

The Neurocardiologist Leader/Teacher



Hal Roberts
National Title I Conf.
Long Beach, CA
February 22, 2017



IF I DIE

it's during a staff meeting because the transition to death would be so subtle.

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If Rip Van Winkle woke up today, he would recognize only 1 industry!

EDUCATION!!!



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Educational Neuroscience

Psychology

The study of mental
processes
responsible for
cognition &
behavior
(MIND)

Pedagogy

The study of the art
& science of teaching
(EDUCATION)

Neuroscience

The study of the brain's
development, structure,
& function
(BRAIN)



Our Students' Minds Matter

“The intuitive mind is a sacred gift and the rational mind is a faithful servant.

We have created a society that honors the servant and has forgotten the gift.”

~Albert Einstein~



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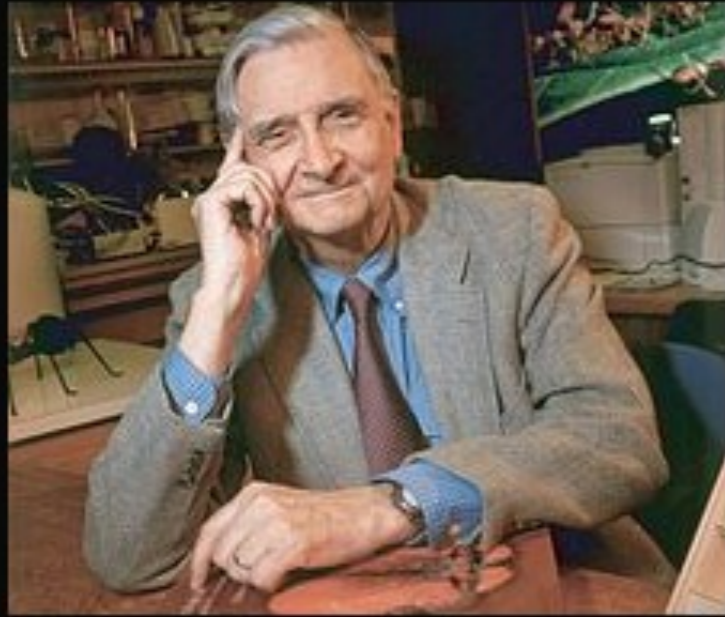
"What I do with 180 days of instruction makes a difference in the trajectory of the rest of a kid's life."

-Patrick Briggs

The **great** thing about education is that everyday matters;
The **scary** thing about education is that everyday matters!

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Thinking Matters



We are drowning in information, while starving for wisdom. The world henceforth will be run by synthesizers, people able to put together the right information at the right time, think critically about it, and make important choices wisely.

(E. O. Wilson)

izquotes.com



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Leadership & Understanding How the Brain Learns - Matters



The **brain** is always at the party &
leadership always dances to the
tune of the brain

- Mindful Leadership by Dickman;
Stanford-Blair





Brain-Friendly Teaching Matters
Teaching & leading without an
awareness of how the brain
learns is like designing a glove
with no sense of what a hand
looks like.

Human Brain and Human Learning – Leslie Hart

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Connecting Mind & Heart Matters

Social experience (**relationships**) is the great
provocateur of
thinking & learning. -

Leading with the Brain in Mind

To inspire meaningful change, you must make
a connection to the heart BEFORE you make a
connection to the mind.

Educating the mind without educating
the heart is no education at all. - Aristotle



Relationships

Matter

It is the CEO of
Leadership!

Followers buy into
the leader before
they buy into
the vision

We all need someone
to believe in us, to cheer
us on, & to affirm our value
& progress



Relationships Matter!



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Executive Functions Matter

- decision making
- planning
- working memory*
- prioritizing
- inhibiting impulses
- reflecting
- organizing
- strategizing
- self-control
- delaying gratification
- coordinate thought & emotion



Limbic system (emotional brain) Matters

- risk taking
- motivation
- hunger
- sleep cycle
- long term memory
- sensation seeking
- novelty seeking
- impulsivity
- primacy of emotional expression
- immediate needs



The Box
Matters —
especially
dealing w/
Change

**THEY SAY
“THINK OUTSIDE
THE BOX”
I SAY
“WHAT CAN
YOU DO WITH
THE BOX”**

It should be — “think
about the box &
adjust it
accordingly”



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Umami Matters



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- 5 Tastes
 - sweet
 - sour
 - salty
 - bitter
 - **UMAMI**
- SAVORY
COMPLEXITY
DEPTH



Rigor/Complexity Matters

Rigor/Complexity

- Requires **thinking, problem solving, & transfer of learning**
- Ss are noticeably alert & engaged
- Goes **up levels of Bloom's**
- Requires **application of knowledge to new situations**
- Involves the S doing better assignments that **require thinking & processing**
- Is counter to the teenage **brain (hormones!)**
- **May require more support**
- Creates **ownership**
- Gets better results

Difficulty

- Usually **involves more** rather than better / deeper
- stays on **same level of Bloom's**
- Easily **confused with rigor**
- Creates more failure
- Is **more** worksheets, novels, & more, more, more....
- Typically involves **teacher-centered activities**
- Builds resentful Ss & Ps
- Creates **compliance**
- Gets current results
- More **posters/more coloring**
- Can get on **Google**

Relevance Matters (Lesson planning)

formula for lesson plans include 3 "Rs" + 1

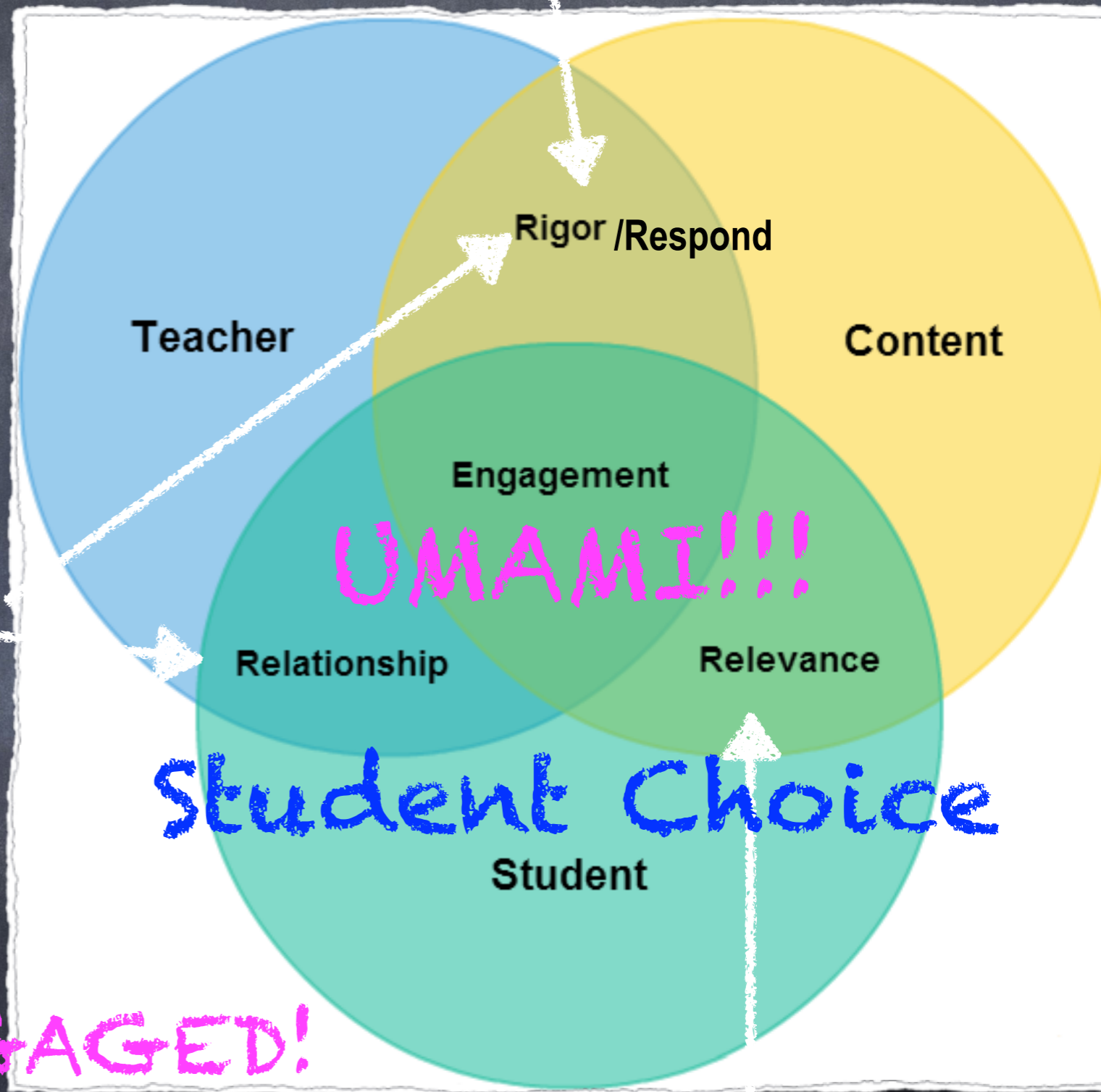
There is no such thing as a lazy student...

...WHEN ENGAGED!



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(depth/complexity)



Engagement Matters

know the difference
between on-task &
engagement

Students will find
the most engaging thing
in the room.
Is it your lesson?

@LaVonnaRoth

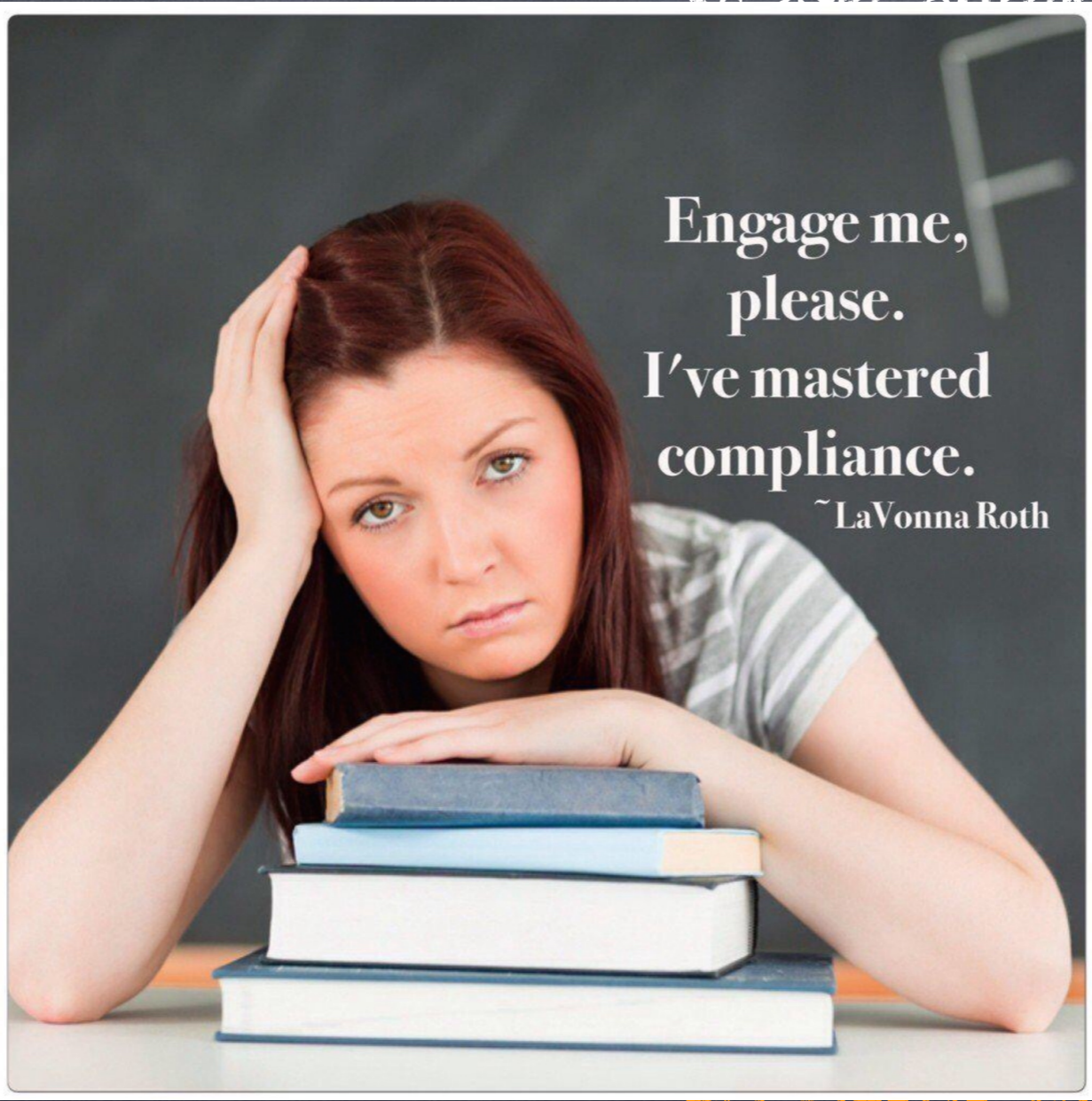


Engagement

On-task

- Often confused w/ on task
- Ss are having to **to think & problem**
- Ss are more **interested in learning** than the
- It's a **culture of compliance** to learning/grow
- a culture of **compliance**
- **Noise & laughter**
- **Ss ask more Qs**
- **S behavior issue**
- Ss rarely shut d
- **Movement** happens

- Often **confused w/ engaged**
- **Ss are quiet, well-behaved &**



participate
y ask for the pts.
"this for a grade?"
"doing this?"
comes up in class
n early
ghter are
issues emerge
compliance
whole period



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by Dr. Kevin Daniel post on
Twitter

Sex, Threat, Patterns Matters

When you encounter/see something/someone:

- ◉ Can I eat it - will it eat me?
THREAT
- ◉ Can I mate it - will it mate me?
SEX
- ◉ Do I recognize it? Have I seen it before? PATTERNS → reading; math; what comes next...



Brain Rules
John Medina

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Boring Matters

• Brain does NOT pay attention to boring.

• DUH!!!



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Gist Matters

- Brain pays more attention to the GIST than to the peripheral details; it selects memory-laden information, processes it & leaves the rest alone

Formative Assessment Matters

Quick and Easy Formative Assessments

Assessments FOR learning happens while learning is still underway.

Hand Signals	Ask students to display a designated hand signal to indicate their understanding of a specific concept, principal or process. Thumbs Up or Thumbs down, 5 Fingers 1-5 scale
Index Card	Distribute index cards and ask students to write on both sides with these instructions. Side 1: Based on our study of _____ list a big idea that you understand. Side 2 Identify something about _____ that you do not yet fully understand.
One Minute Essay	A one-minute essay question is a focused question with a specific goal that can, in fact, be answered within a minute or two.
Analogy Prompt	Present students with an analogy prompt: A designated concept, principal or process is like _____ because _____. Analogies are a great way to assess what your students understand in a fun way.
Concept Map	Any of several forms of graphical organizers with allow students to perceive relationships between concepts through diagramming key words representing those concepts. Http://www.graphic.org/concept.html
"Brain Dumps" 3 minute Pause Or Turn to your partner	The 3-minute pause provides a chance for students to reflect on the concepts and ideas that have just been introduced, make connections to prior knowledge or experience, and seek clarification. <ul style="list-style-type: none"> • I changed my attitude about.... • I became more aware of • I was surprised about • I felt..... • I related to..... • I empathized with..... • This reminds me of (Text to text, text to world, text to self) • I can adapt.....
Exit Card	Exit Cards are written student responses to questions at the end of a class or learning activity or at the end of a unit.
Journal Entry	Students record in their journal their understanding of a concept.

worked hard at ~ told myself I'd try ~ had a lightbulb moment when ~ wished ~ connected with ~ disliked ~ Reflection Exit Slip: During class I ~ wished I could change ~ laughed at ~ realized ~ decided ~ marveled at ~ cringed at ~ savored ~ hoped ~ wondered ~ thought ~ enjoyed ~ felt confused about ~ appreciated ~ worried about ~



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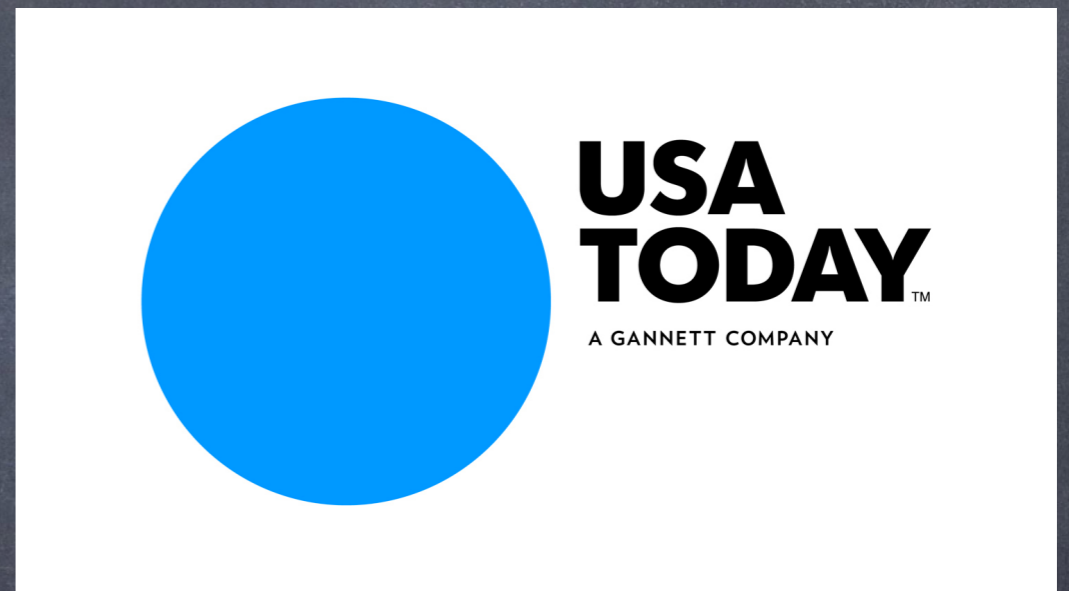
red, yellow, green
cups

Images/ Pictures Matter

The brain loves to look
at images or pictures...
not a lot of words
Vision trumps all other
senses!



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Movement

Matters — A Lot!

— Numb butts = lame

brains (Game Changers—

Julie Adams)

no matter what

— When the bum is numb,

grade level

Brain

the brain is drained

Let's take

Breaks!

(LaVonna Roth)

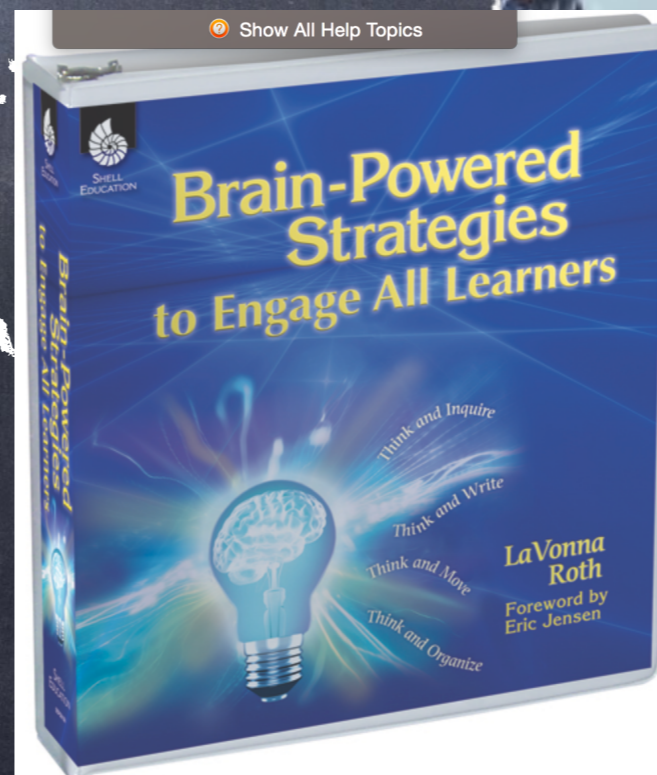
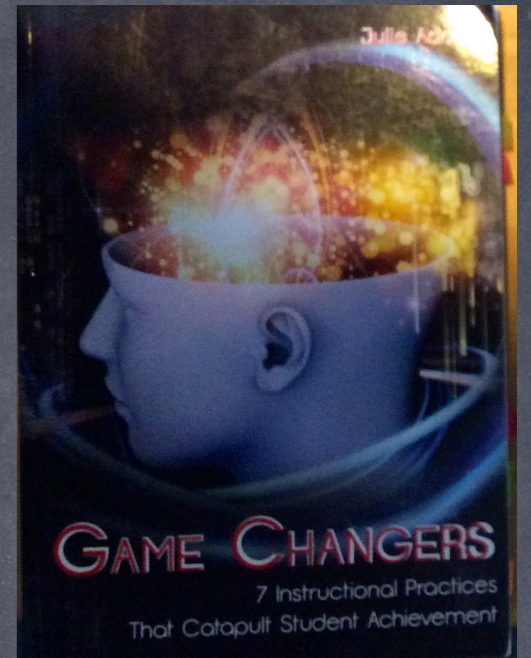
a brain break

— The greater duration in

the chair, the greater

depth of student

despair—(Eric Jensen)



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Learning Matters - more than teaching!

Teaching

- It's my **job to teach** & the Ss to job to learn
- **You can lead a horse to water**-but you can't make him drink
- **Ps just don't do their job** anymore. Society is...
- Ss just don't/won't work for me. **They're not motivated.**
- Where do I send THESE Ss so that they can learn
- **NO LATE WORK** & 1 chance to be successful
- **Our demographic changes...**

Learning

- It's my **responsibility** to create conditions & **support systems** to ensure S learning & **I will not accept failure** because that means I failed
- Data from **formative assessments** are frequently used
- Ss get **multiple chances** to prove they can learn
- Instruction is **working for 80%** of the Ss consistently
- Special Ed is **last resort**
- Ss ask **more Qs than T**

Smell Matters



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Emotions Matter

Capture their emotions; then you can capture their minds because emotion is the gatekeeper to the brain/learning.

The brain
loves a
good story



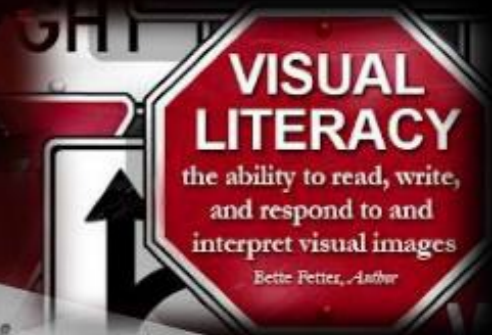
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Background by Vector Background

Monday, 2/23 8:00

#tlap

**React and respond
to AMAZING images**



"Say it with words and you're lucky if they hear it or bother to read it. Tell your story with imagery, and it grabs attention, evokes emotion, and is more instantly processed. Some say sixty thousand times faster..."

-Michael Lambert and Margaret Carpenter

Capturing Emotions Matters



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Praise Matters

Know how/what to praise - praise effort, strategies, concentration; do not use labels

Mindset -

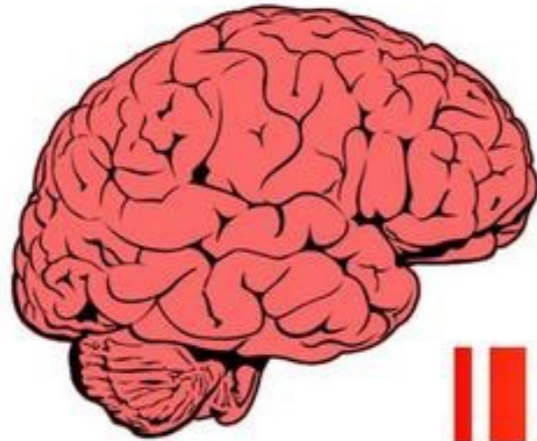
Carol Dweck, Ph.D



Mindset Matters

A Mindset Shift

Fixed



- Avoid challenges
- Give up easily
- See effort as pointless
- Ignore useful negative feedback
- Feel threatened by the success of others

Growth



- Embrace challenges
- Persist in the face of setbacks
- See efforts as a path to mastery
- Learn from criticism
- Feel lessons and inspiration in the successes of others.

Consider where you would place yourself currently. Now think about what you can do to release your growth mindset.



What mindset do these kids have?

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Hooks Matter

(but make them relevant)

Crafting engaging lessons - fun, novelty, curiosity,... (review: the brain does not pay attention to boring things!)

"Don't just teach a lesson...create an experience!"

Dave Burgess Teach Like a PIRATE

<http://shar.es/1oWNiA>



Teachers Matter – the most!

It is the teacher, not the program

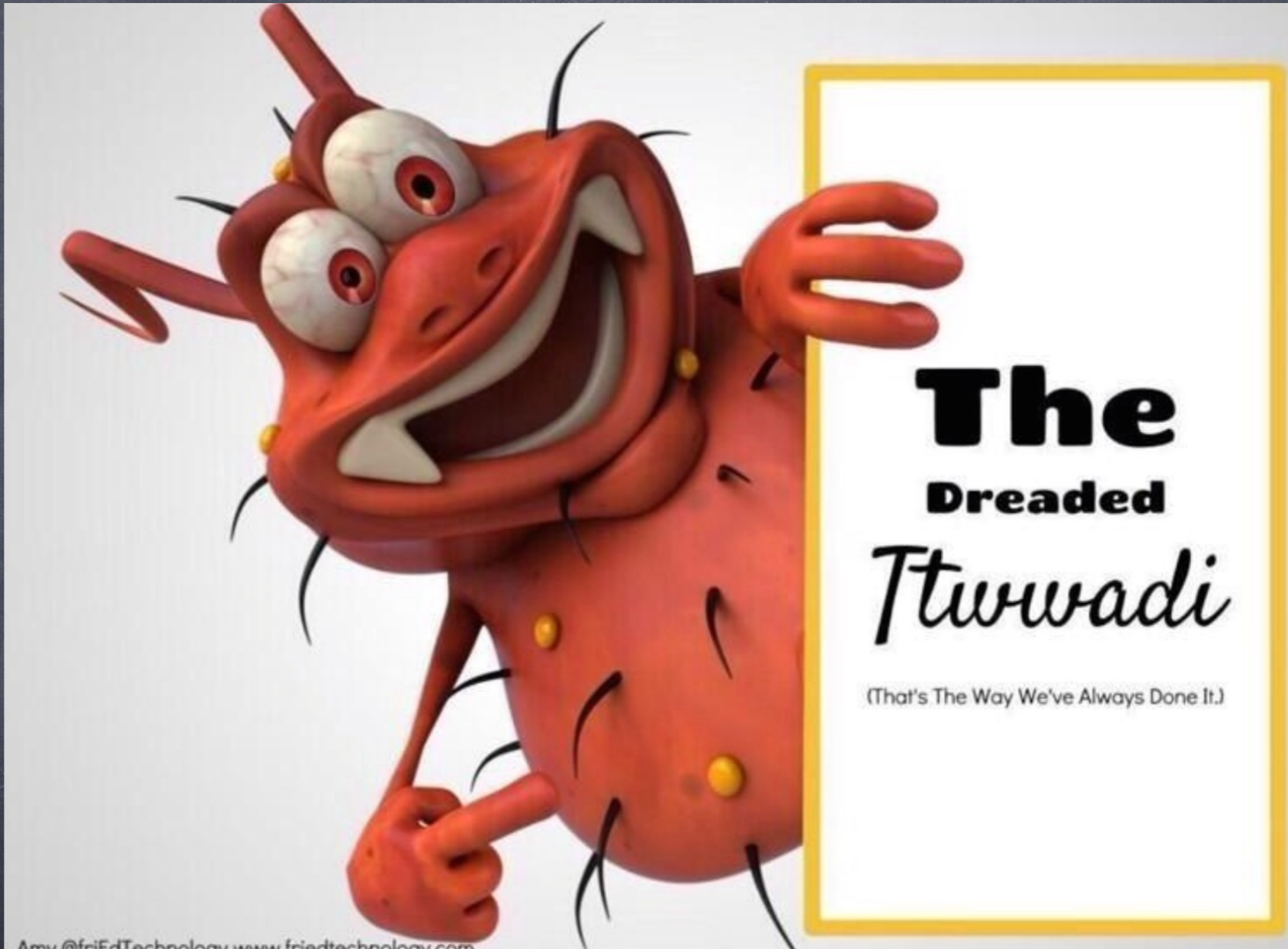
“It’s all personnel!”



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Ttwwadi NEVER Matters

Don't let the
past
determine your
future



Amy @friEdTechnology www.friedtechnology.com



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↑
Amy Mayer
@friEdTechnology



The Future Matters

- Will you take a chance on change?

Teaching Matters

Teaching - sometimes it seems deceptively simple; but you will find at times endlessly complicated; it will satisfy your soul and frustrate your intellect. It is at the same time, rewarding and maddening - and it is without a doubt the greatest profession mankind has ever known.



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3 Things Matter

1. Laugh
2. Think
3. Cry

Jimmy Valvano



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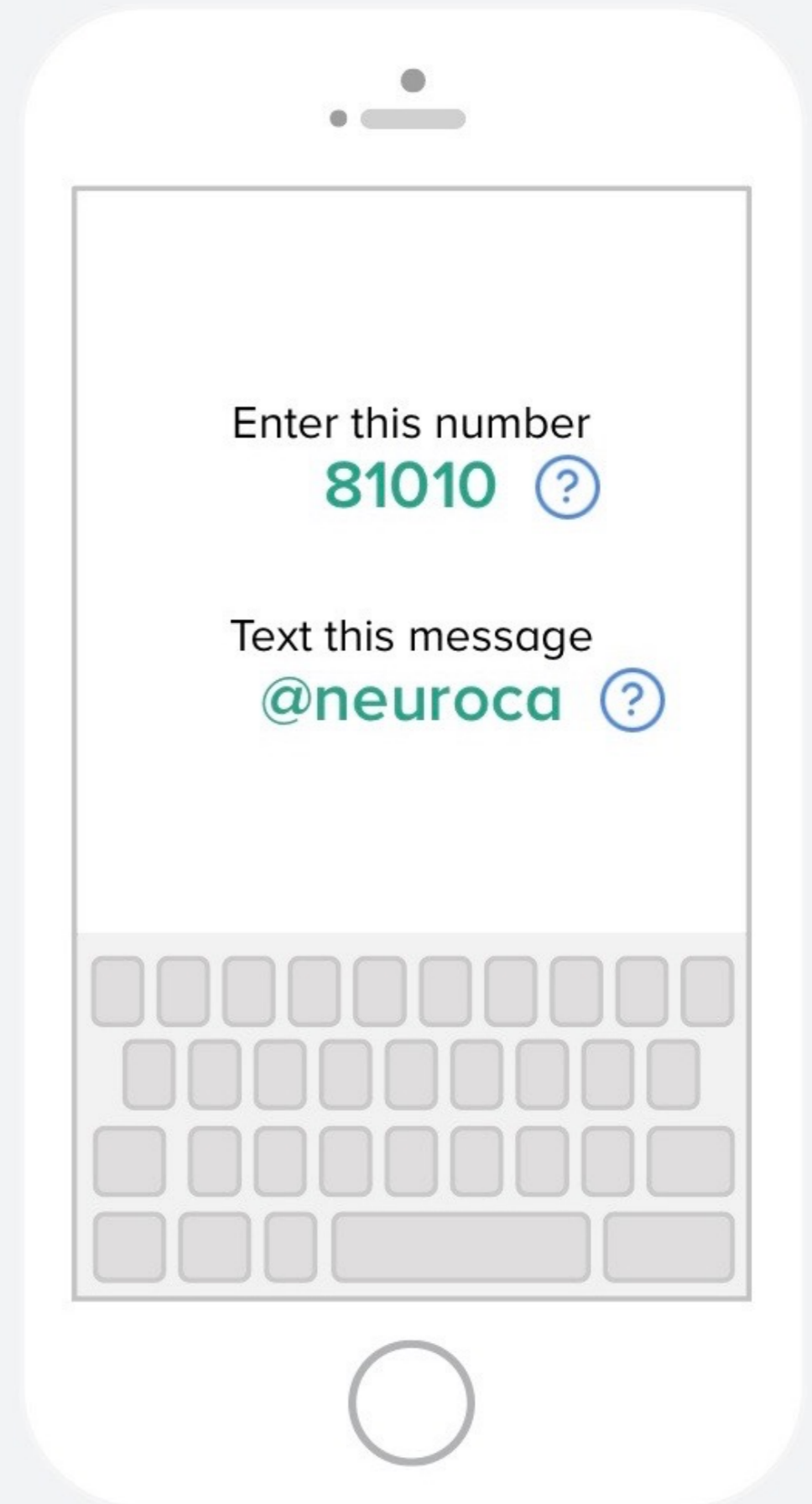
what will your ripple create?
—HAL ROBERTS



Get on my
Remind List for
updates or to ask
me questions



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