# Teaching That Sticks

adding adhesiveness without compromising mathematics

Elizabeth Statmore (@cheesemonkeysf)



Friday, 26 July 2013

# Why stickiness?



Friday, 26 July 2013

What do I **think** I know about this concept? Why does this matter?

#### Two reasons —



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Friday, 26 July 2013

Every idea in the curriculum does not sparkle with rich tasks and perplexity.

#### Two reasons —

# REASON I - YOU



3

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#### 

# REASON I - YOU Sometimes you're f\*\*\*ed



3

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#### Two reasons —

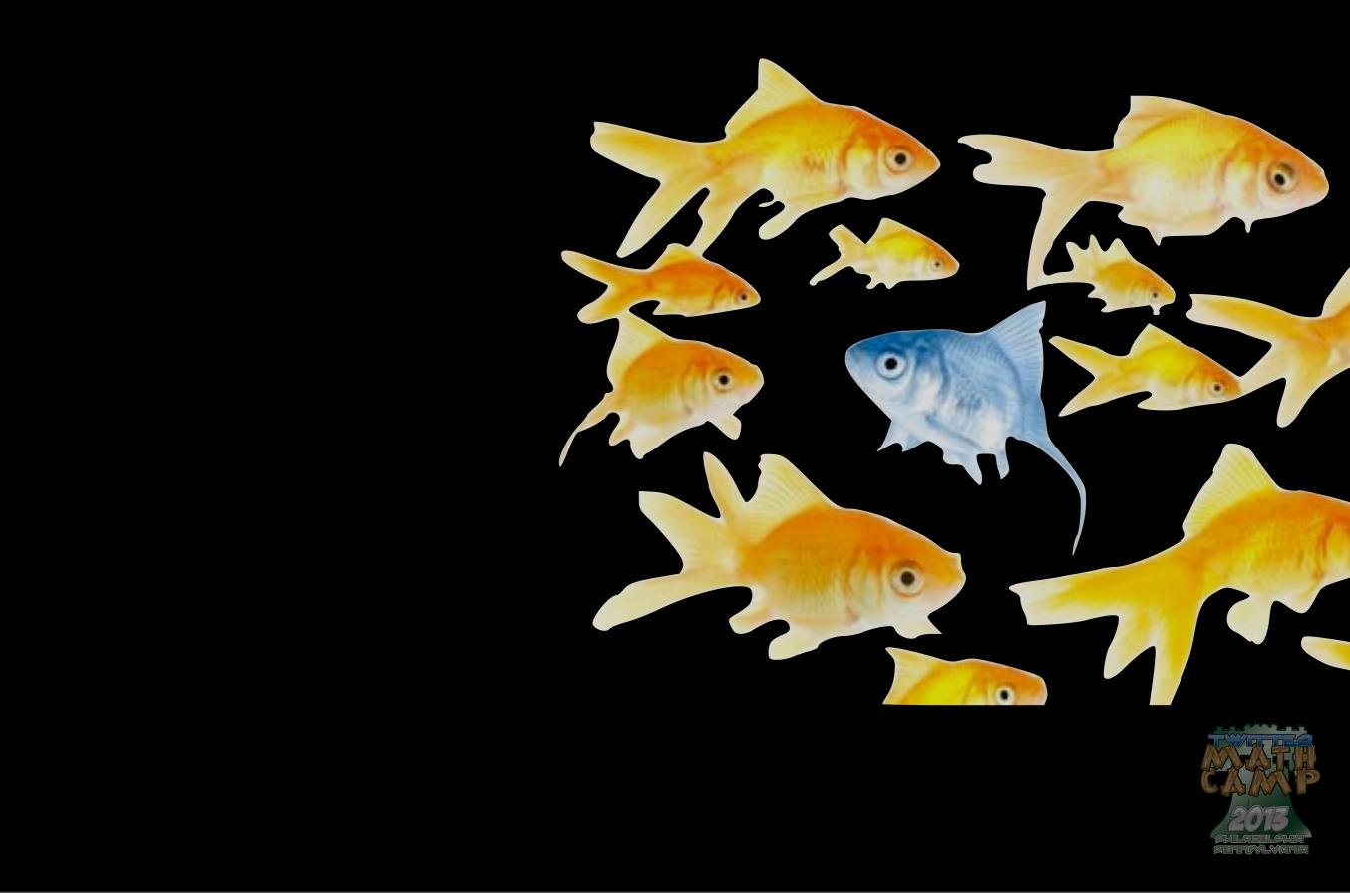
# REASON I - YOU Sometimes you're f\*\*\*ed

# REASON 2 - STUDENTS

3

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Every idea in the curriculum does not sparkle with rich tasks and perplexity.



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**DIFFERENTIATION & INCLUSION** 

re allowing for the likelihood that many Ss experience the topic in ways you are incapable of imagining — even though you can plan for it and build in on-ramps.

# matter of INCLUSION

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# NOT gimmicks



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This is not about using gimmicks or tricks. Rather, it is about making wise use of the leverage we get from the fact that the brain naturally makes connections because THAT is its job!

#### The brain makes connections



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#### Bitter truth:





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Good ideas sometimes need help to stick in the classroom

### **Bitter truth:**



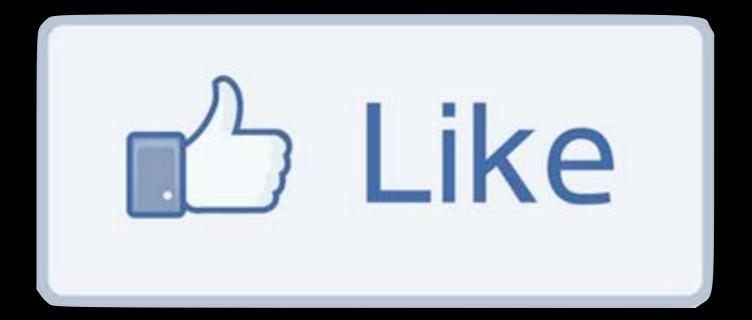
# even great ideas sometimes need help



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Good ideas sometimes need help to stick in the classroom

#### Good news:

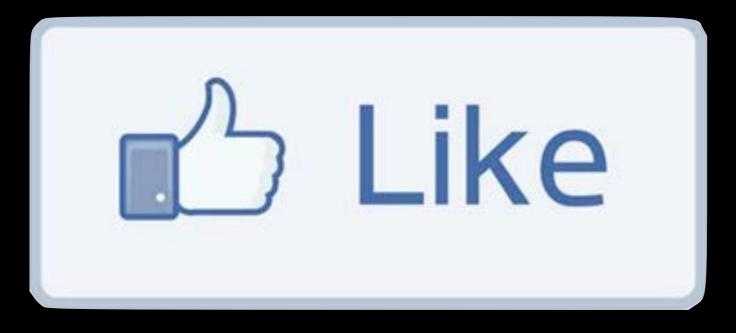




Friday, 26 July 2013

Stickiness can be applied judiciously to reach more students using a few well-understood principles





# All ideas can be made stickier



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Stickiness can be applied judiciously to reach more students using a few well-understood principles

#### **THE POINT: to reach ALL learners**

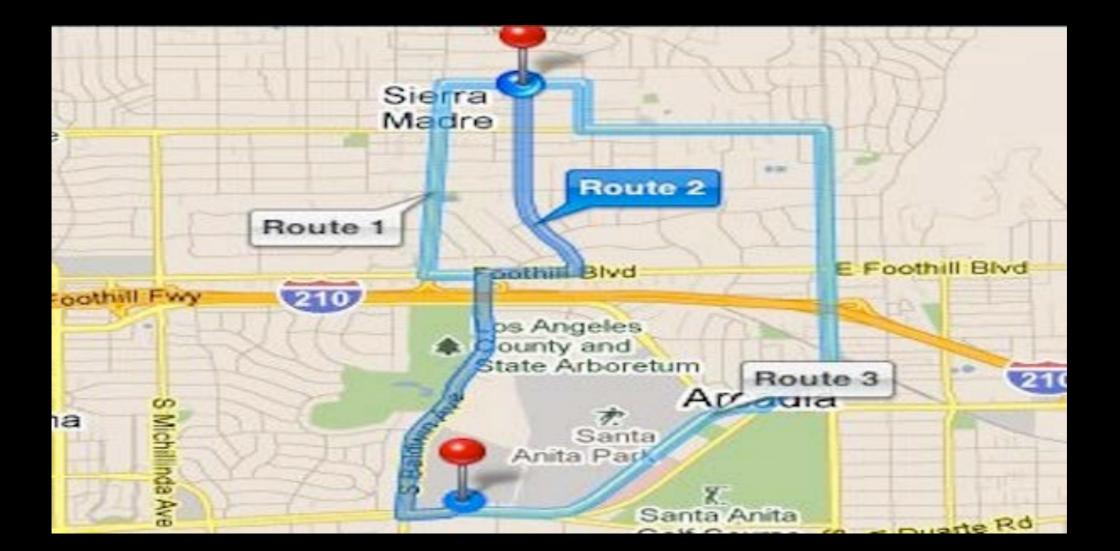


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I want to reach 100% of all the different kinds of learners in my room all the time.

That may not be practical, but it is aspirationally essential.

#### **THE POINT: to reach ALL learners**



#### by mapping in *multiple on-ramps*



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That may not be practical, but it is aspirationally essential.

# Stickiness is a PLAYBOOK



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Stickiness is a playbook for broadening and deepening your reach

F



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Overview of this session. I'll give a 30,000-foot view of the six dimensions of stickiness. Then we'll break into groups to do unconventional brainstorming.

# 6 traits of sticky ideas

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#### 6 traits of sticky ideas

### slightly wacky brainstorming



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# So let's get sticky...





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2015 REALESCERE

Friday, 26 July 2013 Source: Made to Stick, by Chip and Dan Heath

#### SINPLE

2015 Reference

Friday, 26 July 2013

Source: Made to Stick, by Chip and Dan Heath

#### SINPLE

#### UNEXPECTED



Friday, 26 July 2013 Source: Made to Stick, by Chip and Dan Heath

#### SIMPLE

#### UNEXPECTED

#### CONCRETE

2013 ALLEGELAHR PERNYUNARTE

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Source: Made to Stick, by Chip and Dan Heath

SINPLE

UNEXPECTED

CONCRETE

CREDIBLE

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# SIX TRAITS of Sticky Ideas SERPLE CREDIBLE UNEXPECTED EROTIONAL CONCRETE



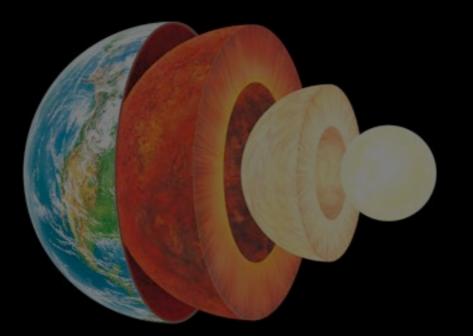




Friday, 26 July 2013

Core + Anchor. The "undo" button (or menu command) as the essence of the concept of inverse functions (by a show of hands, how many people in this room have narrowly escaped doom through the miracle of the "undo" command? Well, functions are about "doing," and





#### Find the **core**



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# Anchor it in students' own experience



#### Tootsie Roll Industries



13

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Friday, 26 July 2013

3-Acts and #anyqs work by opening a curiosity gap between what students know right now and what they COULD know with a little more struggle.

## UNEXPECTED

#### Open a curiosity gap





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## UNEXPECTED

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# Capture attention through surprise



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#### Activate physical senses



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Even a brilliant task can be made stickier by connecting it to students' sense memory: By a show of hands, how many people in this room have ever walked in the forest? Close your eyes and remember what that felt like — how did the air feel on your skin, what was the moisture



#### activating physical senses



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### activating **physical senses**





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#### Memory = leverage



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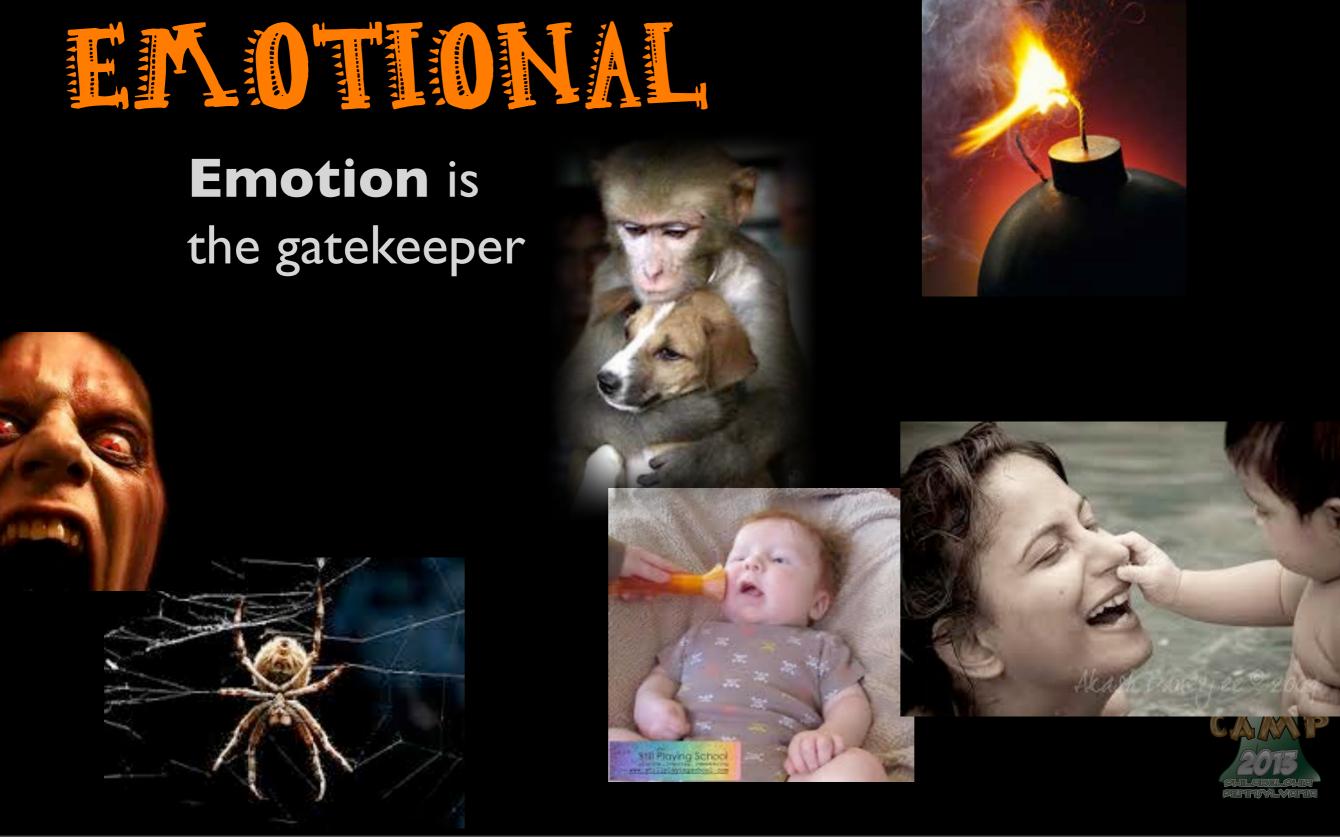


## **Emotion** is the gatekeeper



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Find things that will hit us in the gut. We have a very emotional brain.



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Who are your offstage characters? Stories make ideas sticky. They don't even have to be good stories! Human connection is powerful for adolescents in the classroom. Most adults don't talk to them about their own lives and connections. Show them what it is like to be a genuine

## **STORY** Who are your **offstage characters?**

# There is value in **stories ANY** story!

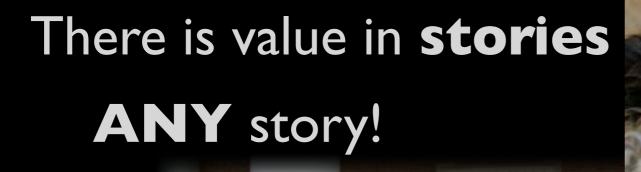


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### STORY off

### Who are your offstage characters?



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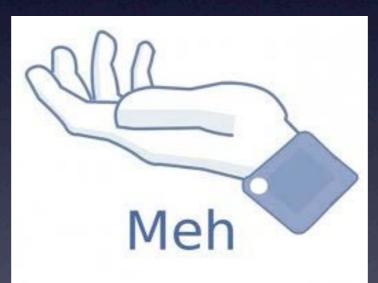
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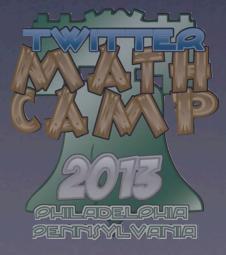
### Now let's get to work

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