

Pedagogy, Technology, & the Future of Higher Education

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Welcome to ATI!

Three Days.
The Latest Tech.

THE
CUTTING
EDGE.





Twitter

Digital opportunities to connect with new content and communities can accelerate learning for every student—but only after teachers become efficient digital learners, too.

~William Ferriter

#USNHshare

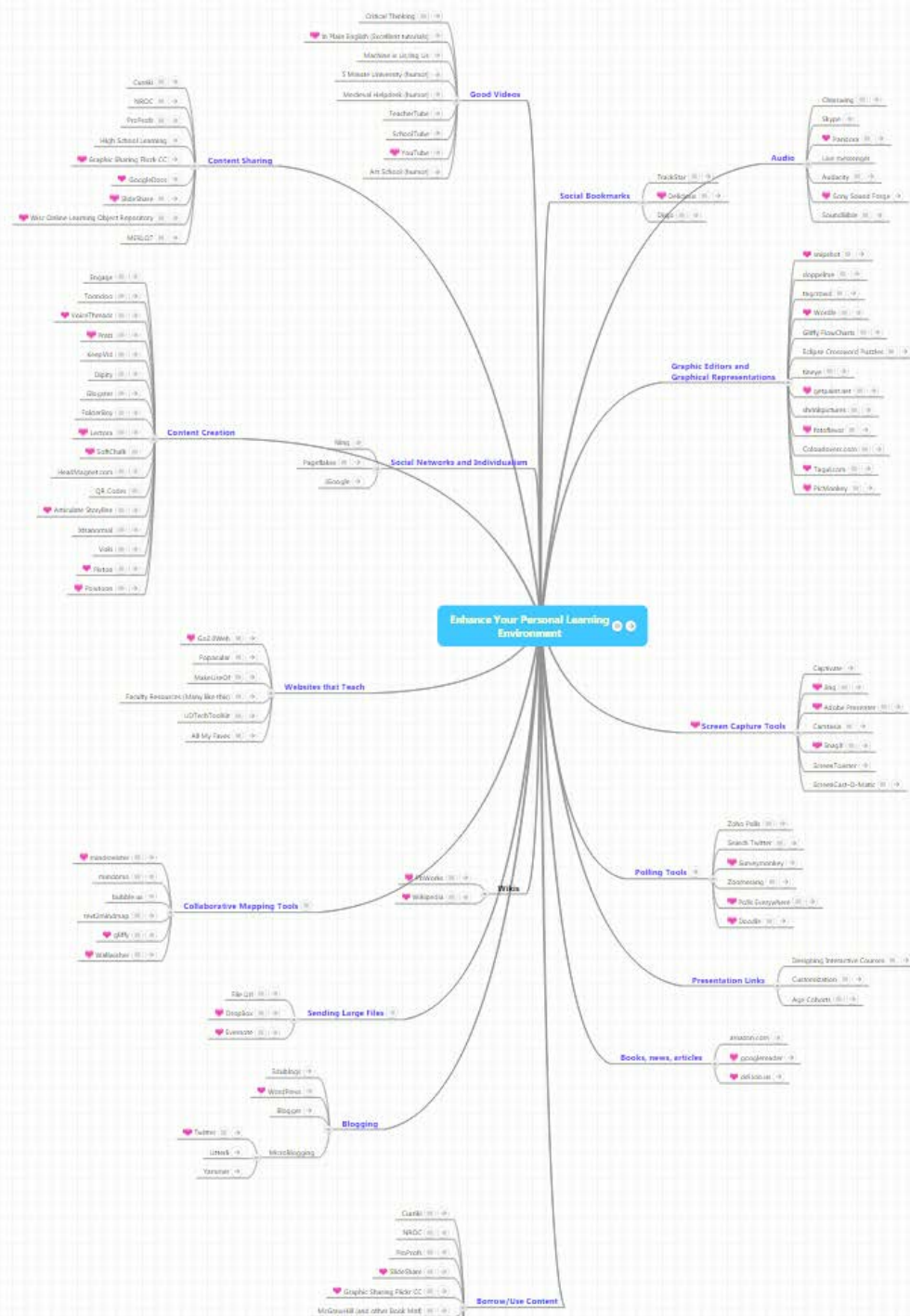
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Your LMS

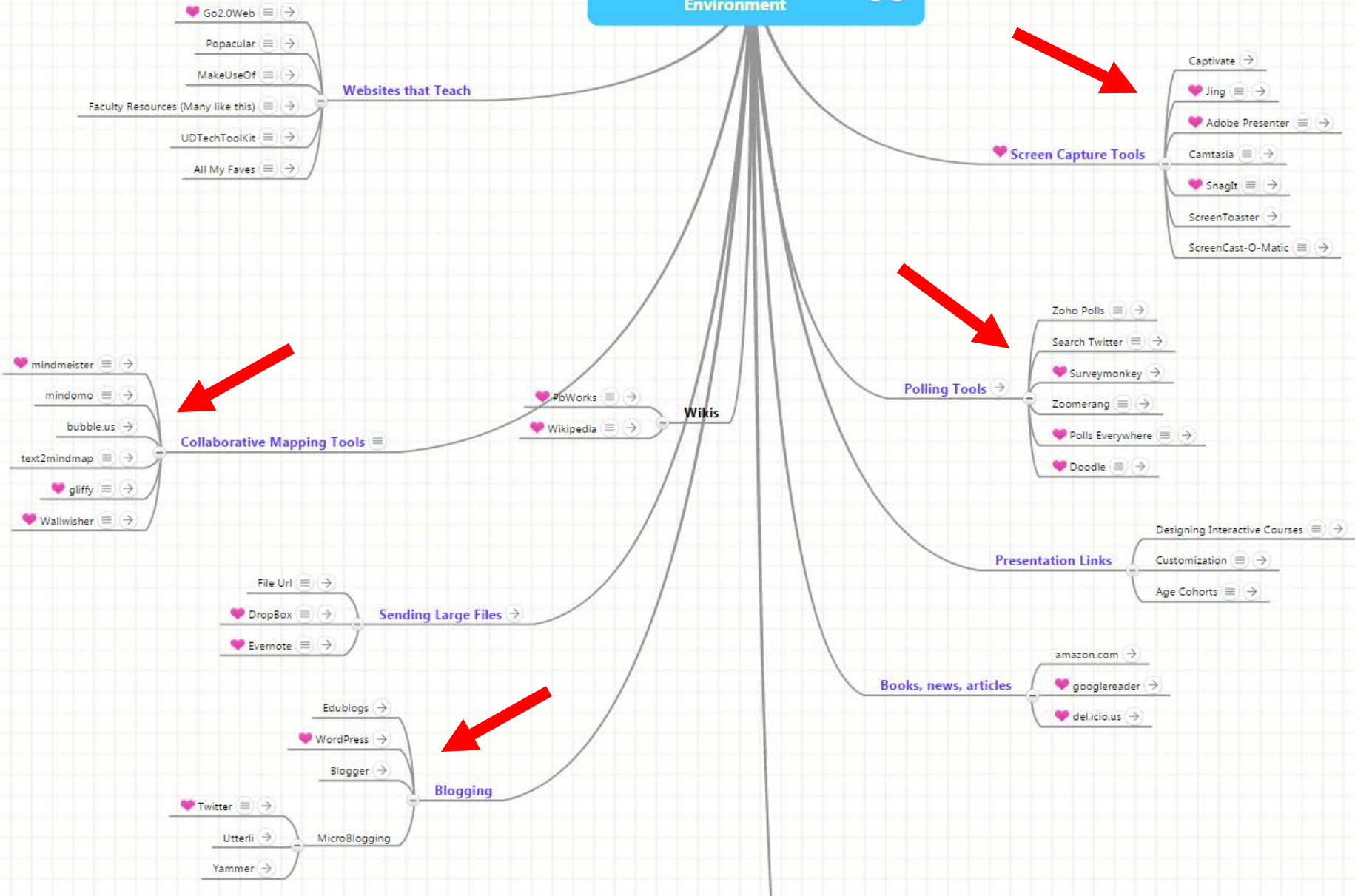
“A friendly and easy-to-use LMS will help trainees enjoy the learning process and focus on understanding the content.”

~ “4 Reasons to Love Your LMS”





Enhance Your Personal Learning Environment



Remote Proctoring Software

proctorio

HOME

ABOUT

WHY PROCTORIO?

CONTACT

Know who is suspicious.

Proctorio uses algorithms to monitor over twenty suspicious behaviors to be flagged for instant video review.



Wearable Computing:

Google Glass, Apple watch, video cameras, etc.



CC BY 2.0 Loic Le Meur <http://bit.ly/1JMXAKm>

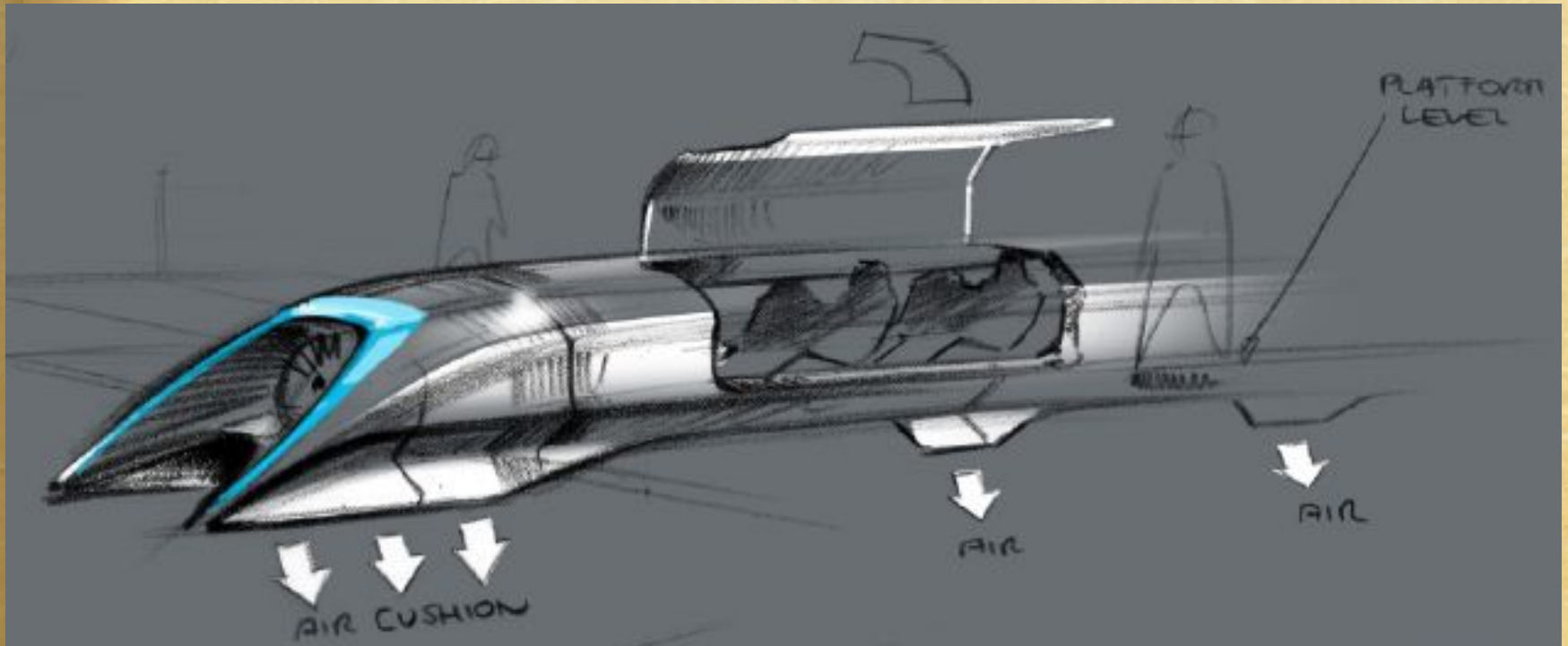


<http://lat.ms/1Os5snA>

Drones: Classroom Applications



The Elon Musk Hyperloop: Transforming “Distance” Learning



Technology Driving Education



PUSH-BUTTON EDUCATION

Tomorrow's schools will be more crowded; teachers will be correspondingly fewer. Plans for a push-button school have already been proposed by Dr. Simon Ramo, science faculty member at California Institute of Technology. Teaching would be by means of sound movies and mechanical tabulating

machines. Pupils would record attendance and answer questions by pushing buttons. Special machines would be "guaranteed" for each individual student so he could advance as rapidly as his abilities warranted. Progress records, also kept by machine, would be periodically reviewed by skilled teachers, and personal help would be available when necessary.

WHAT DO YOU WANT KIDS TO DO WITH TECHNOLOGY?

WRONG ANSWERS

- MAKE PREZIS
- START BLOGS
- CREATE WORDLES
- PUBLISH ANIMOTOS
- DESIGN FLIPCHARTS
- PRODUCE VIDEOS
- POST TO EDMODO
- USE WHITEBOARD
- DEVELOP APPS

RIGHT ANSWERS

- RAISE AWARENESS
- START CONVERSATIONS
- FIND ANSWERS
(TO THEIR QUESTIONS)
- JOIN PARTNERS
- CHANGE MINDS
- MAKE A DIFFERENCE
- TAKE ACTION
- DRIVE CHANGE

TECHNOLOGY IS A TOOL, NOT A
LEARNING OUTCOME.



Flipping the Driver

- ◆ ATI subverts the idea that we are here to focus on the technology or the Next Big Thing;
- ◆ ATI asks teachers to imagine a vision for their own courses and curricula, and helps them use technology to realize those visions;
- ◆ This year's "Open Education" ATI asks teachers to partner with students – a community of learners – to consider how digital tools can be used to help higher education more effectively serve the public good.

Open Educational Resources

OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and repurposing by others. Open educational resources include full courses, course materials, modules, **textbooks**, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

The 5 R's of OER

- ◆ Reuse
- ◆ Remix
- ◆ Revise
- ◆ Retain
- ◆ Redistribute



Creative Commons



Attribution

Others may distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation.



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Save students money

- Students spend on average \$1,200 a year on textbooks (U.S. Public Interest Research Group, survey of 156 campuses in 33 states)
- That's equal to about 12% of our in-state tuition!
- Since 1978, college textbook costs have increased 812%. To put that in context, it means that textbook prices have increased at 3.2 times the rate of inflation. (Mark J Perry, AEIdeas. <http://www.aei.org>)
- Used/rentals/ebooks don't solve the problem. Used textbooks are undermined by new editions, rentals create a system where we remove books from student hands. Many ebooks have expiration dates and print limits.

Effects of Textbook Prices

- 60% of students report not purchasing a required textbook because of cost, and 23% regularly go without books due to cost
- 50% of students report taking fewer courses due to textbook costs
- 14% have dropped a course and 10% have withdrawn from a course due to textbook costs

When Universities Address Textbook Costs:

Houston Community College

- ♦ OER --increase in class grade average, increase in average score on departmental final exam, and a lower course withdrawal rate. (2011, 690 students, <http://www.johnhiltoniii.org/>)

Mercy College

- ♦ Pass rates 8.54% higher in OER math sections. (2012, 695 students, <http://www.educause.edu/>)

Tidewater Community College

- ♦ 90.4% retention rate in all-OER Z-degrees.

<http://www.scribd.com/doc/256155220/Z-Degree-Report-2015-Tidewater-Community-College#scribd>

Textbook Costs REALLY Matter to Students

- A 2014 survey found that nearly half of students (49%) were actually **willing to choose one university over** another if free textbooks were provided all four years.
- The survey showed that college students currently **worry more about how they will afford required college textbooks** than they do about paying the cost of tuition.

This is not (only) about COST

We could save students money in tons of easy ways:

- ◆ Increase all class sizes to 100+;
- ◆ Increase all teaching loads to 6-6;
- ◆ Close the library! Close the gym!
- ◆ Turn off the heat!

Cheaper isn't the (only) point. Affordability will bring more students to the table and keep them there. But that is **only the beginning** of how OER can improve the learning process.

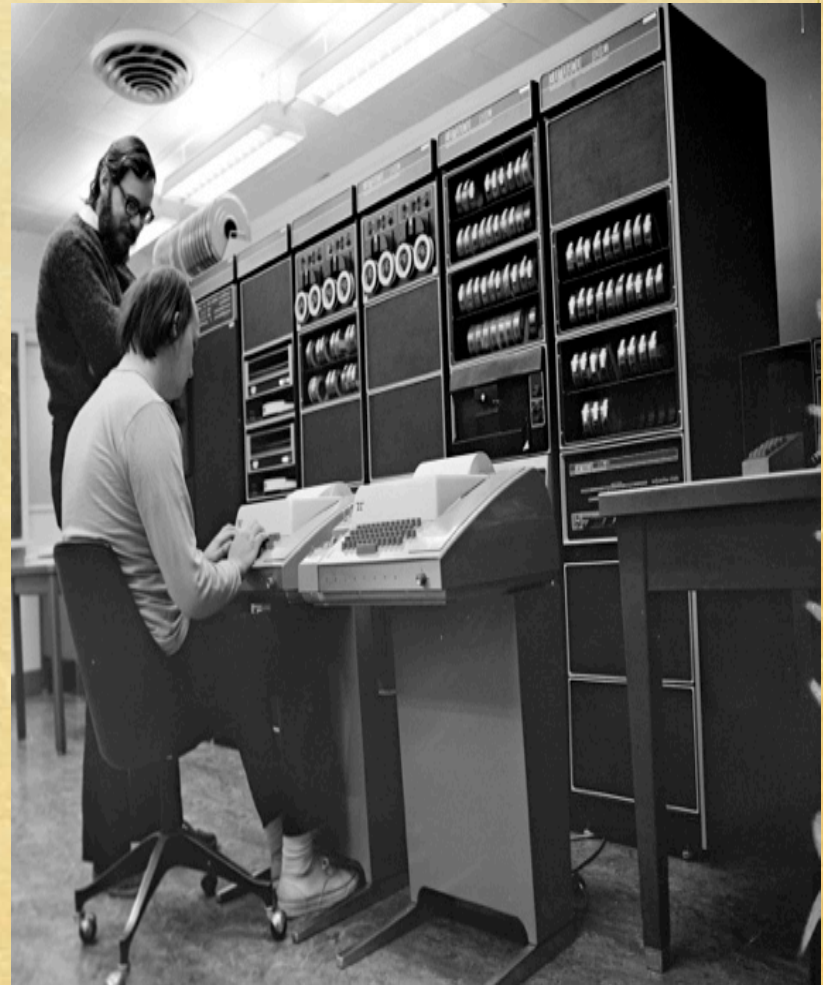


Resisting “Students as Consumers”

“Student-centered”

≠

“give the customer
what s/he wants.”



WE have the OPPORTUNITY to Help Steer the Ship

- ◆ Current rhetoric: corporate models, marketing campaigns, students as consumers.
- ◆ Financial reality + *pedagogical* model = **new possibilities.**

Student-Centered Missions @ USNH

- ◆ PSU: “we are Student-Centered. Decisions are made with the best interest of the students in mind; we constantly work to improve access, opportunity and affordability.”
- ◆ UNH: “students collaborating with faculty in teaching, research, creative expression, and service.”
- ◆ KSC: “social justice and equity,” “civic engagement and service,” strong relationships among students and faculty,” & “support for a wide range of learners.”
- ◆ GSC: “learner responsive curricula.”

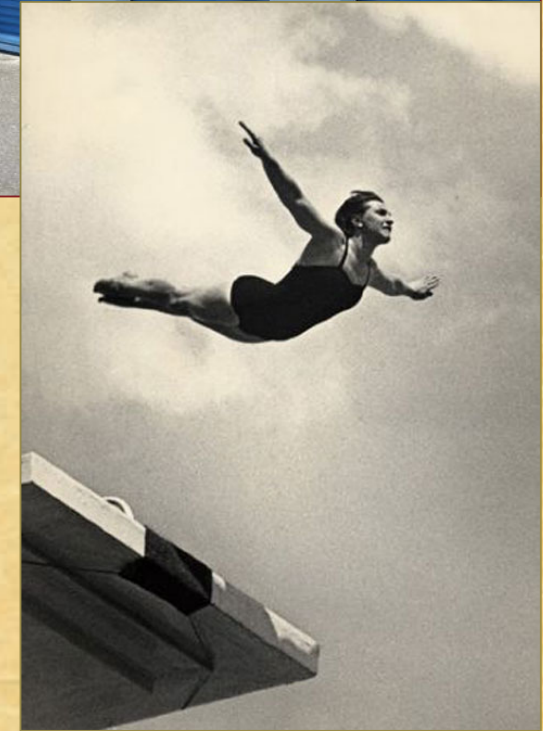
Open Pedagogy

- ◆ Centers its practice on **community** and **collaboration** rather than content;
- ◆ Focuses on interstices between university and *wider public*;
- ◆ Treats education as a **learner-developed process**;
- ◆ Is **skeptical** of hoops, products, endpoints, experts, & gate-keeping.

Digital Possibilities

Repository → Platform

Open and networked educational environments must not be merely repositories of content. They must be platforms for engaging students and teachers as full agents of their own learning.



Text: CC BY Jesse Stommel: <http://bit.ly/1vmC7oe>;

Storage : CC BY SA Meathead Movers; Diver: <http://www.peatom.info>

“Students as Producers”

- ◆ *Real* problems and questions.
- ◆ Share *beyond* the instructor.
- ◆ Student *autonomy*.
- ◆ Reject *disposability*.
- ◆ *OPEN* Assignments using the 5 R's.



Citation:

<http://cft.vanderbilt.edu/2013/09/students-as-producers-an-introduction/>

When we center students & open pedagogy...

WHAT CHANGES?

- ◆ Syllabus
- ◆ Classroom “Management”
 - ◆ Teaching
 - ◆ Assessment

Alt

Ctrl

 *Shift*

Cost Savings → Teaching →
Scholarship

Now what
does this
mean to us as
SCHOLARS?



Current research funding cycle does not maximize dissemination, economic efficiency, social impact

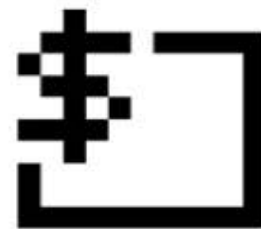


Government RFPs announced, research grants awarded

Scientific research conducted and papers written

Articles submitted to journals and peer review occurs

Acceptance in journals; authors transfer copyright to publishers



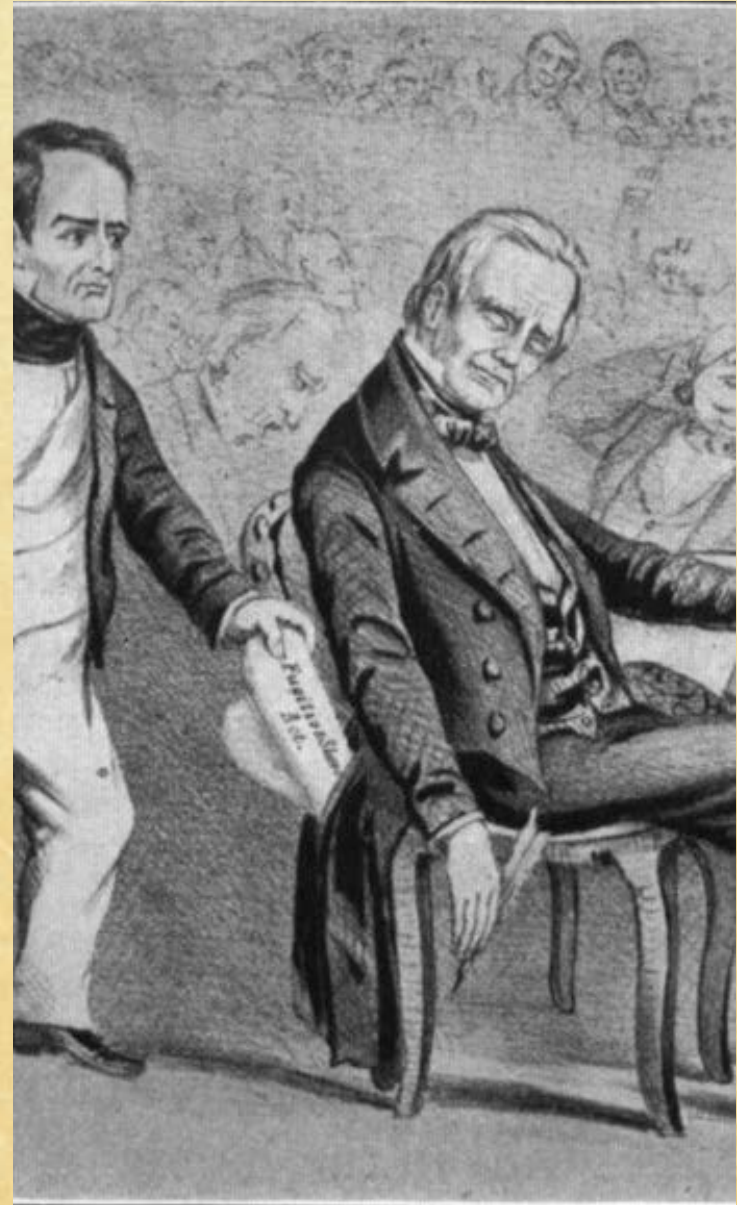
Slow scientific progress, poor return on public investment

Public granted little or no reuse rights beyond access to read articles

Libraries subscribe or public pays per article fee to view on publisher's website

Articles published in mainly closed access journals

Scholarship:
dialogue
rather than
intellectual
property



Why Do You Do What You Do?

If you write to be read, to encourage critical thinking and to educate, then why wouldn't you disseminate your work as far as possible? Open access is the answer. ~*Martin Eve, University of Lincoln*



Our Next Three Days

PROCESS, not products

- ◆ Focusing our learner-centered pedagogy to drive the use of technology

OPENING, not opened

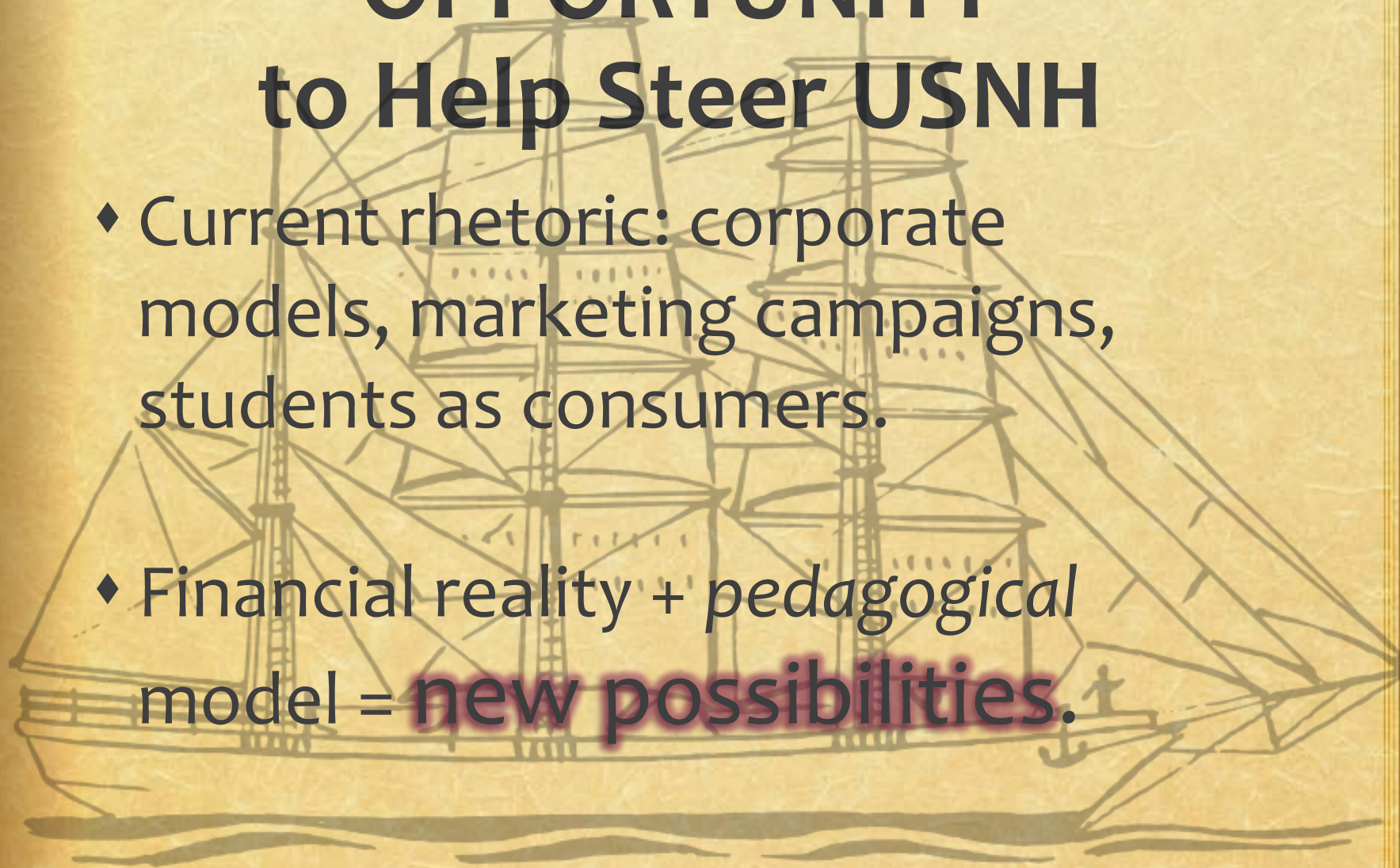
- ◆ Thinking of “open” and OER as a continuum, not an all-or-nothing proposition

COMMUNITY, not content

- ◆ Building collaboration as the basis for learning

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What will YOU do?

- ◆ Adopt OER and save students money!
- ◆ Adapt or create OER and share with others!
- ◆ Encourage your institution to scale up OER!
- ◆ Use open pedagogies to empower students!
- ◆ Insist on pedagogical drivers for academic technologies!
- ◆ Publish your research in open access journals or repositories!
- ◆ Advocate for an institutional policy on open access!

Questions/Ideas: Answerable & Otherwise

