Engaging the Brain

https://tinyurl.com/Brain-HA19
Engaging the Brain

Nourishment
Safety
Social Interaction

Emotion
Processing Time
Neuroplasticity

Engagement
Nourishment

- O2
- Glucose

MOVEMENT!!!
YOUR BRAIN
AFTER EXERCISING

COMPOSITE OF 20 STUDENT BRAINS TAKING THE SAME TEST

AFTER SITTING QUIETLY  AFTER 20 MINUTE WALK

WWW.EXERCISERIGHT.COM.AU
Introductions

a. Name
b. What you teach
c. Where you teach
d. Something you are looking forward to in this school year.
Safety

➢ The Amygdala: Fight, Flight, or Freeze.

➢ Inhibits the pre-frontal cortex (planning, problem solving, cognition)
Safety

Unstressed vs. Stressed

Optimal arousal
Optimal performance

Impaired performance because of strong anxiety

Performance

Increasing attention and interest

Low

Arousal

Strong

Weak

High
Brains seek a balance between:

- Novelty (stress)
- Predictability (safety)

Monotony = bored

Balance = relaxed alertness
    (body) (mind)

Chaos = anxiety
Take Off, Touch Down
Social Interaction

➢ Socializing = maximum engagement
➢ Soft skills: cooperation/collaboration, empathy, communication, problem solving, creativity.
Emotion

- Retrograde memory enhancement *(anything followed by emotion is better remembered)*.
- Positive emotions promote learning
- Negative emotions inhibit learning
Processing

- ACTIVE
- CHUNKED
- REVIEWED
- RELEVENT
- SPACED/SPIRALED

HIPPOCAMPUS
Align strategies with learning
Paraphrase Passport

"We all need people who will give us feedback. That's how we improve."
— Bill Gates

"If it doesn't challenge you, it won't change you."

“It does not matter how slowly you go so long as you do not stop.”
— Confucius

There is a difference between not knowing and not knowing yet.
— Sheila Tobias

Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time.
— Thomas Edison
1. Stand up - partner
2. Greet/introductions
3. Share your quote and why
   • Person A shares, person B paraphrases
   • Person B shares, person A paraphrases
4. Face the screen when you are done
NEUROPLASTICITY

- Growth Mindset
- Grit

STUDENT
- Self-monitoring strengths and areas to work on
- Reflecting on the learning process
- Analyzing evidence of thinking and understanding

Shared understanding of learning goals, targets, and standards.

Feedback on:
- Product of formative assessment
- Progress of learning
- Process of learning

TEACHER
- Adjusting instructional strategy based on evidence
- Collecting and analyzing evidence of student understandings
- Analyzing evidence of thinking and understanding

- Rehabilitation
- Metacognition
Engagement
Positive Interdependence:
“Does one doing well help others?”
“Does task completion depend on everyone doing his/her part?”
*Students feel: on the same side; need each other.

Individual Accountability:
“Must everyone perform in front of someone?”
*Students feel: can’t hide.

Equal Participation:
“Is participation approximately equal? Time? Turns?”
*Students feel: equal status.

Simultaneous Interaction:
“What percent are performing at any one moment?”
*Students feel: engaged
“If I were a book, I would be a _____________ because...”
Videos of Interest

• Kagan Videos
• Brain Based Learning-Edutopia
• Jensen Learning
• Dr. Marcia Tate
• Wormeli-Teaching with a Growth Mindset

https://tinyurl.com/Brain-HA19
Books/Authors of Interest

- Mirroring People by M. Iacoboni
- Memory and Emotion by James L. McGaugh
- Mapping the Mind by Rita Carter
- Blink by M. Gladwell
- Spark by J. Ratey
- Robert Marzano
- Eric Jensen
- Marcia Tate
- Spencer and Laurie Kagan
- Rick Wormeli

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Articles of Interest

- Research and Rational for Cooperative Learning
- Resources on Engaging Student Voices
  - Help your students speak up and speak out in the classroom, online, and wherever they go.
- #JokeoftheDay
  - Build community and prime students for critical thinking by starting class with laughs.
- Burn Your Podium (and other Hacks)
  - Put an end to sleeping in your classroom. When students are at the center of the learning experience, engagement will come naturally.
- “I wonder”: Harnessing the Power of Inquiry
  - Letting student curiosity inform your teaching naturally increases the relevance and student buy-in of your content.
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Thanks for attending!

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Follow me! @LoriWegman
My Website
Helpful tools and apps

Exit Ticket: https://tinyurl.com/BrainExit-HA19

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