Create a poster showing how you solved the problem:

Mary and Jason are building a flower garden where each plant has its own special place in the garden. Jason is going to Home Depot to buy bricks to separate the flowers and Mary is going to Wilson farms to buy the flowers. Mary will call Jason and tell him how many flowers she bought. Jason wants to be able to quickly figure out how many bricks to buy based on the number of plants Mary buys. Help Jason get ready.
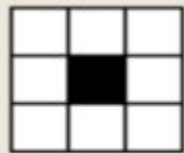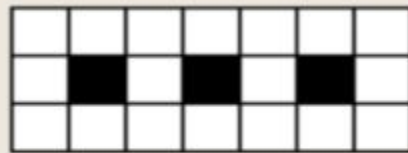

Figure 1   Figure 2   Figure 3

Gallery Walk

- What do you *notice* about the solutions?
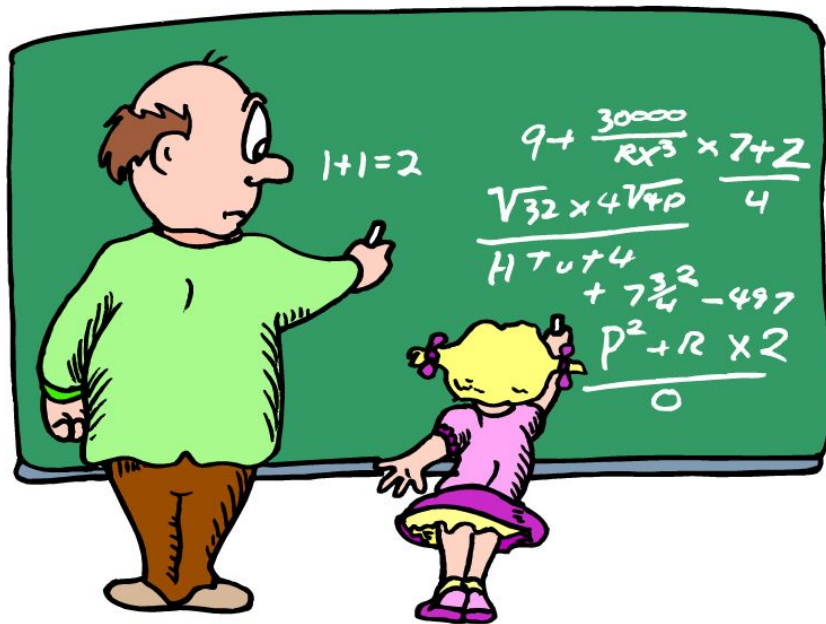
- What do you *wonder* about the solutions?

21st Century Posters: Stimulating Student Discourse through Digital Displays

Sarita Spillert
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Who Am I?

Standards for Mathematical Practices

01 Make sense & persevere

02 Reason abstractly & quantitatively

03 Construct arguments & critique

04 Model with mathematics

**05** Use appropriate tools strategically

06 Attend to precision

07 Look for and make use of structure

08 Use repeated reasoning

Created by Cuethink ™ and #makemathsocial

"To develop strategic competence and adaptive reasoning, students need opportunities to share and compare their solution strategies and explore alternative solution paths." (Suh, 2007)

Source: Lesh et al. (2003)

Why go Digital?
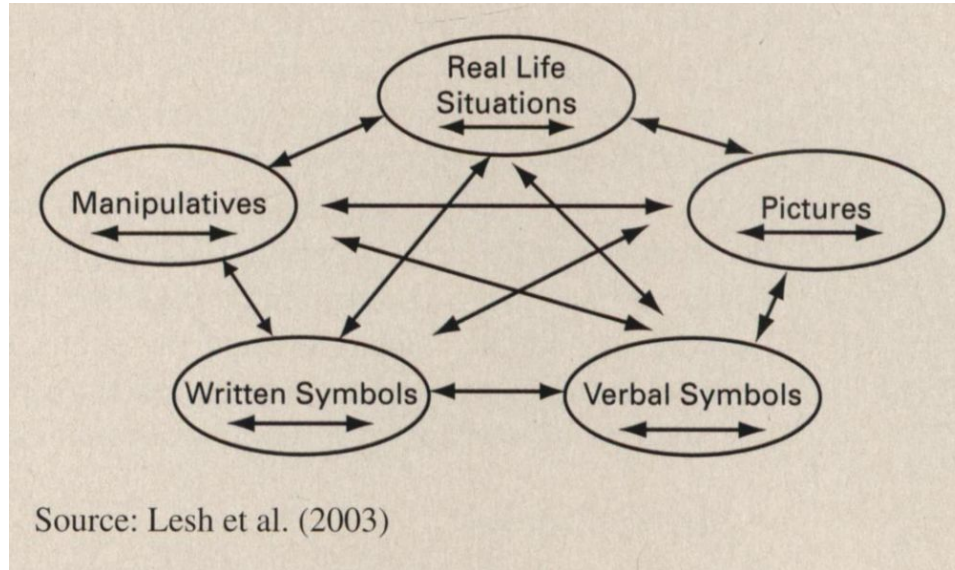
Modeling Math Meaningfully

Name: _____ date: _____ Concept: _____

Modeling Math Meaningfully

| I can write it with numbers! | I can draw a picture of it. |

| I can write a story problem. | I can model it using _____ math tools and explain my thinking |

Created by: Jennifer Suh

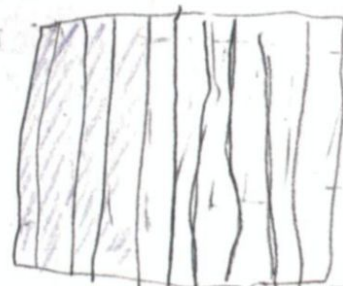Modeling Math   ones   tenth   hundredth

I can write it with numbers!

fractions: $\frac{4}{10}$

decimals: .4

I can draw a picture of it.

I can model it using coins (math tools) and explain it!

four Tenths

I can write it with words.   Make Real World Connections

Why go Digital?

Presenter:

- Voice, Video
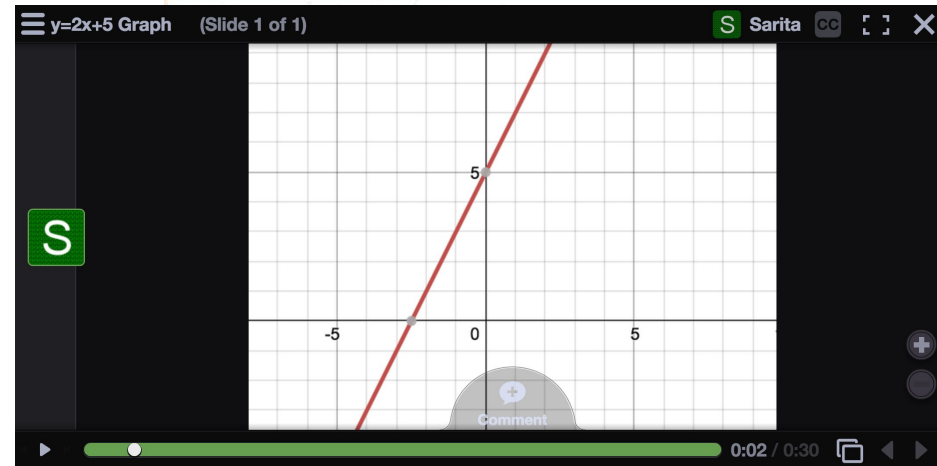- Online tools images
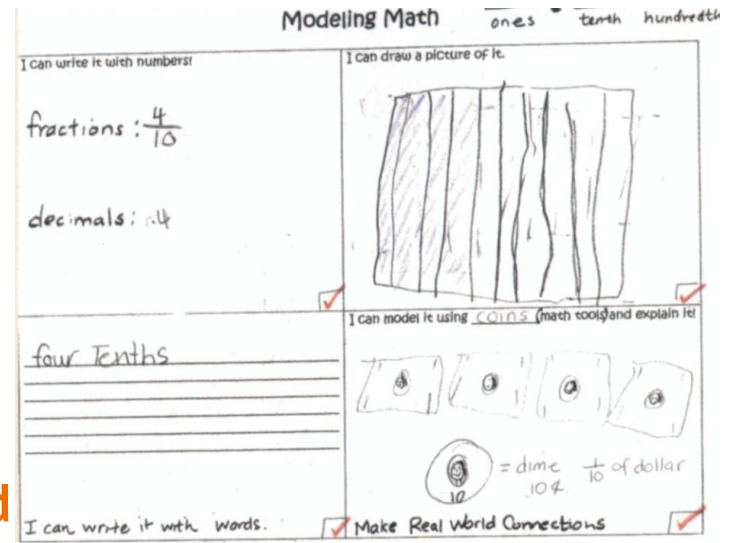- Create digital gallery

CueThink

Why go Digital?

Audience:

- Better comprehension
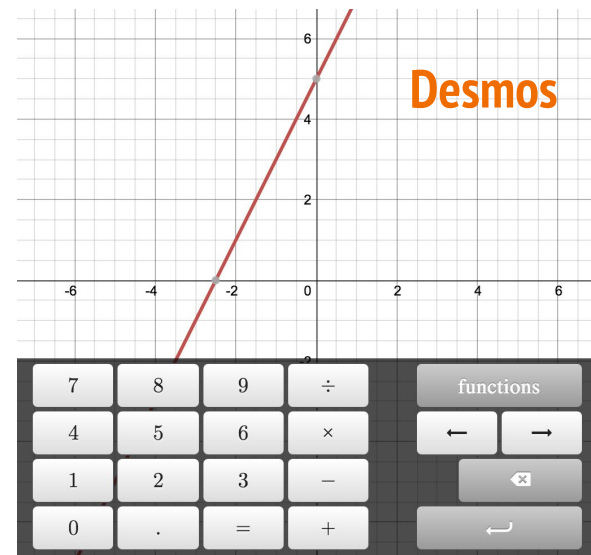- More Processing time
- Ownership of questioning
- Asynchronous

VoiceThread

Why go Digital?

Desmos

"The word *assess* comes from the Latin *assidere*, which means *to sit beside*. Literally then, *to assess* means to *sit beside the learner*."

(Evangeline Harris Stefanakis, 2002, p.9)

Explore & Share: Tools

desmos

padlet

CUETHINK

Google docs

sound + images =
VOICETHREAD
vt

Explore & Share: http://tinyurl.com/VirtualPosters

1) Create a Virtual Poster for the "Tile Problem."
2) Share a link to your work on Padlet
3) Look at two other people's representations and write on a sticky note:
   ○ a connection to your work
   ○ a constructive feedback
   ○ a compliment

Tweet your poster @sspillert #nycmp #25conference #makemathsocial

Virtual Poster Debrief

- What are the *similarities* and *differences* of digital vs traditional posters?

- What *benefits* do virtual posters have over traditional posters?

- What are the *drawbacks* of virtual posters?

Making Virtual Displays Work

- Select *tasks* that encourage *multiple strategies.*

Open Task Resources
http://www.openmiddle.com/

http://nrich.maths.org/frontpage

http://mathforum.org/pow/teacher/samples.html

http://www.cuethink.com/

See what strategies students choose

Step One Solve for Number of Miles Travel
20.25(3)+0.14x=18.25(3)+0.22x
60.75+0.14x=54.75+0.22x
       -0.14   -0.14

60.75=54.75+0.08x
-54.75 -54.75

6=0.08x
----
x=75, this means that they traveled 75 mile

y (scer
(scenario) elkiernan1017

saritaspillert

+ ANNOTATION

Hi, I think 'your' choice of making a graph was very intuitive and thoughtful. I also made a graph with my partner.
majestic wenen   00:13

I had not thought of using a graph because I was caught up in using substitution. Great choice.
Topreci   00:19

hey, i worked with equations a-lot on this problem and it looks like you did really well with a graph, nice job
jodortenzio2020   00:22

saritaspillert

+ ANNOTATION

One thing I would like to mention is that you forgot to include that in the scenario you would be staying for 3 days otherwise, you made a neat graph.
majestic wenen   00:30

I like how organized the table is. It's really easy to read!
ejmackson   00:42

Really like how this was set up, it helped that all the lines were straight and color coded to tell what went with what.
HannahKane   00:53

00:05

16   0

Assign different representations for students to create and then compare
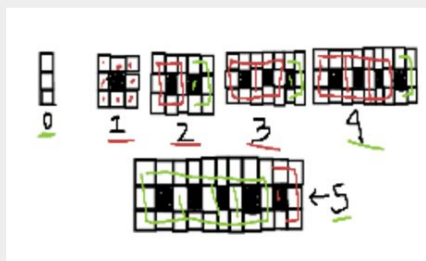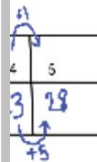
Structure the feedback process

- One thing you did well was…
- If you did … it would help …
- A connection between our representations is …

+ ANNOTATION

One thing I would like to mention is that you forgot to include that in the scenario you would be staying for 3 days otherwise, you made a neat graph.
majestic wenen
00:30

+ ANNOTATION

Hi, I think 'your' choice of making a graph was very intuitive and thoughtful. I also made a graph with my partner.
majestic wenen
00:13

No small task…

"Teachers must create **dynamic classroom environments** in which students are allowed to take **ownership of the discussions** at hand.

For many teachers, making the **transition** to promoting **student-directed investigations** is **no small task. "**

(Frykholm, 2001)

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