

Rigorous Learning with Technology

Kristin Fontichiaro - OELMA

Friday, October 19, 2:00 – 2:45pm

Download slides: bit.ly/fontblog



FANCY NANCY syndrome:

Students make minimal cognitive investment and plug a few trivial infobits into a Web 2.0 tool. They are lauded for their “creativity” ... even though the software engineer did the hard work, not the student.

E-EFFORT syndrome:

Students make minimal cognitive investment and plug a few trivial infobits into a tool where they do a lot of the aesthetic construction.



My Explorers' Report!!!!!!!

By Kristin Fontichiaro



Christopher
Columbus
was born in
1461.



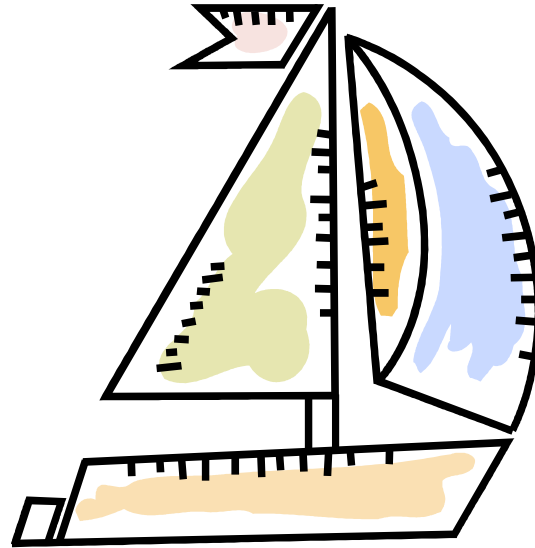


**HE WAS
BORN IN
ITALY.**



HOME OF PIZZA!!!!!! yum!!!!

He had three boats:



Pinta



Santa Maria



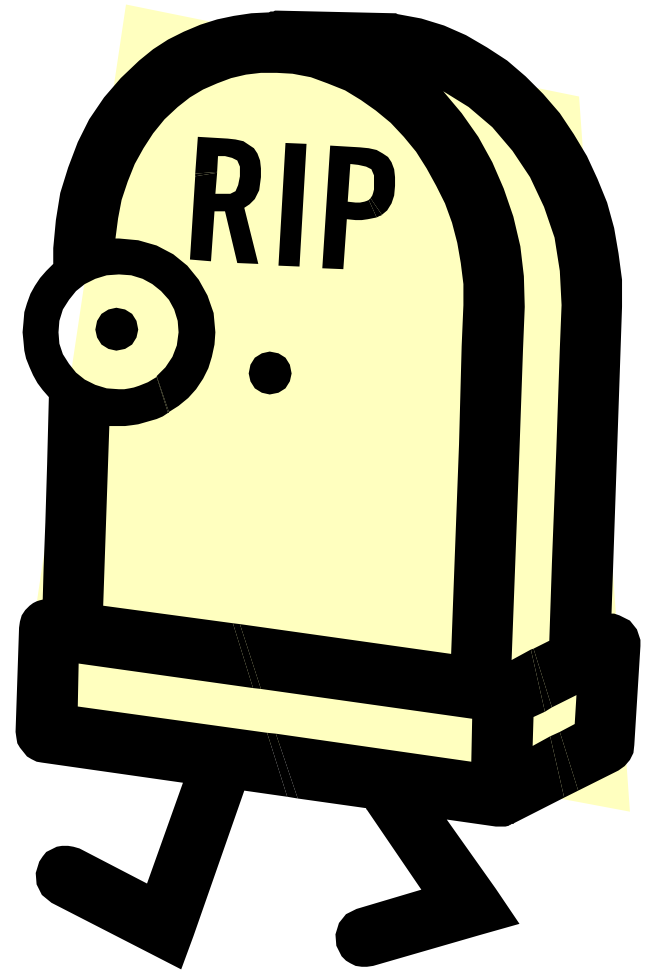
He

discovered

AMERICA!!!

He died in 1506.

It was sad.





THE
END



WHERE'S THE LEARNING?


Yes, they're using technology, and yes, it transcends pen-and-paper, but where is the knowledge-building?

ED TECH MATH

student + tech + school > student + tech

ED TECH MATH

student + tech + school > student + tech



HOW????

How far have we come in using computers to promote cognitive growth in the past 35ish years?



Image: http://en.wikipedia.org/wiki/File:Bell_and_Howell_Apple_II.jpg by Jeff Keyzer, used with a Creative Commons Generic Attribution 2.0 License

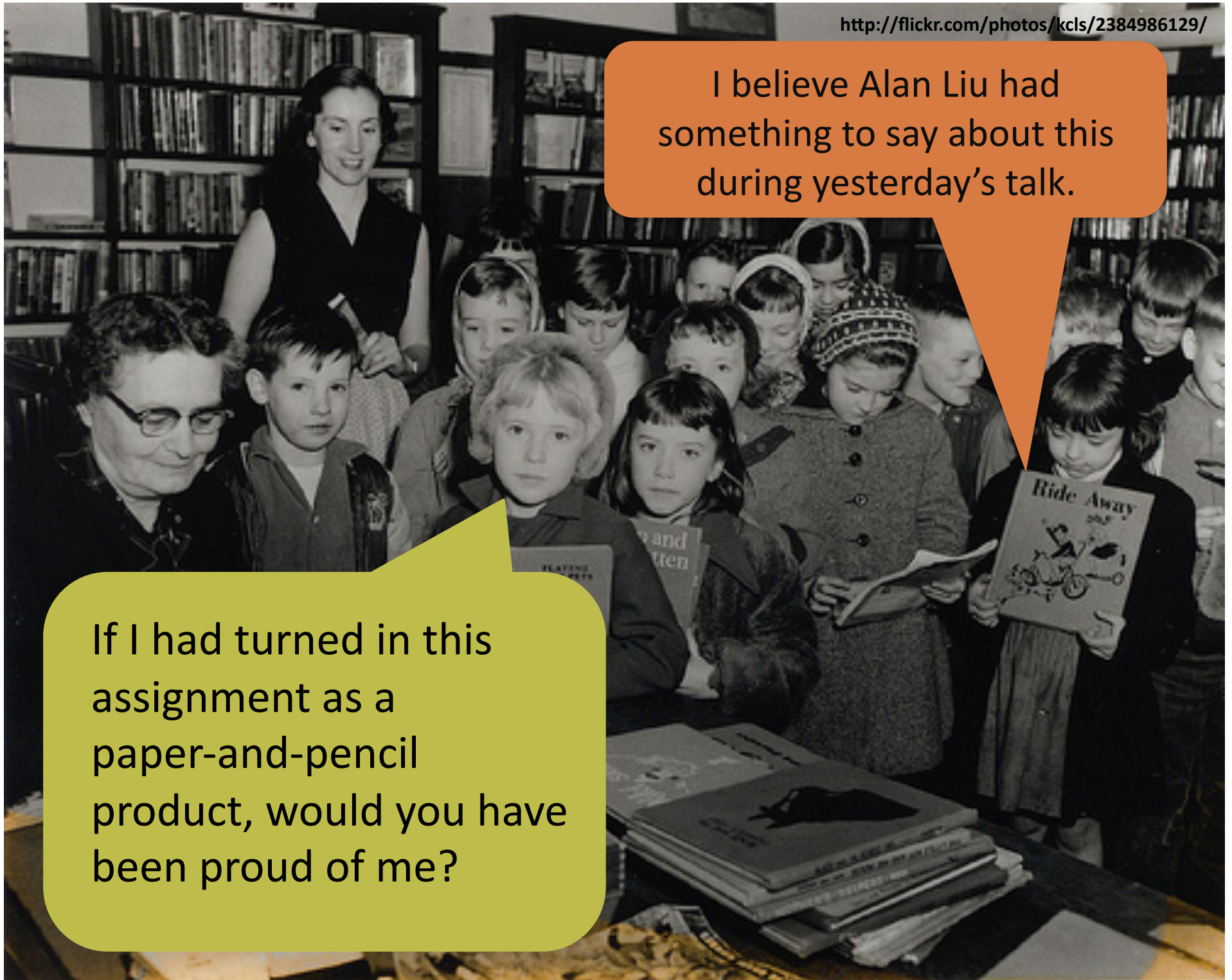


Sorry WE'RE
CLOSED

Which parts of this project could NOT be outsourced to India? (And who would buy it?)

I believe Alan Liu had something to say about this during yesterday's talk.

If I had turned in this assignment as a paper-and-pencil product, would you have been proud of me?





Where's the Beef?*
How Do We Know ~~Rigor~~ When We See It?
*vigor***

* Bernajean Porter; ** Joanne Yatvin

**We should have some agreement on what
good tech-rich learning
like, right?**

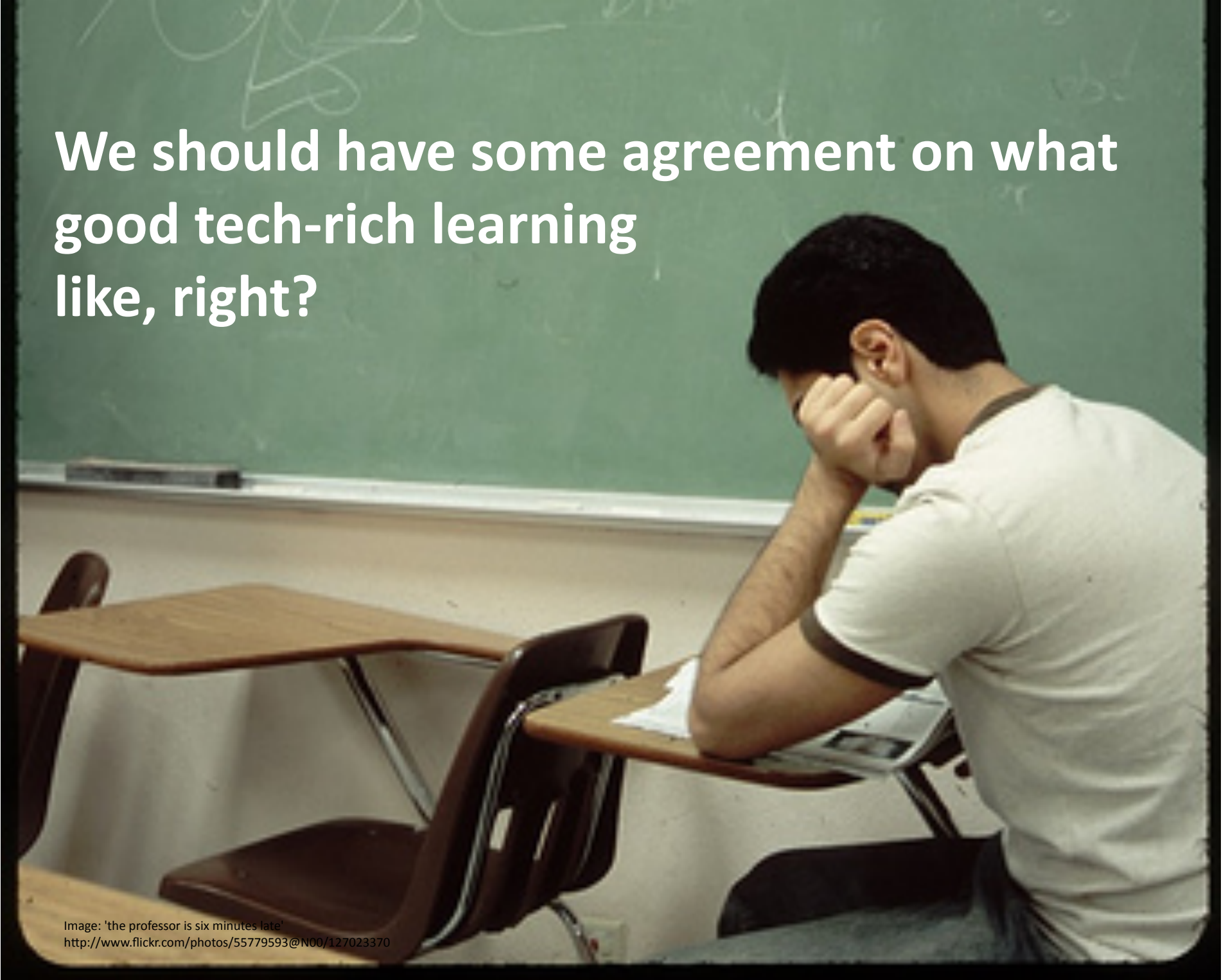
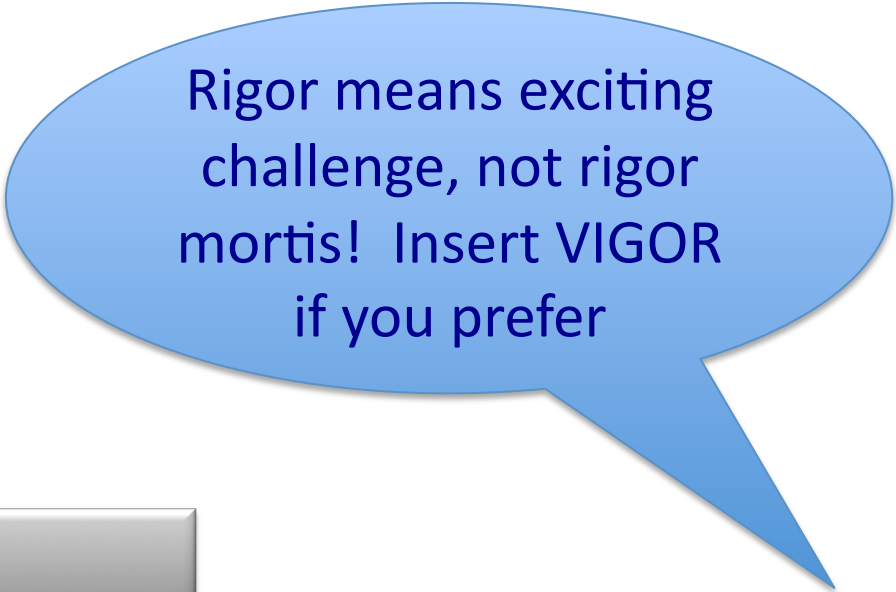



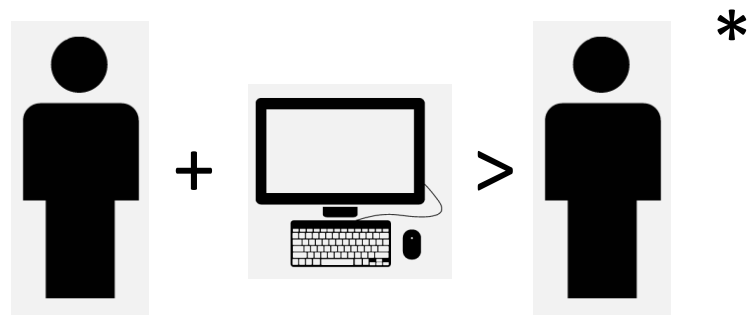
Image: 'the professor is six minutes late'
<http://www.flickr.com/photos/55779593@N00/127023370>



Rigor means exciting
challenge, not rigor
mortis! Insert VIGOR
if you prefer



Rigorous
Learning with
Technology



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* Charles Friedman, definition of Informatics

“Man” by Michael McMillan and “Computer” by Alyssa Mahlberg from thenounproject.com collection.
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(with thanks to Roberta Sibley, Laurie Olmsted, Jeff Stanzler, and Raya Samet for contributing their feedback!)

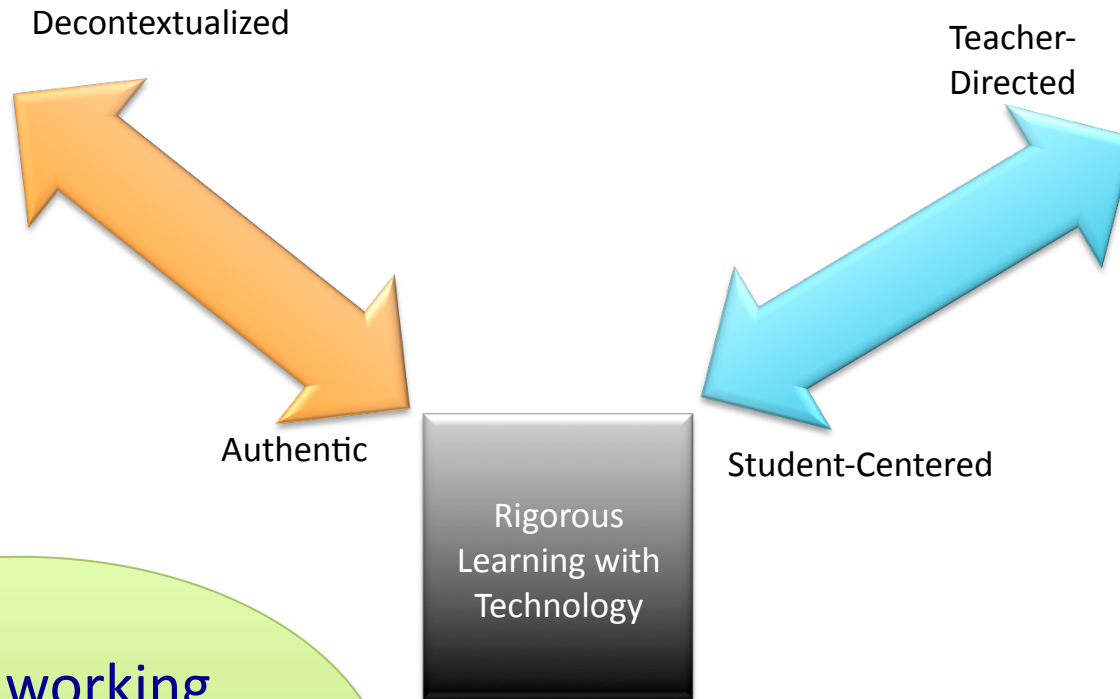
Decontextualized



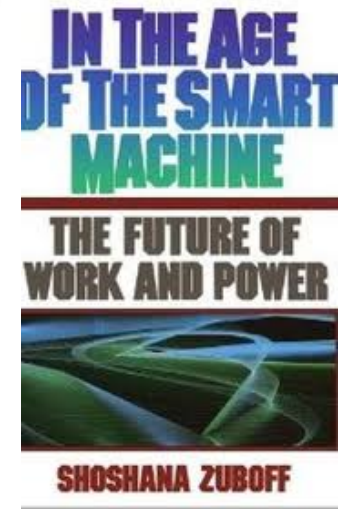
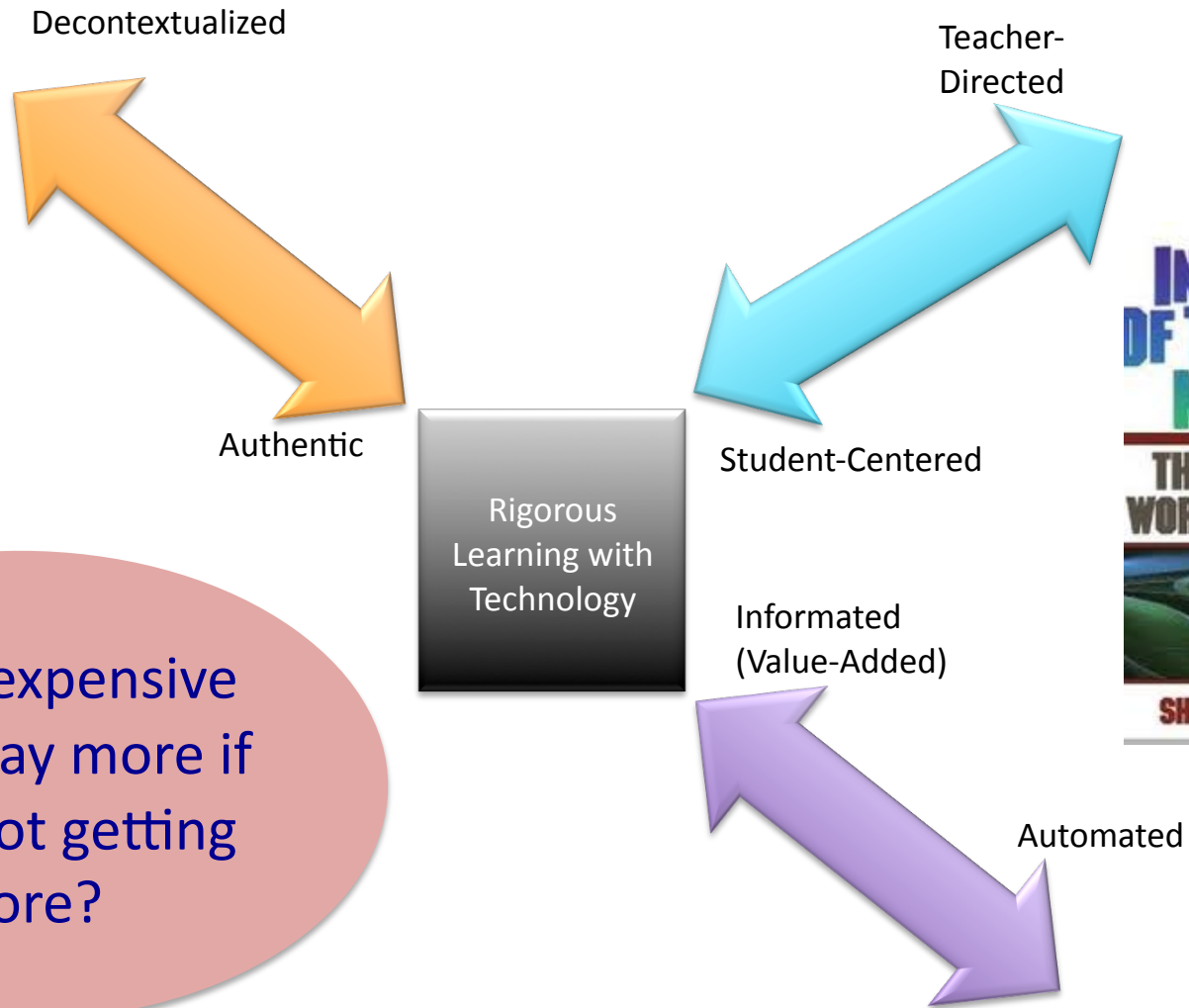
Authentic

Rigorous
Learning with
Technology

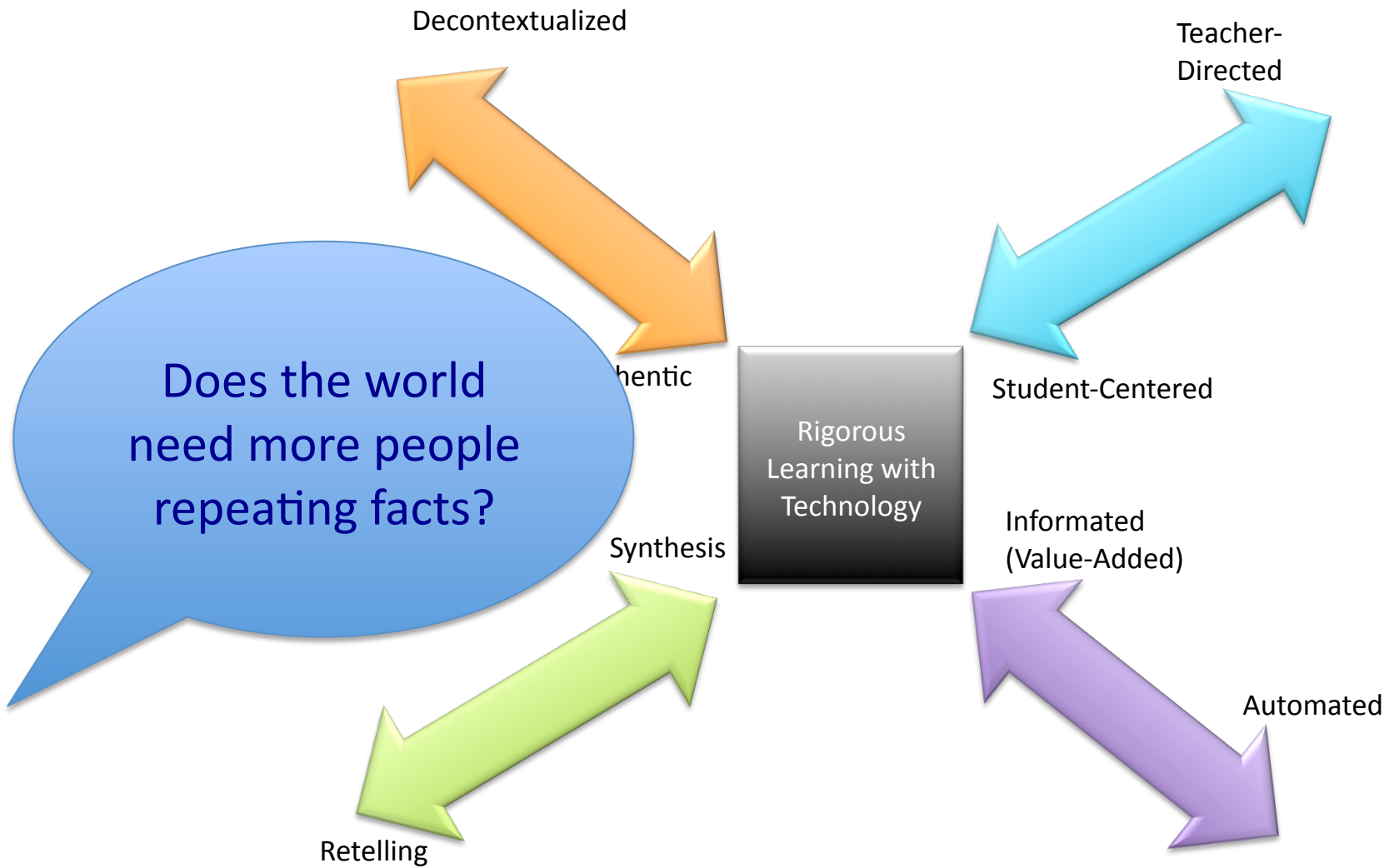
What's in it for me?
How does this apply
to me? Why does this
matter to me?



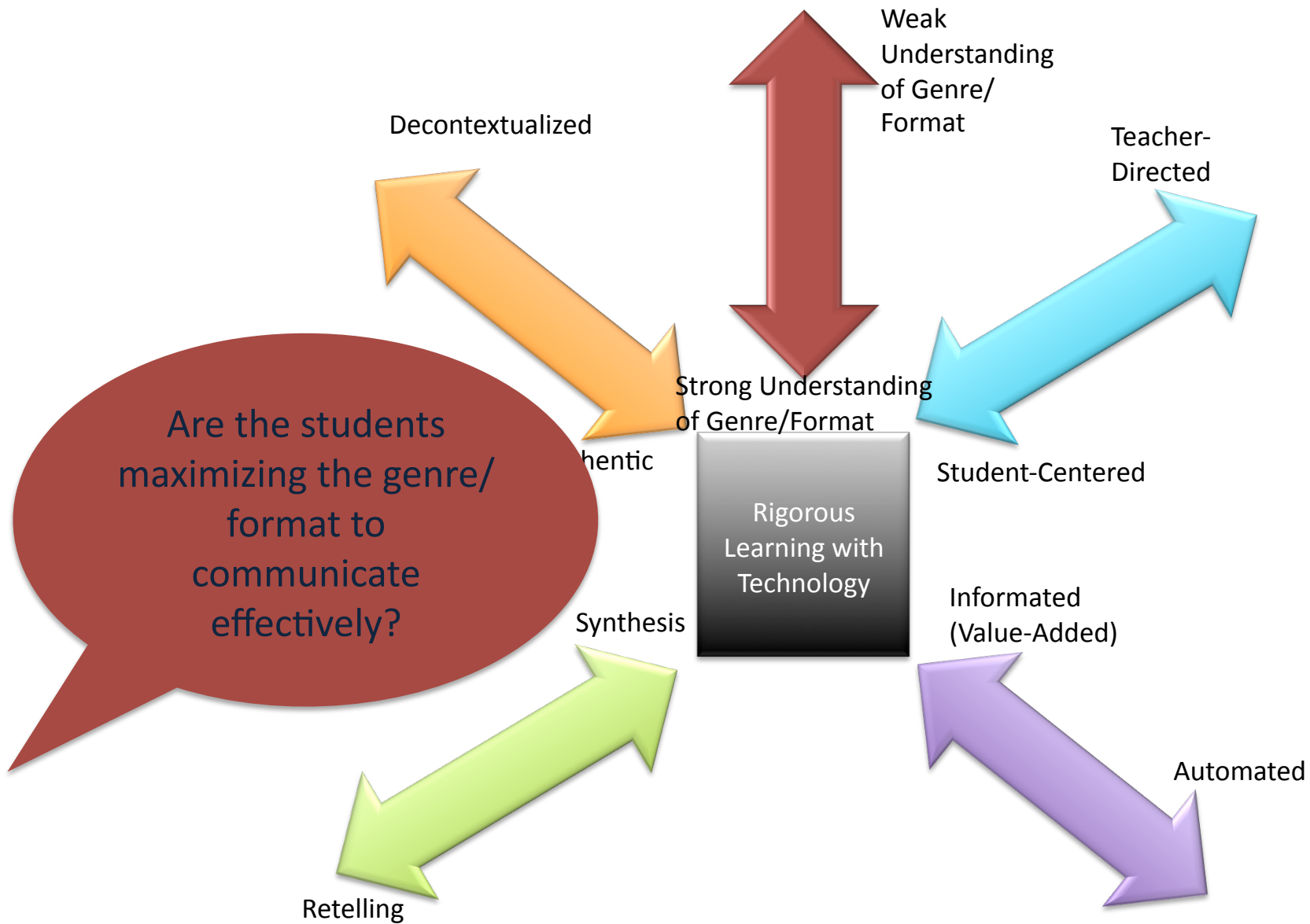
Who's working harder? Who decides what is important?



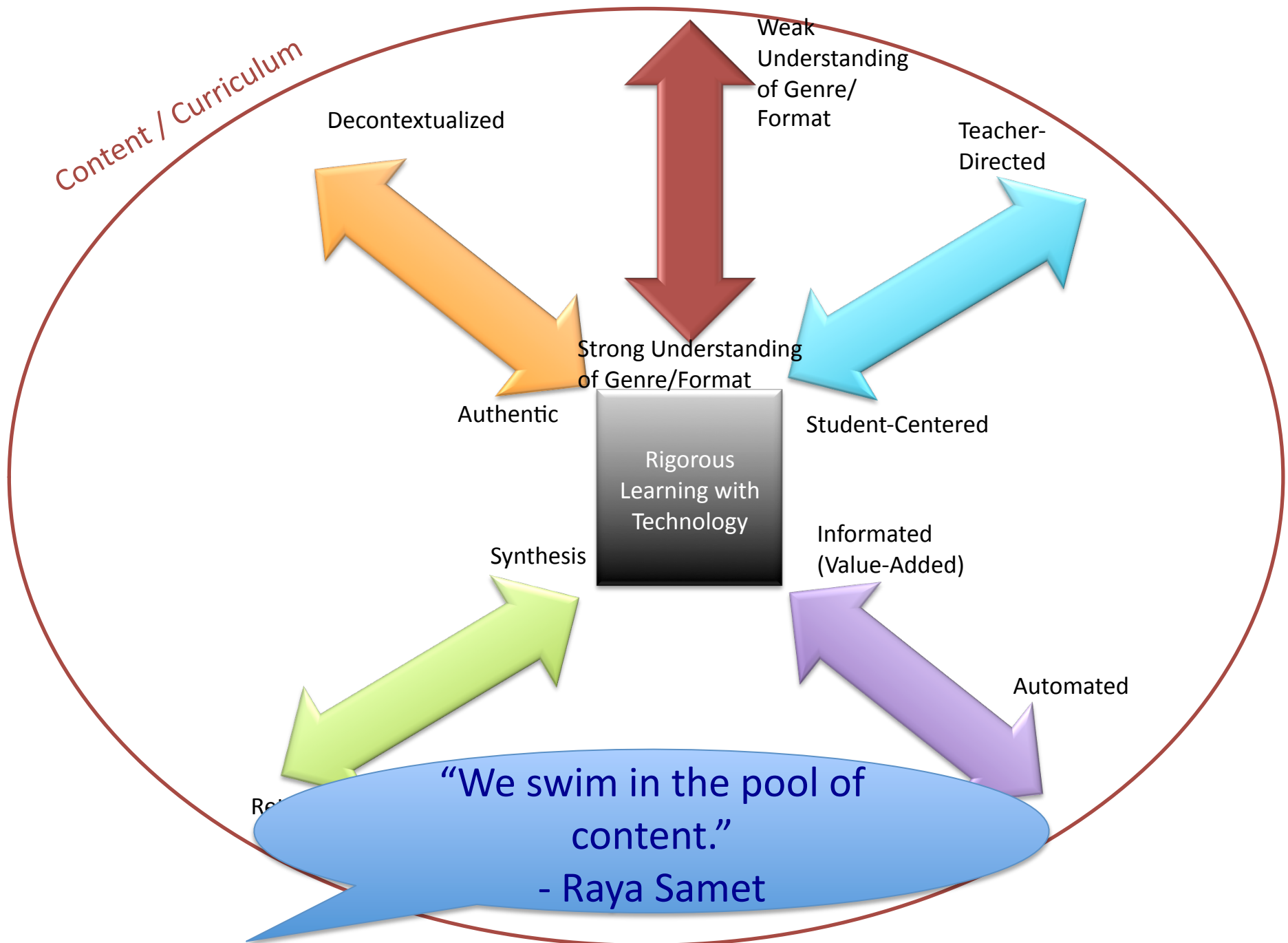
Tech is expensive
... why pay more if
we're not getting
more?



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The Silent Partners

Creativity

Motivation

Enthusiasm

Engagement

“Hands on keyboards”





Testing Our Lens: Student Work Samples



Recognize this
Report?



[http://bit.ly/
sofia-otter](http://bit.ly/sofia-otter)

<http://bit.ly/sofia-otter>





Hamlet goes
to high school



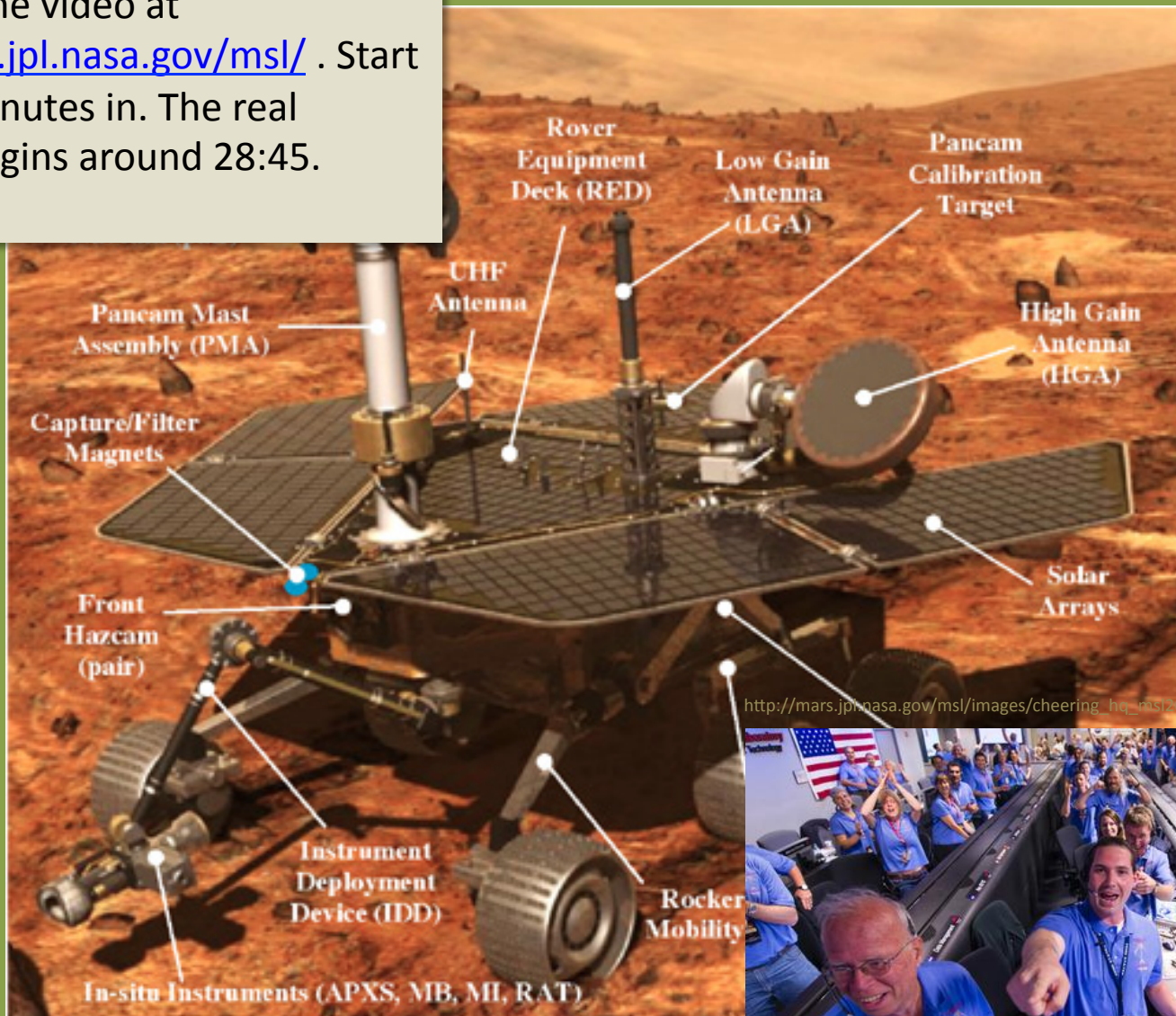
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**Aren't we really trying to
get our students to be able
to ...**

Watch these engineers celebrate!
Check out the video at
<http://www.jpl.nasa.gov/msl/> . Start
about 25 minutes in. The real
euphoria begins around 28:45.



http://marsrover.nasa.gov/mission/images/rover1_detail_500.jpg



http://mars.jpl.nasa.gov/msl/images/cheering_hq_msl2012072601.jpg

http://news.cnet.com/8301-11386_3-57488731-76/google-self-driving-car-300000-miles-and-counting/

CNET News Cutting Edge

Google self-driving car 300,000 miles -- and counting

Company registers progress but cautions of "a long road ahead" (pun intended), especially when navigating snow-covered roadways and interpreting temporary construction signals.



by Charles Cooper | August 7, 2012 4:07 PM PDT

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(Credit: Google)

Google screws around with a lot of far out, even cockamamie projects -- well, because it can and it's fun. Two good reasons that few can fault.

And it's also a good way to push the proverbial tech envelope. So it is that Google's update about the company's [self-driving car project](#) suggests this is turning into something more than Sergey & Larry's homebrew experiment.

Our vehicles, of which about a dozen are on the road at any given time, have now completed more than 300,000 miles of testing. They've covered a wide range of traffic conditions, and there hasn't been a single accident under computer control.



http://cdn.ientry.com/sites/webpronews/pictures/magicarms_616.jpg

Questions?

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