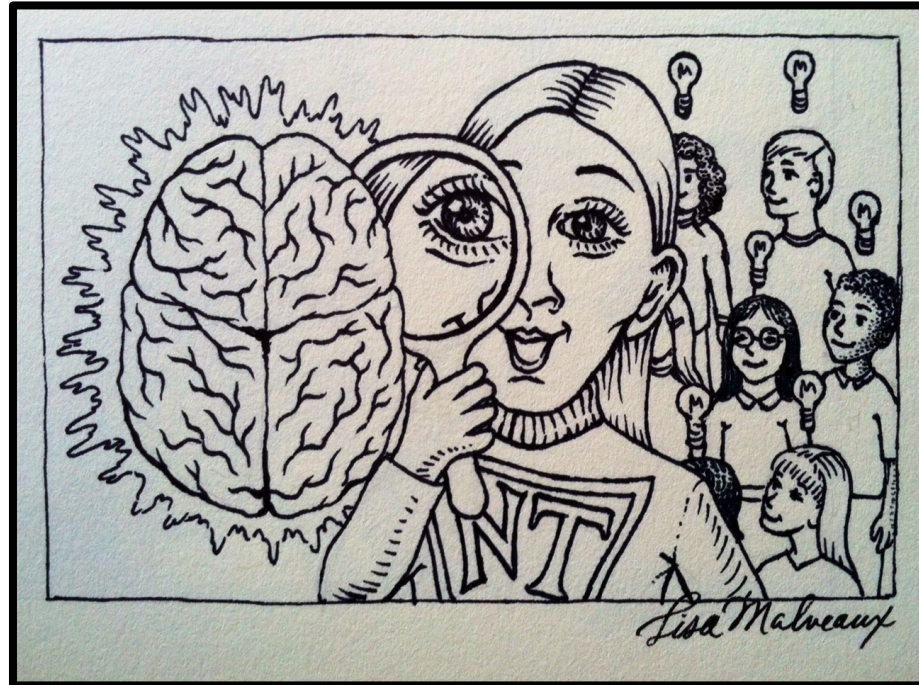


The Center for Transformative Teaching and Learning Bringing Mind, Brain, and Education Science to Teachers and the Classroom

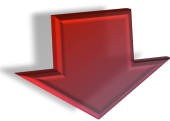
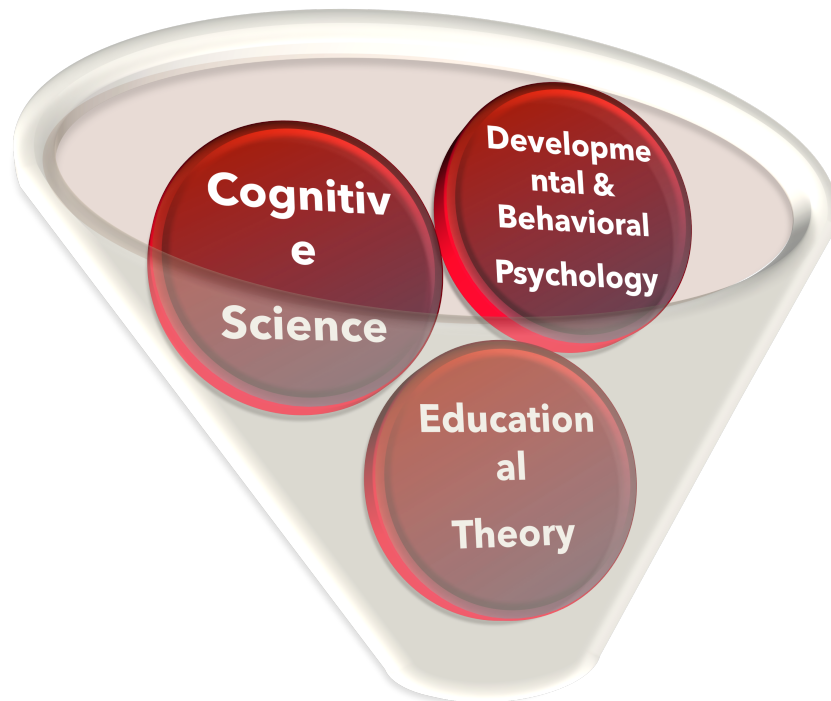


THE CENTER *for* TRANSFORMATIVE TEACHING & LEARNING AT ST. ANDREW'S EPISCOPAL SCHOOL



The CCTL's mission is to create and innovate in the field of Mind, Brain and Education Science research to allow teachers to maximize their effectiveness and students to achieve their highest potential.

What is the next frontier for
teacher training, to taking great
teachers (and their schools)
and making them exceptional?



**Mind, Brain, and Education
Science**

The CTTL's Hypothesis:

When teachers know about

Mind, Brain, & Education Science

they are more likely to do:

Design thinking

Expand student choice

Metacognition

Experiential learning

Redesign learning spaces

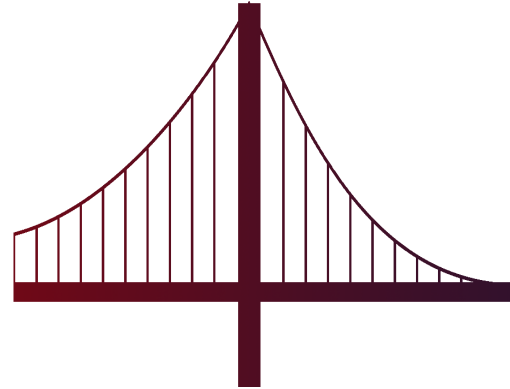
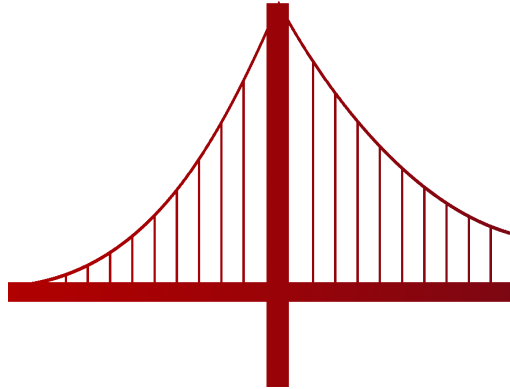
Service

Mindfulness training

Differentiate instruction & assessment

"A Bridge (No Longer) Too Far?"

ACADEMIC
RESEARCH



CLASSROOM
PRACTICES

Research

to

Practice

Ready-Made Research

Original/University Supported
Research Study

Teacher
“Disciplined Inquiry”

Rob Coe
Angela Duckworth
Carol Dweck
Kurt Fischer
Mariale Hardiman
John Hattie
Paul Howard-Jones
Eric Kandel
Mark McDaniel
Michael Posner
Todd Rose
John Shonkoff
Dan Schwartz
Daniel Willingham
Mary Ellen Immordino-Yang
Dr. Judy Willis

- How do peer relationships impact stress and student achievement?
- “How does happiness shape student motivation and academic achievement?”
- How does Mind, Brain, and Education Science currently inform teacher, student, and parent practices at St. Andrew’s?
- How can increased training in MBE improve teaching, professional satisfaction, and student achievement?

- Assessment and the Learning Brain
- Attention and engagement
- Arts Integration
- Brain Plasticity and Growth
- Design Thinking
- Foreign Language (2nd Language) Learning
- Homework
- Intrinsic Motivation (Choice)
- Memory and Recall
- Meta-cognition
- Novelty and Choice
- Stress and Learning
- Technology (A Student’s 2nd Brain)

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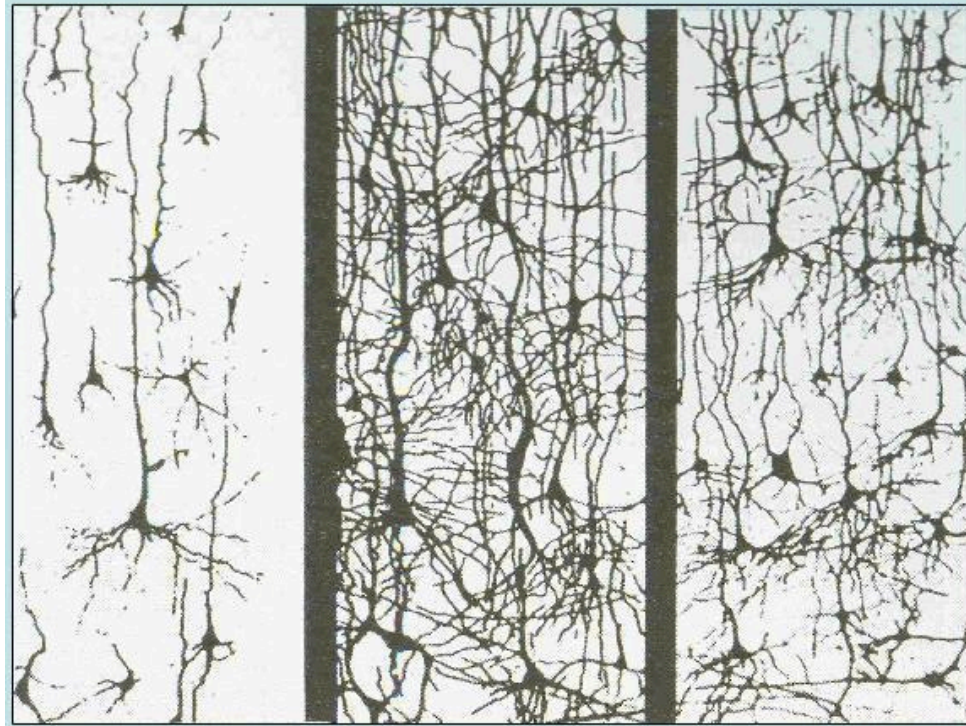
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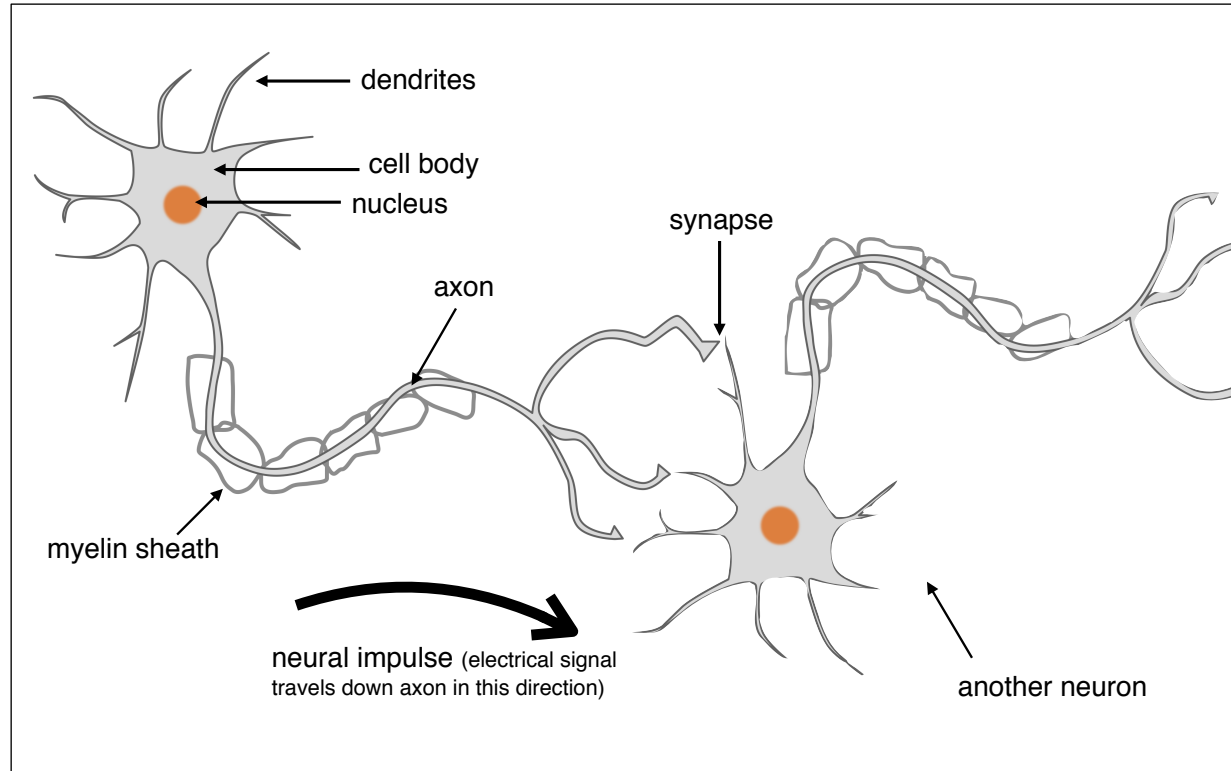
Neuron Growth & Synaptic Pruning: How Might this Science Inform Teaching and Learning?



At birth

6 years old

14 years old



We do it in partnership:



RESEARCH
SCHOOLS
INTERNATIONAL



evidencebased.
education



JOHNS HOPKINS
SCIENCE *of* LEARNING
INSTITUTE

**TEACHFOR
AMERICA**



THE CENTER FOR TRANSFORMATIVE
TEACHING & LEARNING

Attention

Memory

Metacognition

Executive functioning

Higher order cognition

Sequential awareness and production

Spatial awareness and production

Executive functioning

Receptive and expressive language

Social cognition and empathy

Intrapersonal & self awareness

Commitment to learning

Toward a Common Language



A Mindset for the Future of Education: Teachers and School Leaders are Brain Changers & Researchers

Plasticity: "The lifelong ability of the brain to change its organization as a result of experiences."

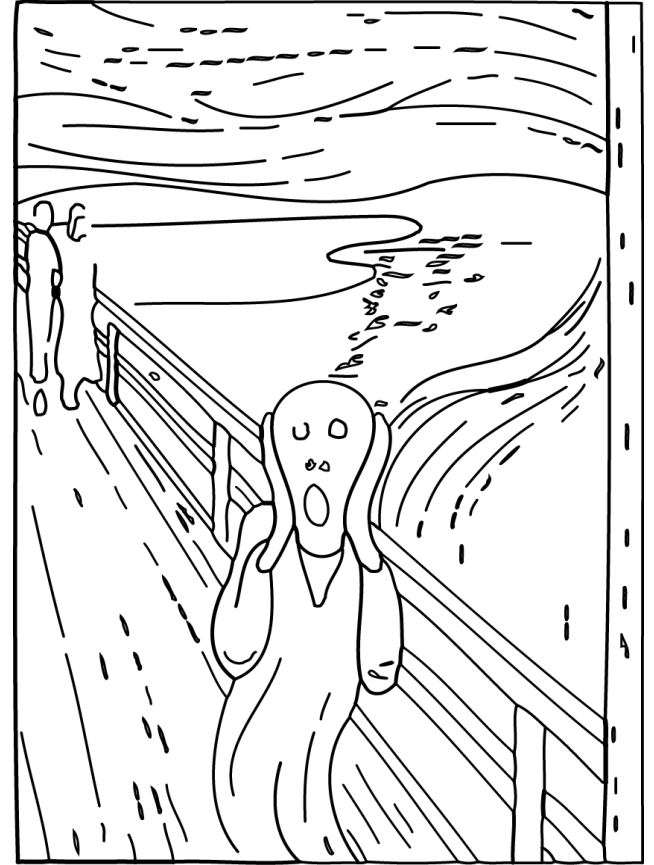




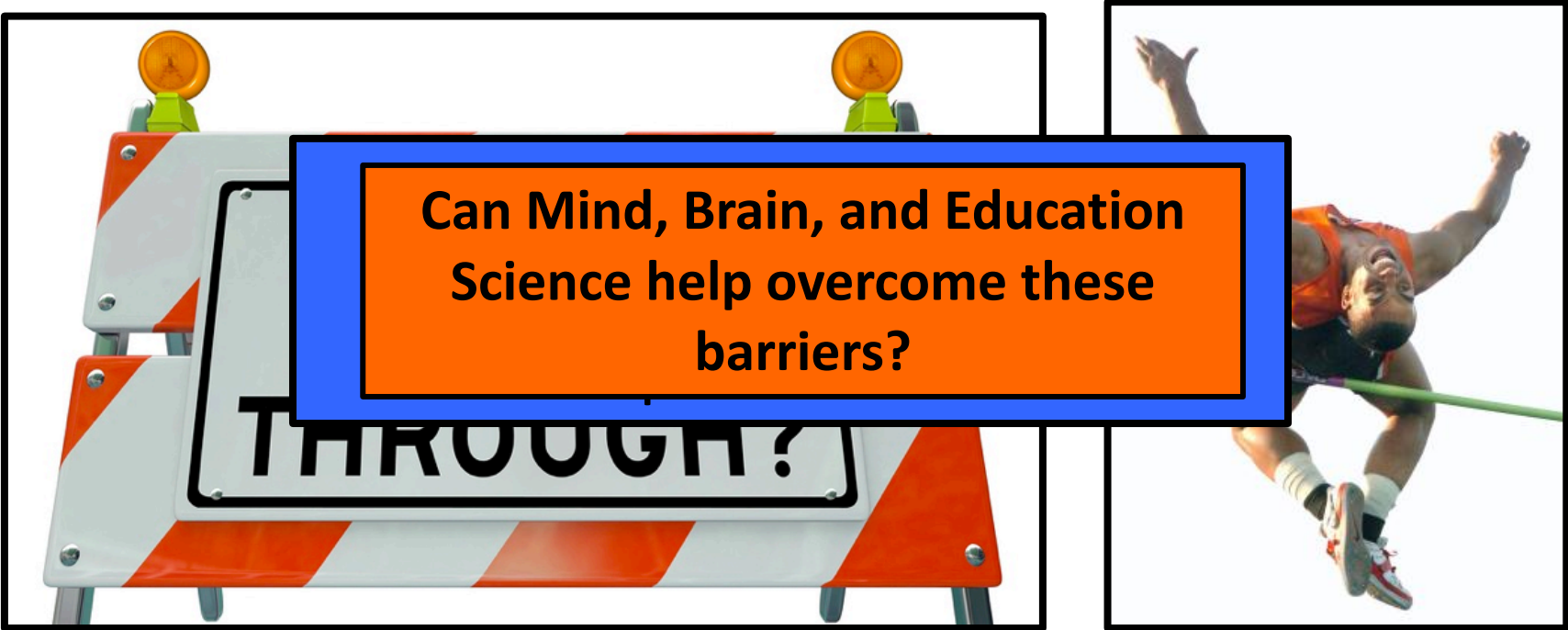
Lisa Malveaux

Learning & Emotion

“‘Downshifting’ is a metaphor often used to describe how negative emotions cause us to process in our emotional center and lose focus on higher order thinking.”



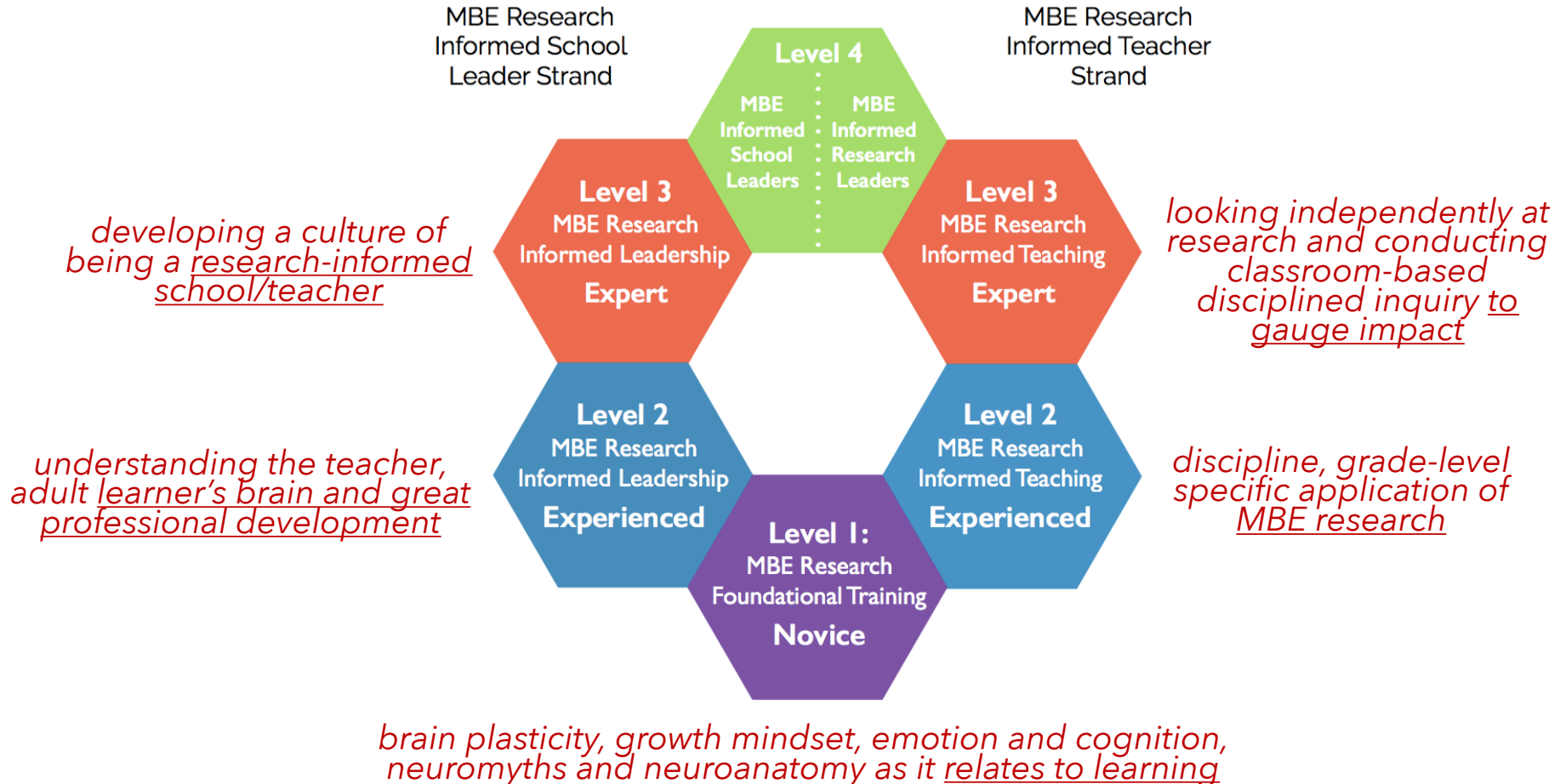
"Lower the Barriers, Not the Bar."



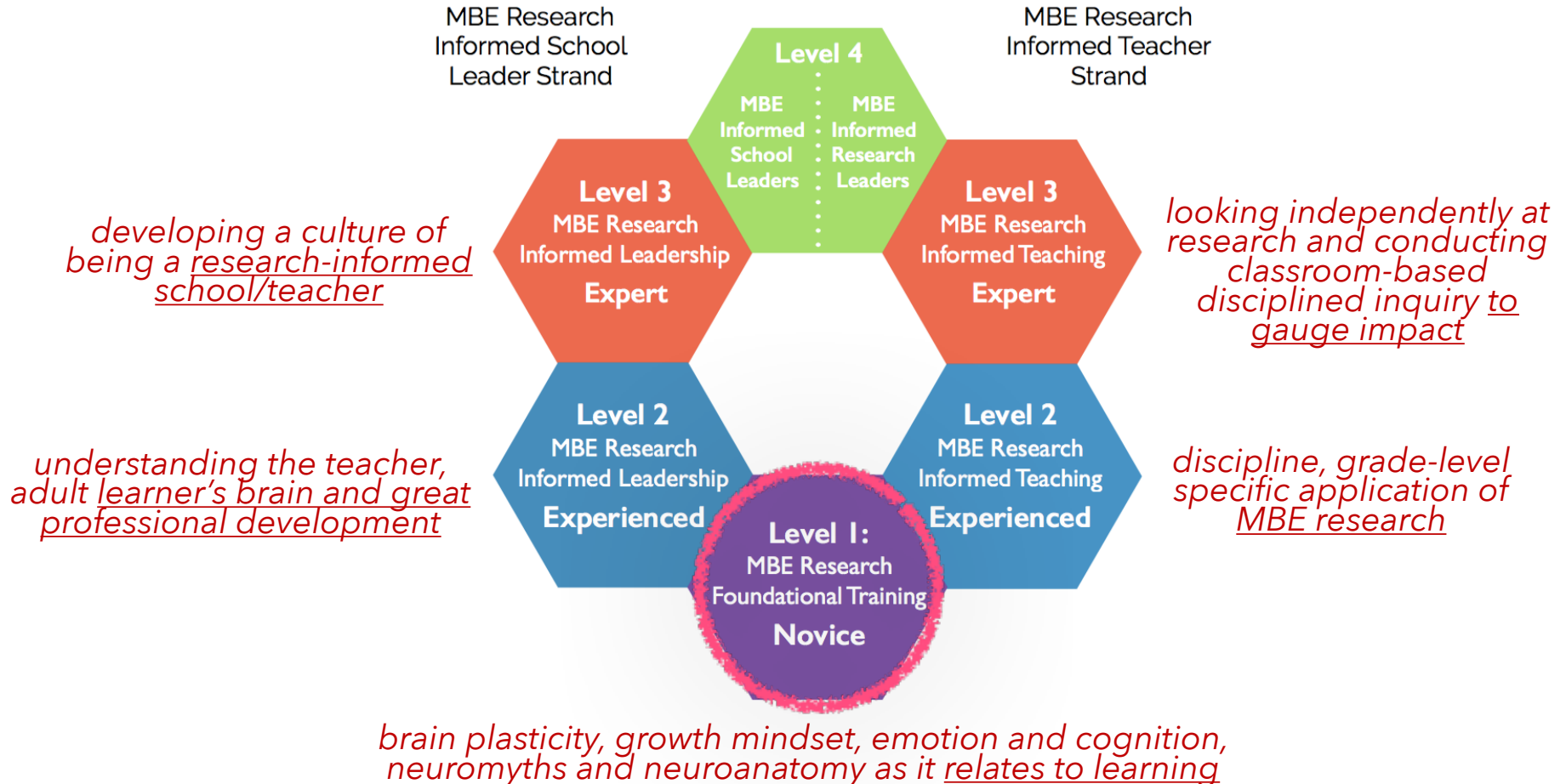
Can Mind, Brain, and Education
Science help overcome these
barriers?

Judy Willis: "The Current Impact of Neuroscience"
in *Mind, Brain, and Education*

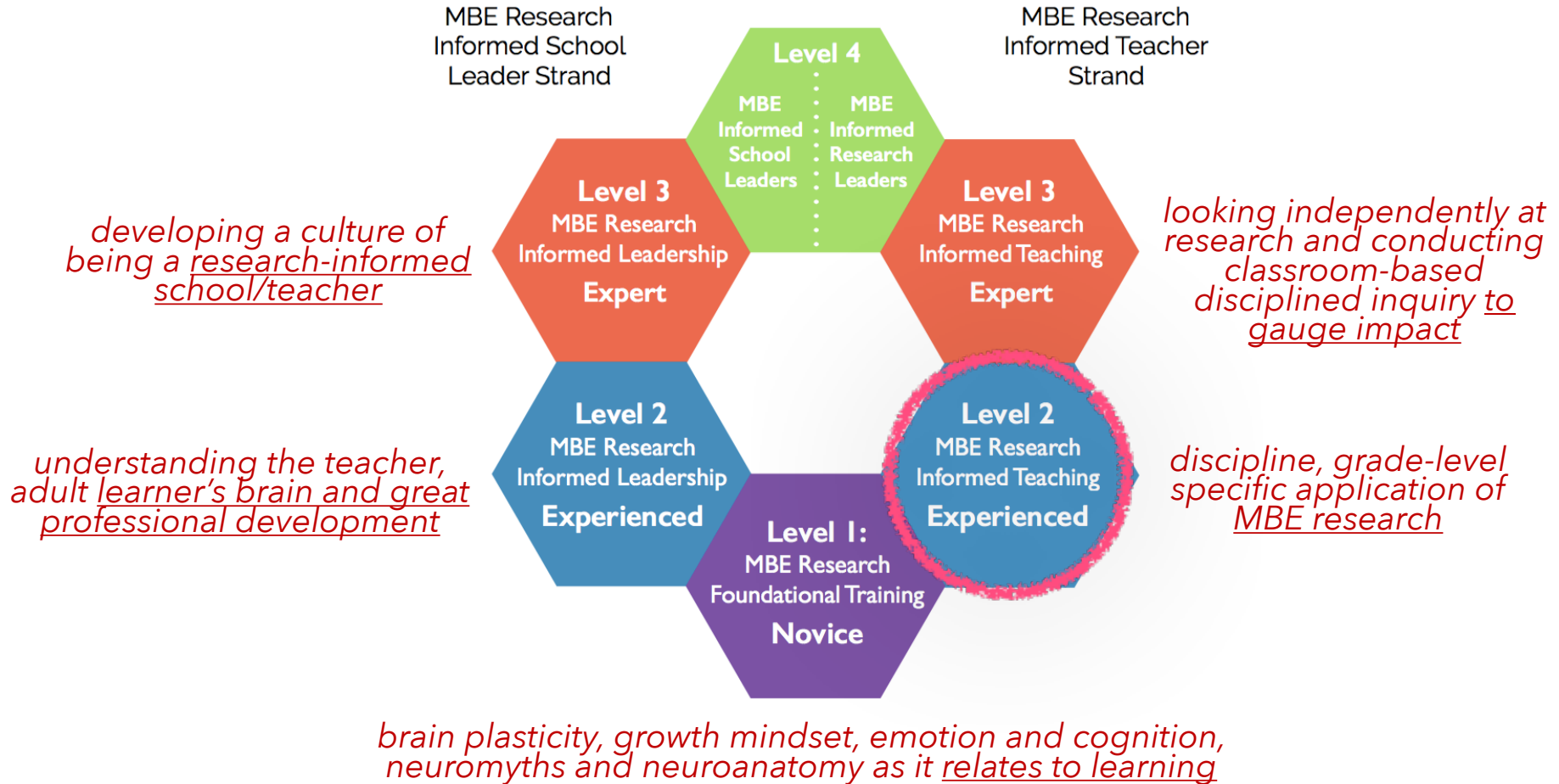
leading research throughout a division/school/district



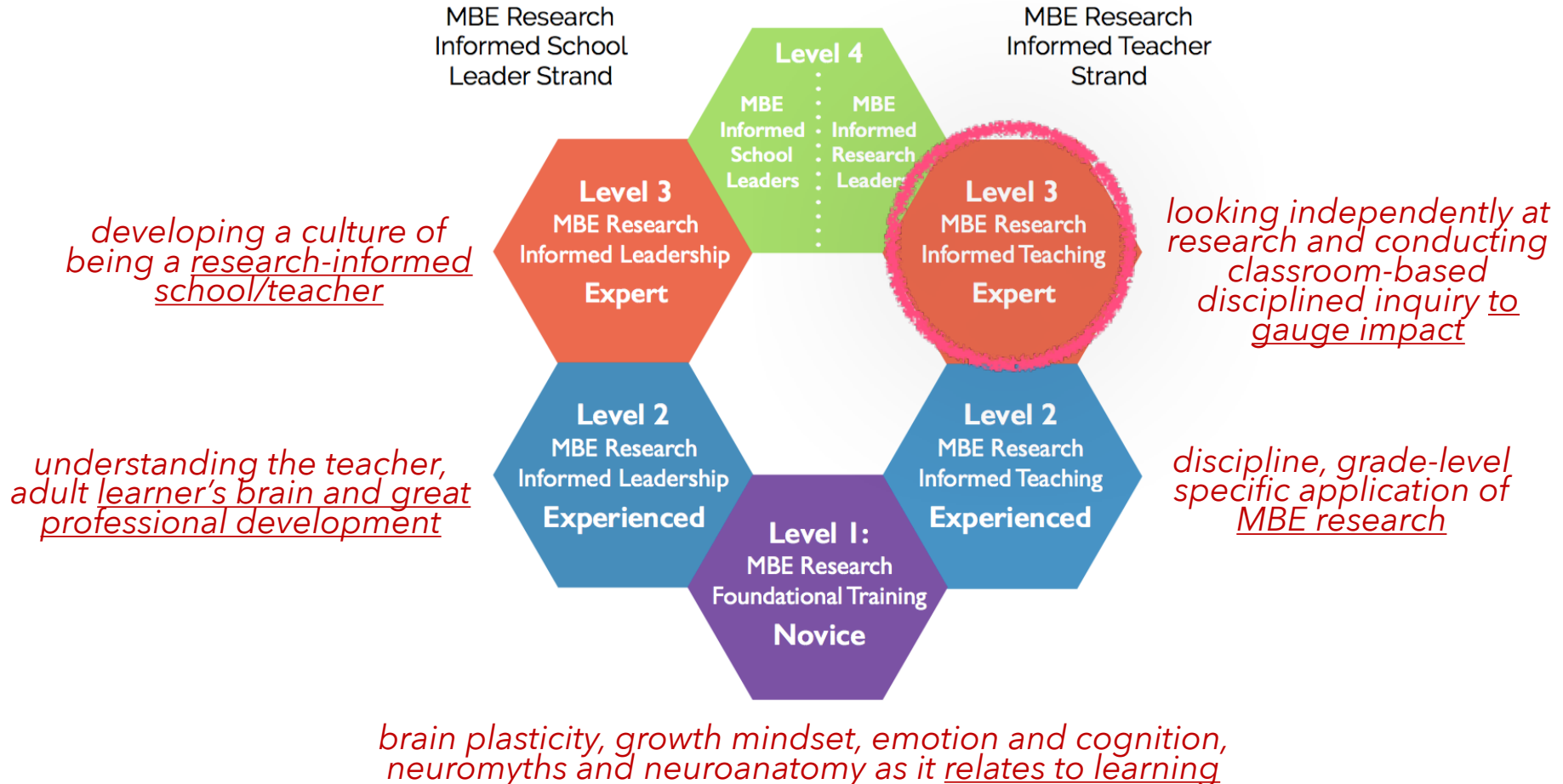
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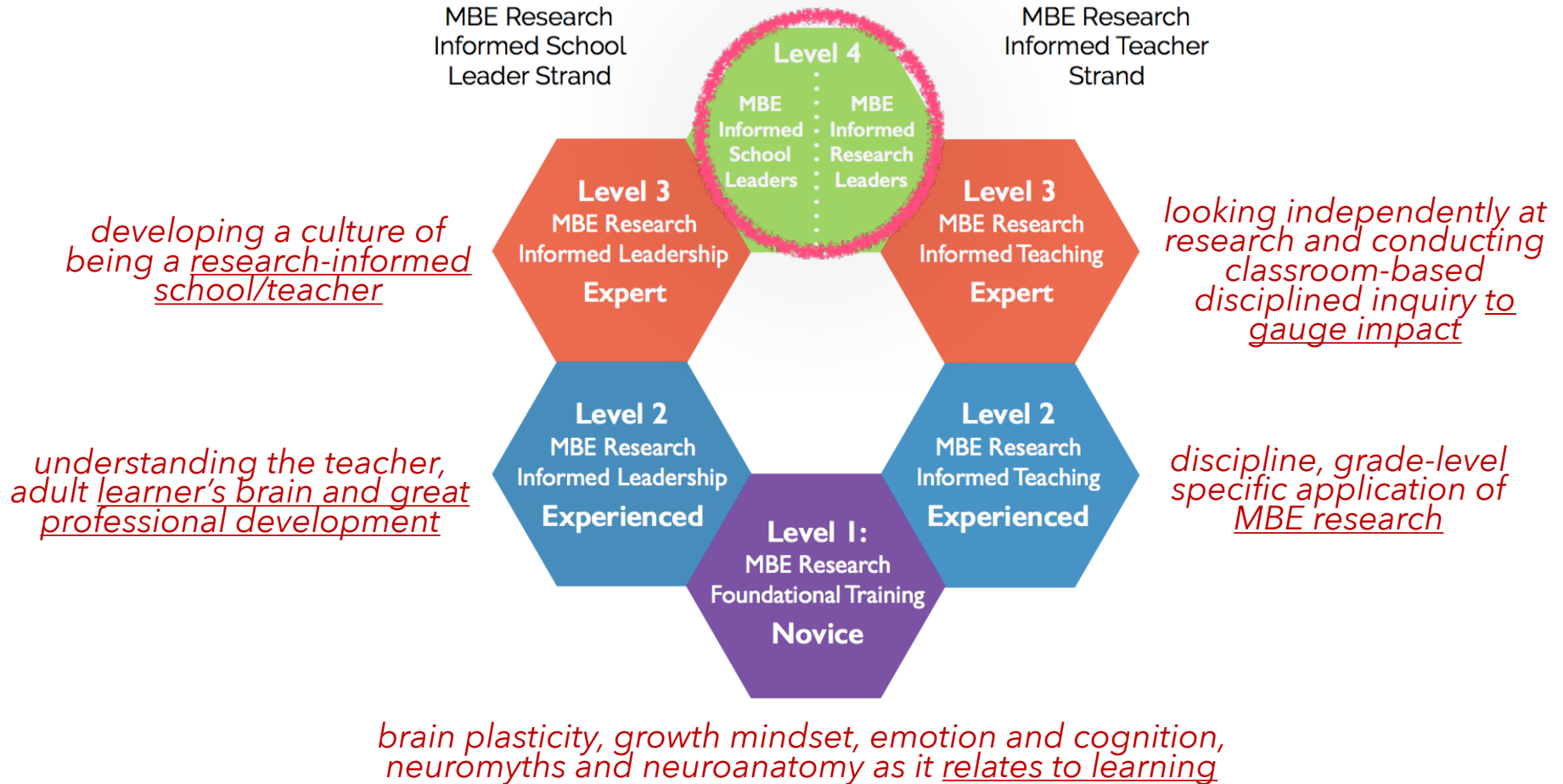
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leading research throughout a division/school/district



leading research throughout a division/school/district

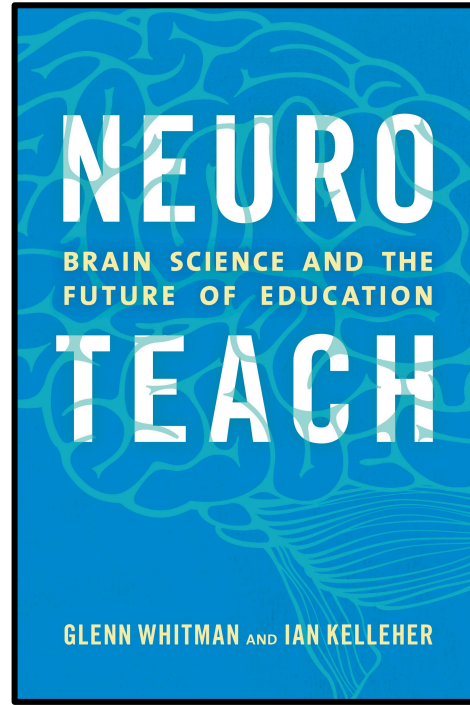
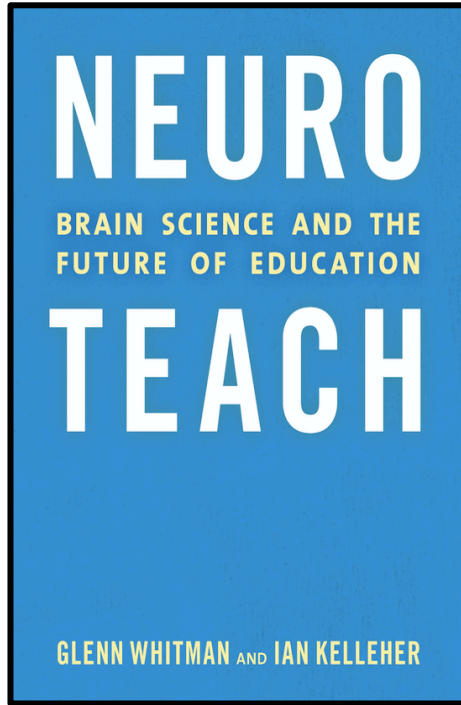


This is our
'secret sauce,'
but...

When I die, I hope it is at a faculty meeting or teacher inservice because the transition from life to death would be so subtle



someecards
user card



"If there's a book you really want to read, but it hasn't been written yet, then you must write it. "

-Maya Angelou



30%



"It's a sobering, even humble, conclusion: At every stage of a teacher's career we simply don't know how to help him or her improve."

**Does your
professional
development
look like
this?**





What if it looked like this?







Stay Connected with the CTTL

www.thectl.org

 @theCTTL  @gwhitmanctl

Consider Attending the Science of
Teaching and School Leadership Academy
(and being an Academy Partner School)

July 23-27, 2017

gwhitman@saes.org