#### STOP ANSWERING QUESTIONS! ... Countering the Google Generation { Jon Ail & Tifiny Howard SkyView Academy, Denver, CO





"Education is not the learning of facts, but the training of the mind to think." -Albert Einstein





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<u>Who's Who?</u> Can you match the following facts with the correct presenter?

 Black belt in MMA
 Dated a cast member from the Young & the Restless
 Sharpshooter
 Triathlete



### Could you teach an entire math lesson by <u>only</u> asking questions?





#### End-of-year gift from my students.



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![](_page_9_Figure_1.jpeg)

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### DOPAMINE

Success → Dopamine
Dopamine → Motivation
Motivation → Success

![](_page_12_Figure_2.jpeg)

![](_page_12_Picture_3.jpeg)

#### MIYAGI

I'M SORRY, I CAN'T HEAR YOU OVER THE SOUND OF HOW AWESOME I AM.

How can I teach like Mr. Miyagi?

# OXYTOCIN

# Feeling of love and trustBuilt over time

![](_page_13_Figure_2.jpeg)

![](_page_13_Picture_3.jpeg)

How do I develop Titan-like relationships?

### ENDORPHIN

Masks physical paini.e. "runner's high"

![](_page_14_Picture_2.jpeg)

![](_page_14_Figure_3.jpeg)

# How do I get my students in the zone?

### SEROTONIN

- Result of feeling
   important and "special"
- Product of confidence and self-certainty

![](_page_15_Figure_3.jpeg)

![](_page_15_Picture_4.jpeg)

How do I help my students feel like Sally Field?

## Using nothin' but your noggin', simplify √972 (use simplest radical form).

![](_page_16_Picture_1.jpeg)

## Using nothin' but your noggin', simplify √972 (use simplest radical form).

![](_page_17_Picture_1.jpeg)

![](_page_17_Picture_2.jpeg)

The following problem was originally presented by IXL (booth #820):

Pythagoras and Archimedes each led a session at the NCTM conference. The next day, they looked at the attendance stats together and Archimedes' ego spiraled out of control. He bragged that he had 40 more teachers attend his session than Pythagoras did. He also boasted that overall, the number of teachers that attended at least one of the two sessions was four times the number that attended Pythagoras' session. Finally, he exulted in the fact that the number of teachers attending Pythagoras' session was only 16 more than the number that attended both sessions.

How many attended Archimedes' session?

#### Teach like Miyagi (dopamine)

1. Stop answering questions ✓ Make the students do the work especially problem solving Help students to acknowledge and embrace struggle ✓ Use the Socratic Method to guide students Teach them to ask better questions

![](_page_19_Picture_2.jpeg)

 Teach like Miyagi (dopamine)
 Provide appropriate scaffolding.
 Collect relevant, appropriate data use data teams and well-designed assessments
 Differentiate instruction

![](_page_20_Picture_1.jpeg)

#### Titan-like Relationships (oxytocin)

Build trust and respect with your students
 ✓Work to develop meaningful, ongoing relationships with your students
 ✓Greet your students at the door <u>every</u> day
 ✓Consider "Capturing Kids Hearts" training

![](_page_21_Picture_2.jpeg)

"Struggle" is a good thing. - Jim Stigler, UCLA

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### Titan-like Relationships (oxytocin)

2. Build trust and respect among your students
 ✓ Begin class with "Good Things" / "Good News"
 ✓ Use social contracts
 ✓ Emphasize teamwork

![](_page_23_Picture_2.jpeg)

#### In the Zone

 Help students see the relevant life skills that they are developing
 ✓ Persistence/Perseverance
 ✓ Integrity
 ✓ Courage
 ✓ Commitment

![](_page_25_Picture_0.jpeg)

#### In the Zone 2. Use great anchor problems ✓ Use great questions to launch the school year...the unit...the lesson...the semester and keep coming back to them 3. Use intriguing math problems ✓Are "double-stuffed" cookies really "doublestuffed"? Could we triple-stuff a cookie? Find great answers to the question When are we ever 'gonna use this stuff? Have students pursue and present their own answers to this question

### "You really like me!" (serotonin)

#### 1. Build pride

✓ Have students regularly share their work Have students create instructional videos using Smart Recorder or Jing. Use them to create your school's own version of "Khan Academy" 2. Celebrate the wins  $\checkmark$  As a class, affirm students who share their work ✓ Display student work

![](_page_28_Picture_0.jpeg)

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![](_page_29_Picture_1.jpeg)

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