  
Stubborn



Patient  
Stable  
Predictable  
Consistent  
Good Listener

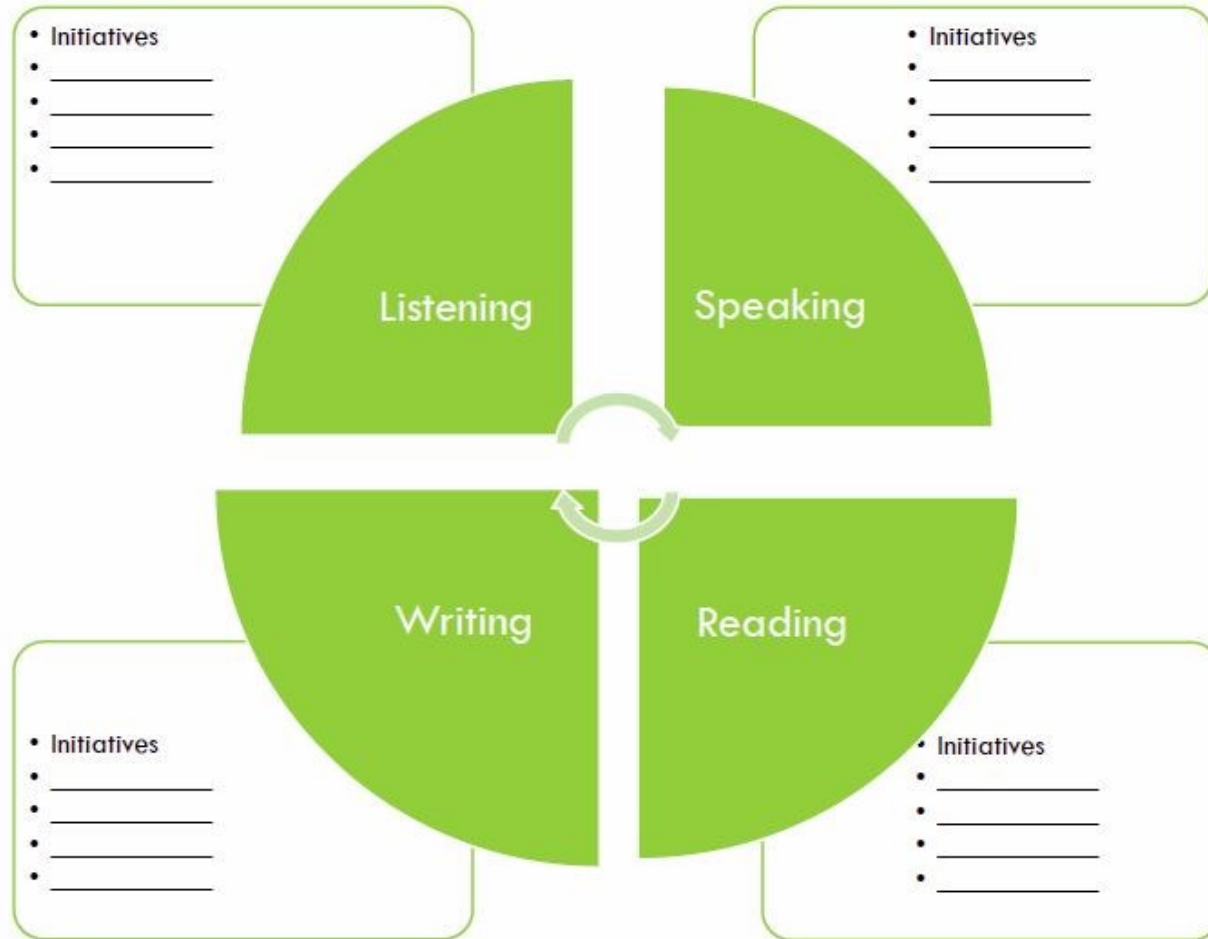
Critical  
Picky  
Fussy  
Hard to Please  
Perfectionistic



Detailed  
Careful  
Meticulous  
Systematic  
Neat

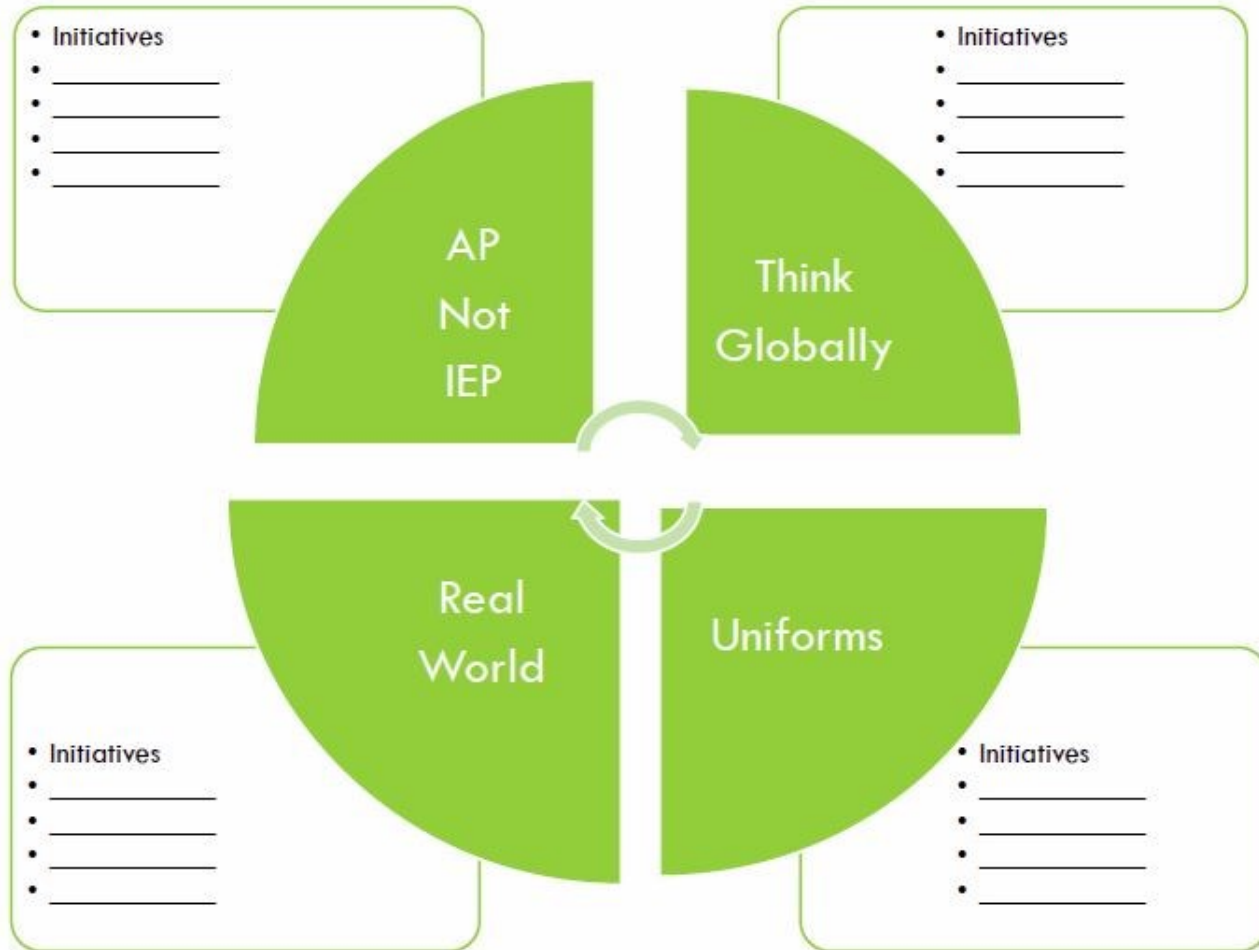
*Wanting an education is not enough. We cannot have something simply because we want it. Many of us “want” things we will never have. Perhaps you wanted to be a professional athlete, or be a famous actor, or musician, or politician. I always wanted to be a cowboy and ride my horse across the western prairies. But, wanting is not sufficient to having. One must first be prepared and qualified. Only then is it possible to achieve your dreams. This is why one of the primary functions of education is to prepare and qualify us so that dreams can become reality or at least reasonable possibilities. Dr. Don Clerico...A “Voice from the Field”*

# LEAP ACROSS GAPS WITH LANGUAGE

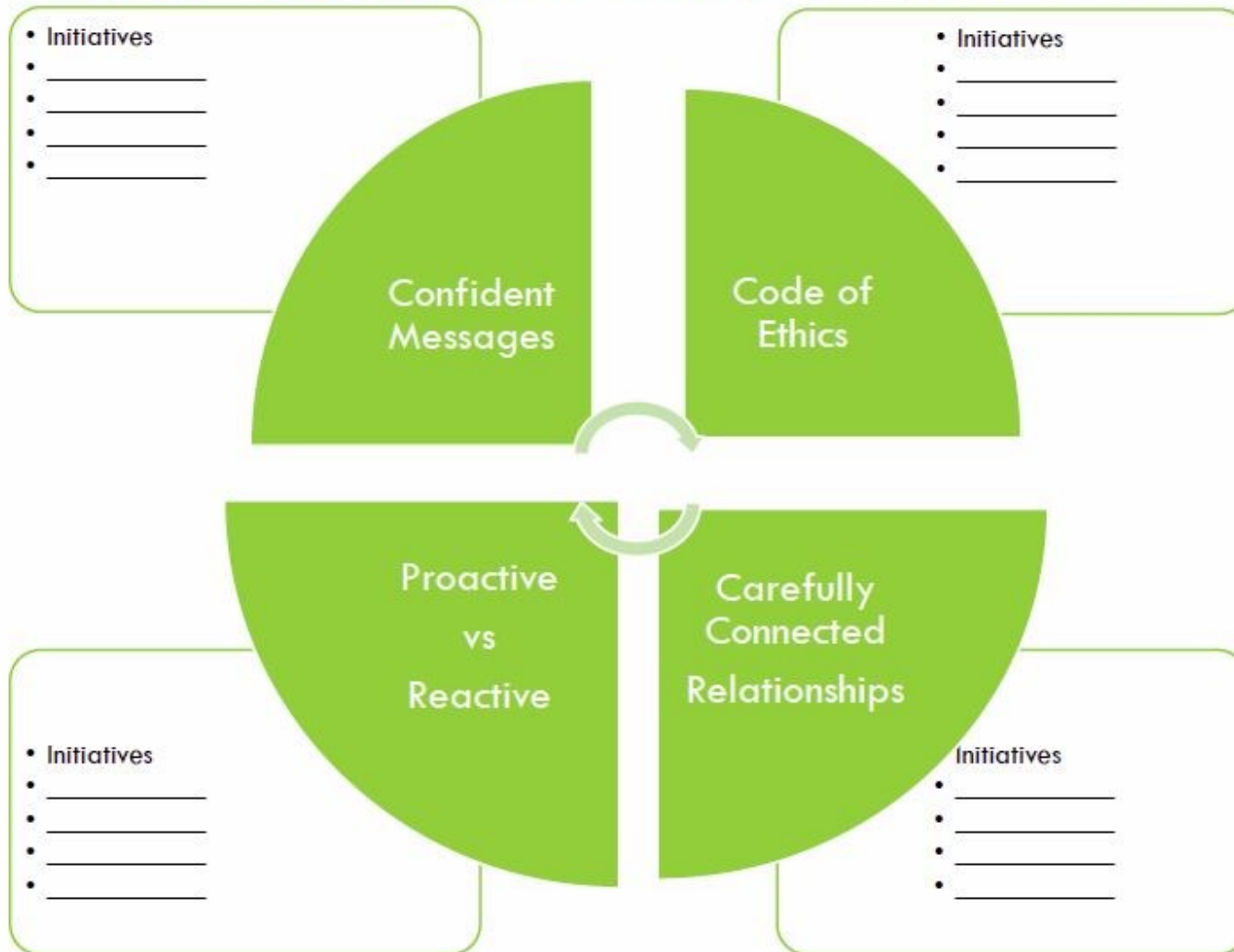




# LEAP ACROSS GAPS WITH EXPERIENCES



# LEAP ACROSS GAPS WITH ATTITUDE



# LEAP ACROSS GAPS WITH PERFORMANCES

