A Mixed Methods Look at Self-Directed Online Learning...and the Design of Online Activities for Successful Online Experiences

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February 24, 2016

MIT OpenCourseWare

http://ocw.mit.edu/about/15-years/

15 Years of MIT OpenCourseware
Celebrating a new milestone in open education

About OpenCourseWare

MIT OpenCourseWare is a free and open publication of material from thousands of MIT courses, covering the entire MIT curriculum and used by millions of learners and educators around the world.
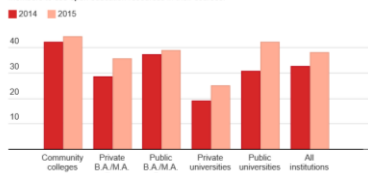
READ MORE

October 29, 2015

Campus Tech Leaders Report More Support for Free Educational Materials, Ellen Wexler, Chronicle of Higher Education


Encouraging Faculty to Use Open-Source Content

Here's the percentage of survey respondents who report that their institutions encourage faculty members to use open education resources in their courses.

February 2016

Going Digital: Faculty Perspectives on Digital and OER Course Materials

Kenneth Green, The Campus Computing Project

http://www.campuscomputing.net/goingdigital2016

The Faculty Experience with Open Educational Resources (OER)

Now Using and Making My Course Materials Available as OER 4%
Now Using 11%
Reviewed, Not Used 10%
Never Heard of OER 39%
Know a Little, but Not Reviewed or Used 36%

- Three-fourths (75%) have had no direct "contact" with OER content
- Just 15% have experience – are now using – OER resources in their courses
- Only a third (36%) agree OER content provides a viable alternative to traditional print /commercial course resources.

February 2016

Going Digital: Faculty Perspectives on Digital and OER Course Materials

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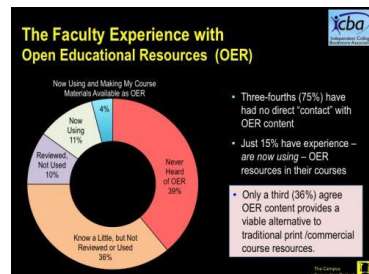
Digital Course Materials	% Agree/ Strongly Agree
generally cost less for my students	79
include **significant added-value content** not available in print	45
are **as easy for me to use** as similar print materials.	41
provide for **richer and more effective learning experience** than print	35
have a **beneficial impact on student learning** compared to print.	27
are **higher quality** than similar print materials	19

February 2016

Going Digital: Faculty Perspectives on Digital and OER Course Materials

Kenneth Green, The Campus Computing Project

http://www.campuscomputing.net/goingdigital2016

Why Might You Decide to Select OER Materials for Your Classes?	% Important/ Very Important
High quality of OER materials	74
Low cost of OER for My Students	71
Option to remix OER materials	65
OER materials **are easy to find** online	57
OER materials are **generally digital**	52
Recommendation of colleagues	47
Bookstore support for OER	42
Web site **comments/reviews**	19

Audience Poll #1:
Who in here has taken a MOOC?

January 11, 2016
Maps and the Geospatial Revolution, Anthony C. Robinson, Penn State, Coursera
http://chronicle.com/article/Mapping-a-MOOC-Reveals-Global/234795?cid=at&utm_source=at&utm_medium=en&elq=bf52c7566e1d42d6ac7d42b49a19b0ea&elqCampaignId=2208&elqaid=7501&elqat=1&elqTrackId=ad3e40a9614c4a5fb84d8851653a8839

August 20, 2015
Syracuse professor offers free 'Star Trek' class to the public, USA Today, Amari D. Pollard, LeMayne College
http://college.usatoday.com/2015/08/20/syracuse-professor-offers-free-star-trek-class-to-the-public/ r

September 16, 2013
Rwandan Degree Program Aims for a 'University in a Box', Chronicle of Higher Education, Megan O'Neil
http://chronicle.com/article/Rwandan-Degree-Program-Aims/141631/

Students attend an orientation session at Kepler, a new hybrid program in Kigali, Rwanda, which will use MOOCs and classroom time to help students earn competency-based associate degrees.

Employee to Employee Training
G2g (Googler to Googler) Training
Seven Ways to Corporate MOOC, Udemy blog, December 23, 2013, Shannon Hughes
https://www.udemy.com/organizations/blog/2013/12/23/seven-ways-to-corporate-mooc/

Classes range from management and public speaking, to parenting and mountain climbing.

February 5, 2013
Bioelectricity: A Quantitative Approach, Duke University's First MOOC
http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/6216/Duke_Bioelectricity_MOOC_Fall2012.pdf

May 2013
MOOCs @ Edinburgh 2013– Report #1

MOOC learner aspirations
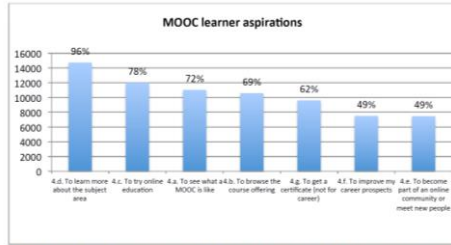
Figure 9 - Combined exit survey responses to Q4 'What did you hope to get out of the course and did it meet your expectations?' – calculated as a sum of exceeded expectations, met expectations, and fell below expectations responses – with percentage shown of total exit survey respondents

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August 30, 2015
Massive online courses grow; what's in it for the universities?, Kirk Pinho, Crain's Detroit Business
http://www.crainsdetroit.com/article/20150830/NEWS/308309998/massive-online-courses-grow-whats-in-it-for-the-universities

- **More than 3.25 million people took massive open online courses through the University of Michigan during the last three years — a figure equivalent to 76 percent of the metro Detroit population of 4.29 million.**

August 30, 2015
Massive online courses grow; what's in it for the universities?, Kirk Pinho, Crain's Detroit Business
http://www.crainsdetroit.com/article/20150830/NEWS/308309998/massive-online-courses-grow-whats-in-it-for-the-universities

And all told, there have been between 16 million and 18 million people enrolled in MOOCs, about 2,500 of which had started or were scheduled to start as of July 2015, according to EdSurge Inc., an independent Burlingame, Calif.-based education technology information provider.

A typical MOOC enrollment level is around 25,000 students, according to research by Katy Jordan, a Ph.D. candidate focusing on technology-enhanced learning at The Open University in the United Kingdom.

January 14, 2016
Why You Should Care That MOOCs Had a Great 2015
Bravetta Hassell, Chief Learning Officer

data collected by Class Central:
- **35 million: total number of students who signed up for at least one course.**
- **1,800: number of new courses announced.**
- **75 percent: the amount of courses available in English (was 80 percent in 2014).**
- **2,200: courses offered for the first time.**
- **Reportlinker estimates the MOOC market to grow by nearly $7 billion by 2020.**

January 14, 2016
Why You Should Care That MOOCs Had a Great 2015
Bravetta Hassell, Chief Learning Officer

- **Self-paced courses are getting a boost…More than 800 self-paced courses exist in the MOOC market, and that number is only getting larger.**

- MOOC providers are realizing their value. No longer are MOOC providers offering free certificates. **At Coursera, the average course is $56; at edX, it's $53.** Further, Coursera is putting up a paywall for graded assignments for some courses.

October 19, 2015
MOOCs Are Still Rising, at Least in Numbers
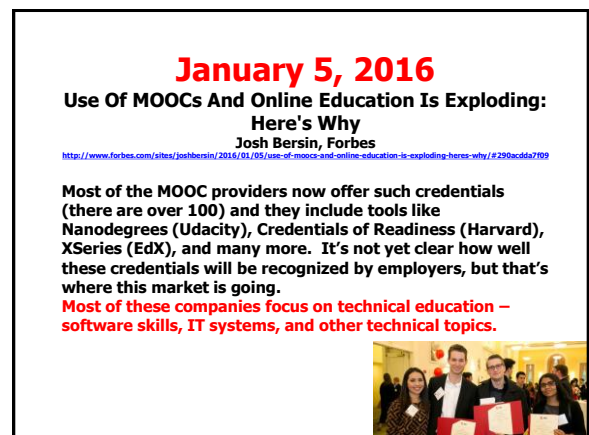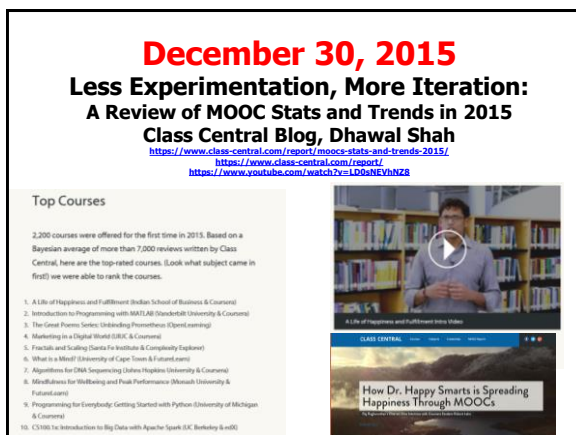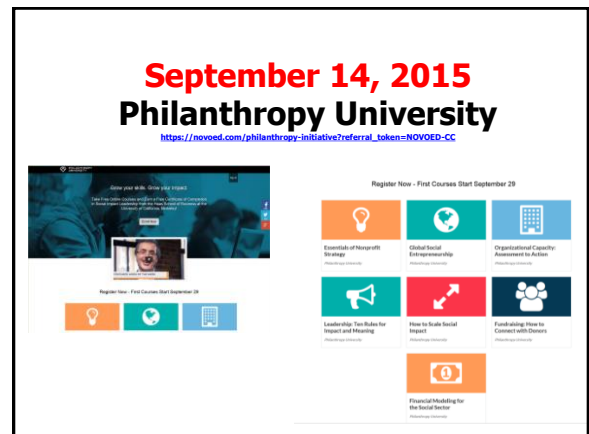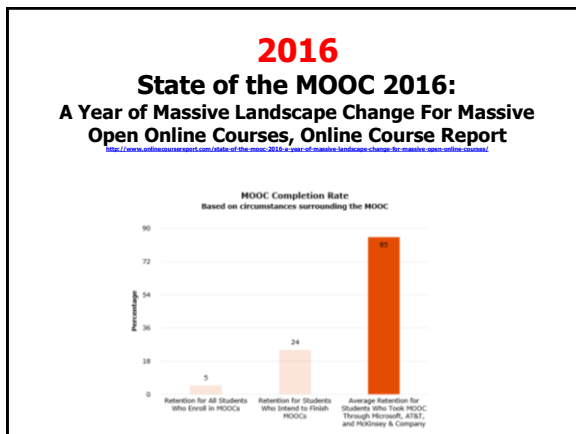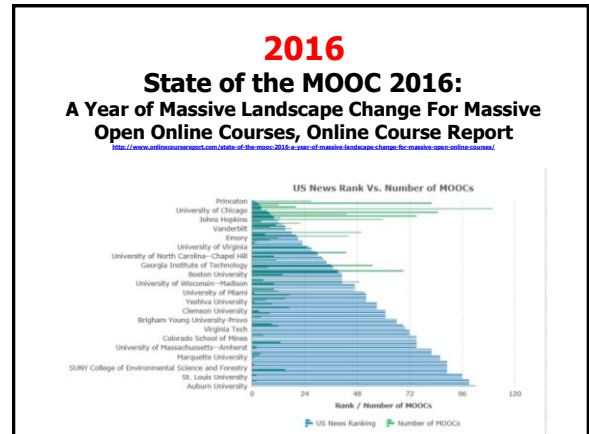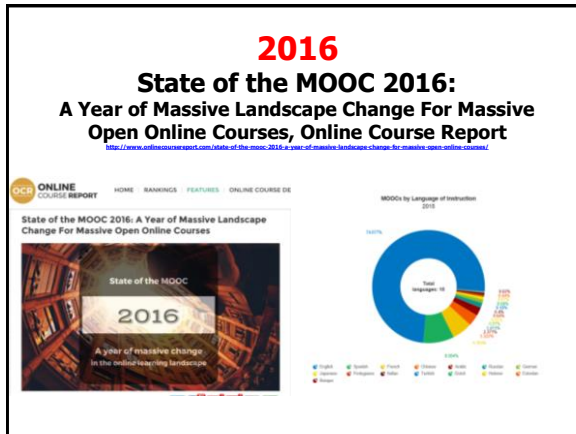Ellen Wexler, Chronicle of Higher Education
http://chronicle.com/blogs/wiredcampus/moocs-are-still-rising-at-least-in-numbers/57527

Course Distribution by Provider

Coursera, with over 1,000 courses, offers more courses than any other provider.

2016
State of the MOOC 2016:
A Year of Massive Landscape Change For Massive Open Online Courses, Online Course Report
http://www.onlinecoursereport.com/state-of-the-mooc-2016-a-year-of-massive-landscape-change-for-massive-open-online-courses/

2016
State of the MOOC 2016:
A Year of Massive Landscape Change For Massive Open Online Courses, Online Course Report
http://www.onlinecoursereport.com/state-of-the-mooc-2016-a-year-of-massive-landscape-change-for-massive-open-online-courses/

2016
State of the MOOC 2016:
A Year of Massive Landscape Change For Massive Open Online Courses, Online Course Report
http://www.onlinecoursereport.com/state-of-the-mooc-2016-a-year-of-massive-landscape-change-for-massive-open-online-courses/

September 14, 2015
Philanthropy University
https://novoed.com/philanthropy-initiative?referral_token=NOVOED-CC

December 30, 2015
Less Experimentation, More Iteration:
A Review of MOOC Stats and Trends in 2015
Class Central Blog, Dhawal Shah
https://www.class-central.com/report/moocs-stats-and-trends-2015/
https://www.class-central.com/report/
https://www.youtube.com/watch?v=LD0sNEVhNZ8

January 5, 2016
Use Of MOOCs And Online Education Is Exploding: Here's Why
Josh Bersin, Forbes
http://www.forbes.com/sites/joshbersin/2016/01/05/use-of-moocs-and-online-education-is-exploding-heres-why/#290acdda7f09

Most of the MOOC providers now offer such credentials (there are over 100) and they include tools like Nanodegrees (Udacity), Credentials of Readiness (Harvard), XSeries (EdX), and many more. It's not yet clear how well these credentials will be recognized by employers, but that's where this market is going.
Most of these companies focus on technical education – software skills, IT systems, and other technical topics.

January 13, 2016
Degree gets you a tech job — or your money back, Marco della Cava, USA Today
http://www.usatoday.com/story/tech/news/2016/01/13/degree-gets-you-tech-job-your-money-back/78703230/

January 20, 2016
Coursera Specializations
https://www.coursera.org/browse?utm_medium=email&utm_source=marketing&utm_campaign=aUAR4L-fEeW6i-NoU89Qw&languages=en

December 30, 2015
Udemy Awards, 2015 Instructor Awards!
https://teach.udemy.com/congratulations-to-udemys-outstanding-instructors-of-2015/

January 11, 2016
7th grade scholarships for MOOC completion, U.S. News and World Report, eSchool News
http://www.eschoolnews.com/2016/01/11/7th-grade-scholarships-for-mooc-completion/

May 31, 2014
ocMOOCs and hMOOCs
Revolutionizing online education
Professor creates courses tailored to cultural differences,
Korea JoongAng Daily, KIM BONG-MOON [bongmoon@joongang.co.kr]
http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=2989330&cloc=joongangdaily%7Chome%7Cnewslist1

Professor Auh Yoon-il of Kyung Hee Cyber University explains the upcoming Kyung Hee MOOC 2.0 in an interview with the Korea JoongAng Daily at Kyung Hee University on Wednesday. ("one culture" or ocMOOCs and hMOOCs)

October 6, 2015
MOOCs as a Learning Supplement
Using MOOCs to Fill In Your Weak Spots, Hanna Peacock, Inside Higher Ed
https://www.insidehighered.com/blogs/gradhacker/using-moocs-fill-your-weak-spots?utm_source=Inside+Higher+Ed&utm_campaign=bf05053fb7-DNU20151007&utm_medium=email&utm_term=0_1fcbc04421-bf05053fb7-197362401

May 27, 2015
MOOC Participant Study Strategies
The Invisible Learners Taking MOOCs, George Veletsianos, Inside Higher Ed
https://www.insidehighered.com/blogs/higher-ed-beta/invisible-learners-taking-moocs

January 11, 2016
Mapping a MOOC Reveals Global Patterns in Student Engagement
Chronicle of Higher Education, Anthony C. Robinson
http://chronicle.com/article/Mapping-a-MOOC-Reveals-Global/234795?cid=at&utm_source=at&utm_medium=en&elq=bf52c7566a1d42d6ac7d42b49cd980ca&elqCampaignId=2208&elqaid=7501&elqat=1&elqTrackId=ed3e40a9614c4a5fb84d8851653a8839
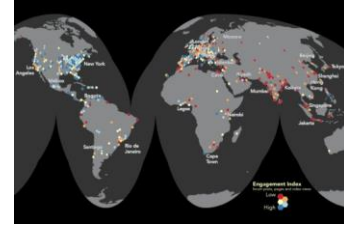
Chapter 10: MOOC Pedagogy
AMP: A Tool for Characterizing the Pedagogical Approaches of MOOCs
Karen Swan, Scott Day, Leonard Bogle, and Traci van Prooyen University of Illinois Springfield

Figure 3. Ratings Metaphors

Chapter 14: Creating a Temporary Spontaneous Mini-Ecosystem through a MOOC
Paul Kim and Charlie Chung, Stanford University

Figure 2. Twitter thread announcing the MOOC

Question
"What are the problems that MOOCs and OER are supposed to address?" or "Are MOOCs and OER "solutions" in search of problems?"
(Note: Best Answers get a MOOCs book.)

Self-Directed Learners (SDL) (Abdullah, 2001)

- **Tend to be highly curious & generally enjoy learning**
- **View problems as challenges**
- **Desire change, willing to try new things,**
- **Persistent, self-disciplined, goal oriented**
- **Independent, self-confident**
- **Make learning meaningful and relevant**
- **Self-monitor, evaluate, and regulate one's learning**

## Study #1.
MIT OpenCourseWare (OCW) Study

- **E-newsletter subscription 156,000 people**
  - **1,429 completed surveys**
    - **613 completed open ended items**
  - **50% over age 40**
  - **76% males**
  - **North America (44 percent); Asia (23 percent); Europe (14 percent); South America (10 percent); Middle East (3 percent); Oz (2 percent).**
    - **Top countries in the MIT OCW subscriber list were the United States, India, China, Brazil, Nigeria, Pakistan, Iran, Canada, the UK, Taiwan, Indonesia, Mexico, and Egypt.**

Reasons to explore?

Main Reason Explore the Web Informally to Learn
(MIT OCW Group; Note: Check all that apply)
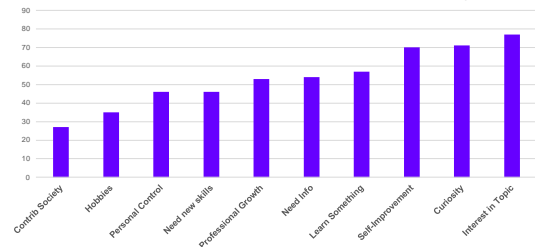
Skills hoping to acquire?

Skills Would Like to Learn Online Informally
(MIT OCW Group; Note: Check all that apply)
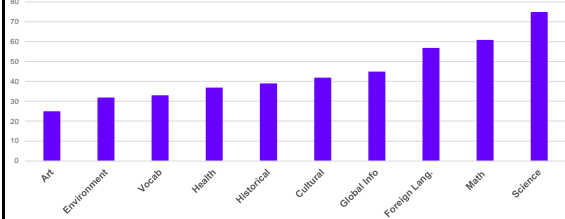
Hoping to achieve?

Like to Achieve from Learning Informally Online
(MIT OCW Group; Note: Check all that apply)
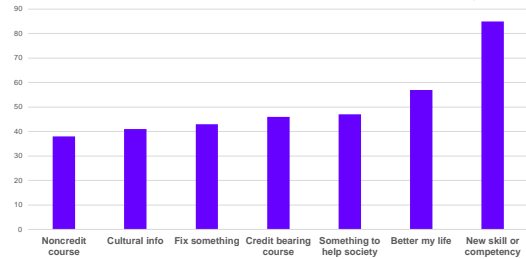
Actual achievements?

Achievements from Informal Online Learning Pursuits
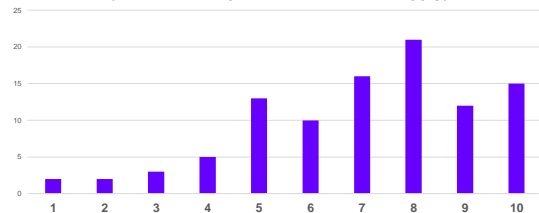**(MIT OCW Group; Note: Check all that apply)**
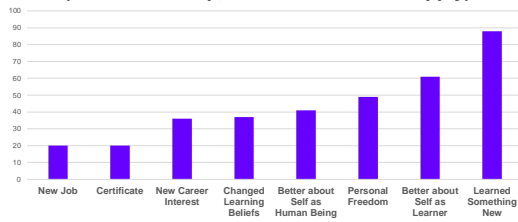
Experience life change?

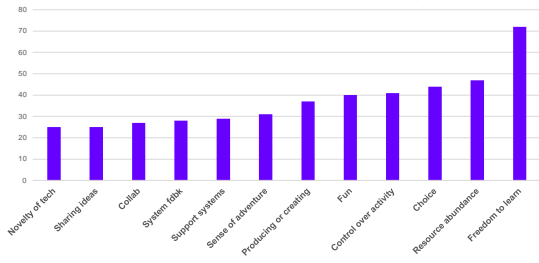**Degree to Which Life Changed from Informal Online Learning**
(Scale of 0 (Not at all) to 10 (Very Significantly); 5 = Moderately)
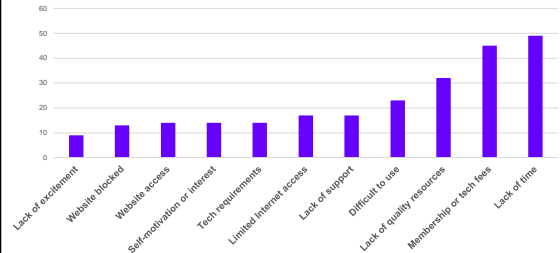**(MIT OCW Group; Note: Check all that apply)**

7

Factors leading to success or personal change?

Factors Leading to Success or Personal Change When Exploring Online
(MIT OCW Group; Note: Check all that apply)

Categories (x-axis): Novelty of tech, Sharing ideas, Collab, System fdbk, Support systems, Sense of adventure, Producing or creating, Fun, Control over activity, Choice, Resource abundance, Freedom to learn

---

What obstacles faced?

What Obstacles Faced When Learning Informally Online
(MIT OCW Group)

Categories (x-axis): Lack of excitement, Website blocked, Website access, Self-motivation or interest, Tech requirements, Limited Internet access, Lack of support, Difficult to use, Lack of quality resources, Membership or tech fees, Lack of time

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Open-Ended Questions

(**28) Can you describe your most interesting or successful informal learning experience? What did you accomplish?**

(30) Why did you want to do this learning activity or task? What was your purpose or goals? Please describe what captured your interest.

(31) Has your life changed in a small or big way as a result of this informal learning activity or experience? If so, how?

(32) What was the key moment when learning informally with technology where you felt a personal change? If so, please describe that moment, as best you can.

(34) Did you face any obstacles or challenges during this time when learning informally with technology? If so, how did you overcome them?

MIT Data:
Inspires and Changes Ed Systems
(18-20 year old male, Middle East)

When i was 14 years old i found MIT OCW during my search in..(physics) by Prof Walter Lewin looked really interesting and i became interested in physics. **To be honest OCW changed my way of living and i found how beautiful physics is**...informal learning is interesting because you can have access to some of the best courses provided by the best universities in the world...MIT OCW or Stanford **open courses have also changed the educational system in some poor countries** and have taught the teachers and professors in those countries how to teach a subject in a modern way.

MIT Data:
Self-Taught on Social Media
(21-30 year old unemployed female, North America)

At first my purpose was to fulfill boredom ...After graduating with a MS, I was faced with unemployment. I took the opportunity to read blogs, watch Youtube videos, and more to learn about blogging and social media. Since than I have become well versed in social media and other business topics and started a business... **I decided not to pursue a PHD because I am learning a more rapid pace.** Instead of spending 5 years in school, I can be flexible and work on what I am learning.

MIT Data:
Enhances Current Job Prospects
(31-40 year old male, Asia)

I learnt scheme from **MIT OCW.** Which helped in **learning elisp/lisp.** The programming techniques increased my software design knowledge. **Algebra - mit ocw course was very useful**, it helped me to refresh the basics of Digital signal processing. - I have learnt a lot of "applying my knowledge" than just learning the "theory" - Various online classes allow for multiple perspectives of the same topic thus showing us how the same thing can be applied in different fields.

MIT Data:
Prepares to Reenter University
(41-50 year old male, Middle East)

Most interesting experience of my own was my use of MIT OCW to refresh on Calculus. I purchased the textbook and followed one of several calculus options on the site. This was quite successful in re-introducing Calculus, as a prep to re-entering college 28 years after graduation - this time to study for a Master's.

MIT Data:
Builds Expertise and Expert Connections
(51-60 year old female, North America)

I'm a virtual reference librarian...My friend and I have a blog about music cognition, which is a little crazy because we don't know anything about it. Nevertheless, we blog about current articles, and one experience was especially meaningful, where **I tweeted a question to Daniel Levitin, who answered. He's the guy who wrote The World in Six Songs, among other things.** The fact that you can communicate with an expert in the field who will take the time to give a thoughtful tweeted (and yes, 140 characters can be thoughtful)--well, that's amazing...**I think it was the single most exciting learning moment I've experienced.**

MIT Data:
Retiree Develops New Hobby
(65 year old male, North America)

I retired from education I became a lifestyle entrepreneur. I was trying to learn software to develop a business website for our sailing business. I discovered...Lynda.com. I was learning web development, video editing and photoshop. **I realized that I could learn this software without going to a formal class and that was an "eureka" moment..** My wife and I travelled and started a yacht delivery and training business that has taken us all over the world. We learned technology and social media as we travelled and ended up with many fantastic experienced in some very exotic places. **We taught ourselves web development and have been figuring out online learning as we went. Now at 65 years of age we are going back to university to take a Computer Science Degree and start a new tech business relating to interactive educational media and games. All very exciting :-)**

MIT Data:
Retiree Develops New Hobby
(70+ year old female, North America)

I'm am avid photographer and have developed skills for developing my own website for display of my photography and books I have written that include my photographs...I've had multiple careers, from science, to public administration, and information technology. The development of my art is a new and exciting experience.

Study #2.
Blackboard (CourseSites) MOOC
http://events.blackboard.com/open

Blackboard MOOC Sample

- **Survey notice sent to 3,800 MOOC participants**
- **159 completed surveys**
  - ◆ **49 completed open ended items**
  - • 72% over age 40
  - • 73% females
  - • North America (81 percent); Asia (2 percent); Europe (6 percent); South America (1 percent); Middle East (2 percent); Australia/NZ (7 percent); Africa (1 percent)
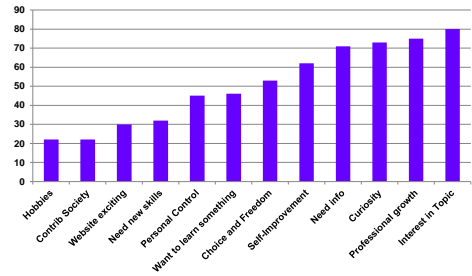
Blackboard Data
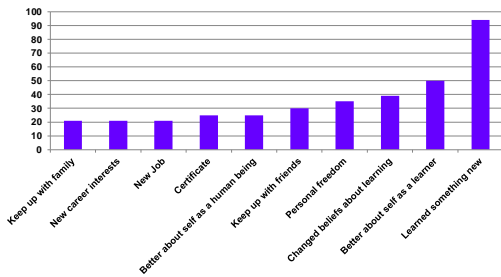## Figure 3. Specific skills wanting to learn informally online
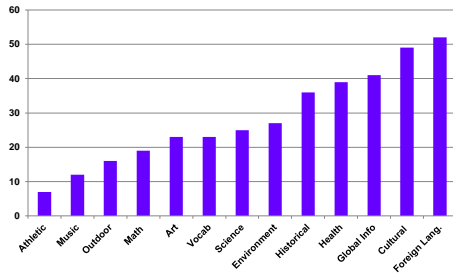
Blackboard Data
Figure 4. Main reasons to informally explore the Web to learn
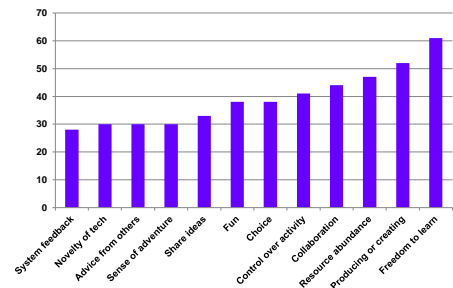

Blackboard Data
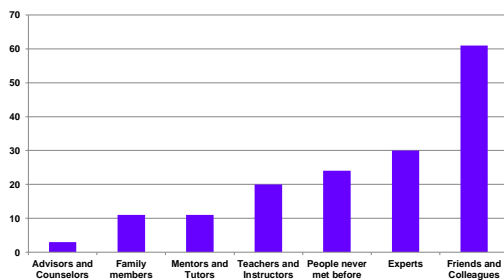## Figure 5. Achievements from learning informally online

Blackboard Data
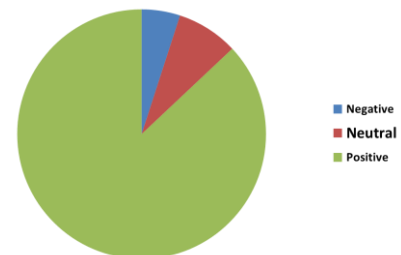## Figure 6. Factors leading to success or personal change when learning informally online

Blackboard Data
Who typically supports your informal learning experiences?

Experience life change?
(0 = not at all; 5 = moderately; 10 = significantly)
Has your life changed from informal learning on the Web?

Negative
Neutral
Positive

Goals and Motivations
(Blackboard MOOC)

- **Improve their job prospects**
- **Pursue personal interests or hobbies**
- **Seeking certification of some type**
- **Information seeking**
- **Means to expand one's formal learning**

Life Changing Example #1

"**I grew in every possible way.** Not only were my own ideas validated but I was encouraged to go beyond what I thought possible - maybe I would call it "**Extreme DOING**" the other half of extreme learning no? These bold steps have shaped my personal and professional life to a profound level."

Life Changing Example #2

"Yes, **I view the way I make choices, the way I raise my children, the way I teach, the way I negotiate international agreements fundamentally different.** There are no huge differences in the decisions because the same set of values inform the decisions, but the approach, the motivations, the incentives are modified in substantial ways as a result."

Life Changing Example #3

Yes. I plan to focus my Ph.D. research on alternative forms of learning (informal DIY) and credit (like open badges) and the changes higher ed and employers will have to make to accept these forms of credit.

Life Changing Example #4

It has made my job much easier and it's been easier for me to execute certain tasks, **making me more willing to take on bigger challenges.** It was also shown me how enjoyable it is to learn a computer language. **It opened my mind** to considering possibilities in this area. It also **made my husband respect my ability** around computers a bit more.

Life Changing Example #5

Some of my friends tell me that they love the nuggets of information that I share with them when talking about things I learned during short commutes, etc. They have started listening to podcasts and share similar nuggets about the fields that they care about.

Life Changing Example #6

My life has changed in a big way. **I used these new skills to create a small business** that supplements my income. I couldn't use this income soley to support myself, but it does pay some bills.

Life Changing Example #7

Without the opportunity to learn informally, my options within my doctoral program would be limited to the ideas and experience of the three instructors in my program track. I would be graduating with a firm grasp of 20-year old dated ideas!

Life Changing Example #8

"Well, **my life changed in that I thought I knew how important place and stories where to indigenous people...**I learnt loads about indigenous culture and places and loads about augmented reality so now I know I have to change the project to allow students to have the same experience - them creating the content not me which I knew but didn't take it into consideration enough when planning the project....**I wanted to create a project that made students (university) aware of how pervasive indigenous culture is contemporary Australia - how** important place is to indigenous people and how their culture is so connected to place through stories...."

Life Changing Example #9

My life has changed in a big way - as the MOOC helped me to re-design one of the educational approaches in my workplace by providing a more interactive, innovative learning experience.

Life Changing Example #10

It has changed because I have learned new things and got more creative in my own field...The key moment was when I felt that **the world is now becoming open** as Dr. bonk describes it. I don't need to travel to different countries and spend my time and money trying to get a new idea or learn a new skill. I can have the access to quality materials, novel ideas and experts anywhere and any time.

Life Changing Bonus #1

Easy access to the Internet changed my life drastically. I quickly discovered Japanese manga (comics) and anime (animated TV shows). **I spent the next three years absorbing Japanese culture and language voraciously**. .. I got interested enough that I did 1 1/2 years of Japanese as an **online correspondence course**.

Life Changing Bonus #2

While taking a linear algebra course at Everett Community College, I supplemented my formal coursework with video lectures from <http://ocw.mit.edu/courses/mathematics/18-06-linear-algebra-spring-2010/>. I actually began watching the lecture videos in anticipation of taking the class. While learning about eigenvectors and eigenvalues, I found the OCW lecture to be of great help. **I watched it over and over until I understood the material thoroughly. As a result, I aced the formal test and completed it in under 10 minutes!**

Information Seekers (DIYers): Personal Identity

"Today, we were trying to install a pool filter--we got instructions off You Tube. I also just bought a recumbent exercise bike--I looked at online reviews before making a choice." She then added, **"Knowing that I did not need to ask an actual person for help was life changing. I am an introvert by nature, and I prefer to figure things on my own. Knowing that I can research informally on the Web is reassuring."**

Information Seekers (DIYers): Personal Identity

"My informal learning experience did influence my social life, as my travel buddy for the convention **thought that I was incredibly smart** and tremendously "with it," because I knew so much about the city, what to see, and how to get places. **It's nice (if not slightly narcissistic) to be appreciated for your knowledge."**

Joining a Learning Community

"My key moment came when I discovered a **community of like-minded scholars** from around the world. **I no longer felt isolated or disconnected.** This has become my most valuable support network and I am grateful."

Joining a Learning Community
(social and intellectual capital)

"Socially the impact was great as well because **now I have friends I can talk technology** with a lot."

Seeking Relevance

"I almost always listen to podcasts or .mp3 audio books, etc. when biking. **After one session of learning some Korean language on a bike I was on my way home and chose to stop into a store for some take-out food. The conversation was almost identical to the lesson I had just learned.** Although the questions and answers were simple and predictable small talk, it really was surreal at just how closely the real-world small talk conversation matched the mp3 that was produced a few years ago. It really gave me confidence that the audio recording method was not a joke."

Challenges and Issues

- **Discern the quality of information**
- **Evaluate the quality**
- **Informal learning not taken seriously by their superiors**
- **Certificates and badges may reduce sense of fun and learning enjoyment**

MOOC Challenges: Finding Appropriate Ones

"I think the hardest part is finding a MOOC that would work. It is not like there is a directory of MOOCs. You get out what you put in - the more you put in - in terms of writing and connecting the more you will get out of the experience. While the experience is informal - you need to give it more of a formal importance in your daily schedule."

Learning for Enjoyment Versus Credentials and Badges

"Just play around with ideas for alternatives to printed texts and don't be afraid to create your own, even if they're amateurish...I think we need to de-emphasise formal assessment and accreditation and encourage our playful side to see what is possible. Too much informal learning wants to get itself 'badged' or validated too quickly and this means its losing its genuine amateur status."

Learning for Enjoyment Versus Credentials and Badges

March 3, 2016

'Trump U.' Draws Unflattering Spotlight to the Candidate as Fraud Cases Move Forward
Chronicle of Higher Education, Corrine Ruff
http://chronicle.com/article/Trump-U-Draws/235573?cid=trend_right_a

Results: Accomplishments (Kou, 2013)

- **Research (7)**
  - **Obtained information, references, clues, data and ideas on a topic (6)**
  - **Had the potential of real life application (1)**
- **Formal Learning Context (23)**
- **Informal Learning, Self-Study (61)**
- **Social Context (30)**
- **Working Context (26)**
- **Across Context: Enhanced thinking (13)**
- **Across Context: Find solutions to solve a problem, find out how to do something (10)**

Results: Accomplishments Formal Learning Context (Kou, 2013)

- (Before Program) Online learning helped me get prepared for, get interested in, or become confident in pursuing formal schooling or a higher degree (6)

Results: Accomplishments Formal Learning Context (Kou, 2013)

- **fill intellectual hole**
  - I have been out of graduate school for many years and have had this intellectual hole for a while now which these courses are starting to fill for me
- **Feel better:** developed self-respect, gained confidence, developed inner strength, gained sense of self-control
  - it gave me confidence that my intelligence is valued by the best of universities.
  - Yes indeed on a personal level I developed self respect for my own self, I started realizing the potential I had and I found out that I can make an impact in the society with the knowledge I gained
- **Motivated to become a selfless human being**
  - It has also motivated me to become a selfless human being , if all of us spend some time and share our knowledge then one day everyone will be educated

Results– Accomplishment: Social Context

- **Become cool in social life, attract interests from people around, got recognition for my knowledge and skills, opened up conversations**
  - I got better grades in my studies, more appreciation, and more respect from people toward the activity I do.
  - Yes it has impect on my life in the way mostly me friend consult me when thay got some problem which thay can not solve.
  - I had new and interesting topic for discussions.

Results– Accomplishment: Social Context

- **parenting-Became better parents, less stressful, make home school easier**
  - Significant changes. We can say we are "homeschooling" and yet the curriculum and materials are available online and I can support my kids while they have the loose structure of the courses…. Knowledgeable teachers allow me to facilitate and not have to relearn everything.
  - Studying online at MIT has made me a better professor, a better dad

Results– Accomplishment: Work Context

- Got certificate for a profession, Got ready for job market, Did well on job interview, Got a job (7)
- Gained useful information, expertise, strategies and perspectives for my job
- Improved work performance, useful to work, retain my job, applied learning to job, impact on business (11) (Including teachers)
- Feel more confident or secure in my job (2)
- Career change or may lead to career change, Ability to switch jobs easily (3)

Results– Accomplishment: Across Context

- **introduced to cultural diversity; more open minded, see things in different light**
  - I have learned numerous approaches to viewing subject matter. The peer forum portion of the course and it's global reach is enriching.
  - I find myself more generally open to new ideas and want to engage in conversations and doing new things.
  - It introduced me to cultural diversity, which is almost non-existent where I live. I think that this exposure to other cultures is one of the main reasons that I find racism absurd. It also interested me in many new activities…

Results– Accomplishment: Other Impact

- **Changed learning pattern**--open my eyes for online learning, engage in more online learning, take advantage of technology (5)
- **Changed life pattern:** spend time on learning instead of entertainment (2)
- **Changed life pattern:** take a different (better) course in life (1)
- **Changed life pattern:** become busier than before (1)
- **Changed life pattern:** life enriched (for older or disabled people), Developed interest in new activities, Found something challenging (4)
- **Changed life plan:** could retire but will continue to study (2)
- **Do NOT have to change:** can continue work due to easy access and flexibility of online learning (1)
- **Impact on society:** help addicted people turn to learning (1)
- **Impact on the world:** influence on foreign educational system (1)

Informal Learner Characteristics

- **Strong intrinsic motivation, pride themselves being a "self-directed learner" ---"my own pleasure" and values autonomy, considers it empowering**
- **Considers sharing as important part of educ/learning**
- **Takes pride in creating and contributing**
- **Enjoys the community of people with similar interests---but not necessarily the human f2f interaction**

Informal Learner Characteristics: Values SDL

"I continue to research my interests for my own pleasure, especially on sites like Amazon for books and e-books, and have ongoing email alerts for journal content. I also use online sources for job hunting and professional networking."

Informal Learner Characteristics: Self-Reliant

"Knowing that I did not need to ask an actual person for help was life changing. I am an introvert by nature, and I prefer to figure out things on my own. Knowing that I can research informally on the Web is reassuring."

Components of Successful MOOC Learner

- **Self-motivated**
- **Enjoys sense of creating**
- **Shares their creation**
- **Delights in wide range of info resources**
- **Takes pride in learning on their own**

Time for a short break… ☺

Slides at: TrainingShare.com
Papers: PublicationShare.com
Books: http://worldisopen.com/
Email: curt@worldisopen.com
cjbonk@Indiana.edu

One Approach:
The R2D2 Model
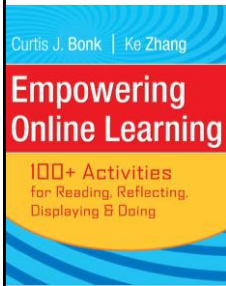
The R2D2 Method

1. **Read (Auditory and Verbal Learners)**
2. **Reflect (Reflective Learners)**
3. **Display (Visual Learners)**
4. **Do (Tactile, Kinesthetic, Exploratory Learners)**
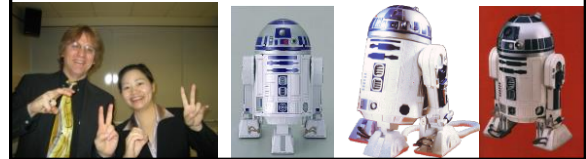
1. Auditory or Verbal Learners

• **Auditory and verbal learners prefer words, spoken or written explanations.**

Read 1a. Grammer Checkers
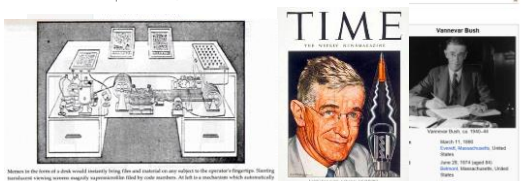### (e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)
http://www.grammarly.com/

Read 1b.
Exploring the Life of a Prominent People (Wikipedia)
http://en.wikipedia.org/wiki/Vannevar_Bush

JULY 1945

As We May Think

VANNEVAR BUSH | JUL 1 1945, 12:00 PM ET

2. Reflective and Observational Learners

• **Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives**

April 13, 2016
Reflect 2a. Interactive Graphs
Tech billionaire announces $250 million in cancer immunotherapy funding,
Jayne O'Donnell, **USA Today**
http://www.usatoday.com/story/news/2016/04/13/billionaire-announces-250-million-cancer-immunotherapy-funding/82821198/
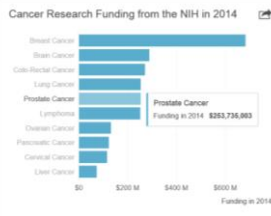
August 5, 2015
Reflect 2b.
More Interpreting Infographics
How much rainforest in that chocolate bar?
Global Forest Watch, Nancy Harris, Octavia Payne and Sarah Mann
http://blog.globalforestwatch.org/2015/08/how-much-rainforest-is-in-that-chocolate-bar/
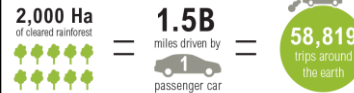
Reflect 2c. Cultural Blogs (e.g., Dr. Kim
Foreman, San Fran State Univ, Come and See Africa Blog;
http://comeandseeafrica.blogspot.com/)
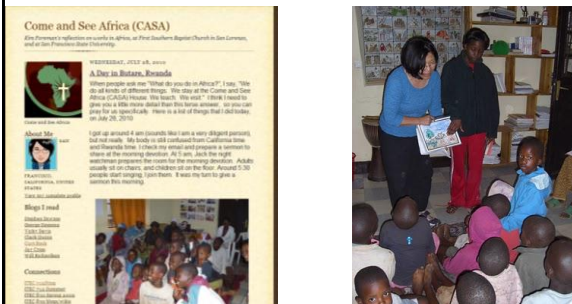
3. Visual Learners

- **Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.**

Display 3a. Map Animations
Yes, Mr. President, We Remade Our
Atlas to Reflect Shrinking Ice
Christine Dell'Amore, National Geographic, August 3, 3015
http://news.nationalgeographic.com/2015/08/150803-arctic-ice-obama-climate-nation-science/?utm_content=buffer8a394&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

**Display 3b. Virtualize Words Used
(e.g., Wordle, Tagzedo, Tagul,
WordSift, Word It Out)**

Display 3c. (April 28, 2015)
Concept Mapping and Timeline Tools
(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)
http://www.spicynodes.org/index.html

4. Tactile/Kinesthetic Learners
• **Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.**

December 8, 2015
Do 4a. Student Final Project Videos
P540 Final Assignment: Learning Theories and Psychotherapy , Shu-Yi Wang
https://www.youtube.com/watch?v=PNMpGjnXAjM

March 12, 2016
Do 4b. Timeline
R678 John Falchi, Timeglider, An Abbreviated History of Distance Education
http://timeglider.com/t/50843d8903a48008?min_zoom=1&max_zoom=100
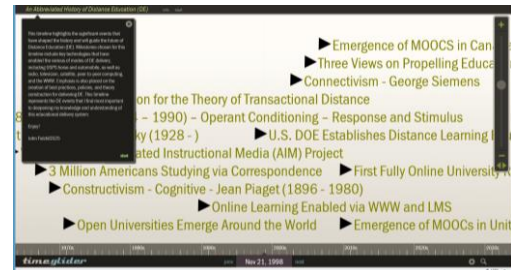
December 8, 2015
Do 4c. Take a MOOC
P540 Final Assignment for Meina Zhu: MOOC, Coursera, Introduction to Psychology, University of Toronto
https://www.coursera.org/course/intropsych
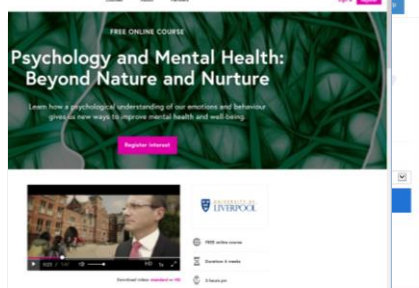
Do 4d. Website Development
R511 Final Projects, April 2016
IT and HPT Comparison (Website)
Doug Hsu
http://dougandindira.wix.com/r511finalproject

Poll #2:
Any ideas so far?

Needed: New Models of Motivation and Engagement
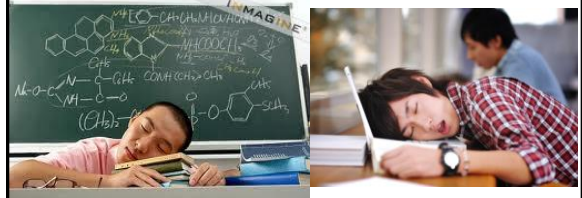
Poll #3: Do you know what happens to sleeping students?

IF YOU DON'T STUDY

You shall not pass!
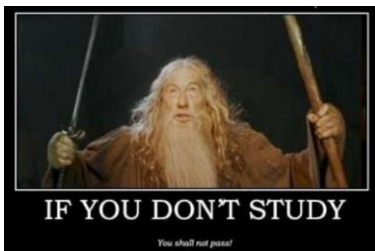
How do we engage online?

What works today?

Engage!
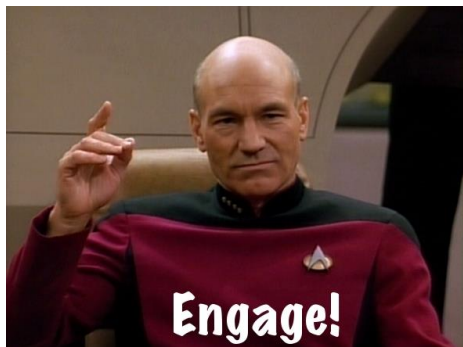
Poll #4: Million Dollar Question: What words come to mind when I say that I want to motivate learners?

ONE BILLION DOLLARS

Motivation Research Highlights
(Jere Brophy, Michigan State University)

1. **Supportive**, appropriate **challenge**, **meaningful**, moderation/optimal.
2. Teach **goal** setting and self-reinforcement.
3. Offer **rewards** for good/improved performance.
4. Novelty, **variety**, **choice**, adaptable to interests.
5. Game-like, **fun**, fantasy, curiosity, suspense, active.
6. Higher levels, divergence, dissonance, **peer interaction**.
7. Allow to create finished **products**.
8. Provide immediate **feedback**, advance organizers.
9. Show intensity, **enthusiasm**, interest, minimize anxiety.
10. Make content **personal**, concrete, familiar.

Framework: TEC-VARIETY for Online Motivation and Retention

1. **T**one/Climate: Psych Safety, Comfort, Belonging
2. **E**ncouragement, Feedback: Responsive, Supports
3. **C**uriosity: Fun, Fantasy, Control
   ...
4. **V**ariety: Novelty, Intrigue, Unknowns
5. **A**utonomy: Choice: Flexibility, Opportunities
6. **R**elevance: Meaningful, Authentic, Interesting
7. **I**nteractive: Collaborative, Team-Based, Community
8. **E**ngagement: Effort, Involvement, Excitement
9. **T**ension: Challenge, Dissonance, Controversy
10. **Y**ields Products: Goal Driven, Products, Success, Ownership

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Introducing the free "TEC-VARIETY" Framework...
http://tec-variety.com/
http://tec-variety.com/TEC-VARIETY-Chinese.pdf
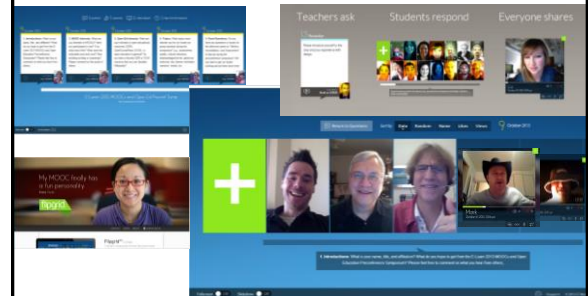
ADDING SOME TEC-VARIETY

在线学习动机与激励:
TEC-VARIETY 模型
——激励和留住在线学习者的100个活动
作者：Curtis J Bonk & Elaine Khoo   IU

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1. Tone/Climate: A. Threaded Video Discussions, e.g., Flipgrid
http://flipgrid.com/#429f88c5)

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2. Encouragement, Feedback, etc.: A. Instructor Course Introductions
(Theatre 10 Intro Video, October 7, 2014, Elizabeth Dale, West Valley College)
https://www.youtube.com/watch?v=_Wzbzc3QiiA
Chuck Severance, U Michigan/Coursera) in Barcelona
http://www.youtube.com/watch?v=JzNHvmSv8TI
Chuck Severance, University of Michigan
https://www.coursera.org/course/pythonlearn

April 1, 2016
3. Curiosity, Fun:
A. Something in the News
(e.g., Potential Vikings site in North America spotted from space, Jareen Inman, CNN)
http://www.cnn.com/2016/04/01/world/vikings-site-space-irpt/index.html

November 19, 2015
3. Curiosity, Fun: B. Something in the News
New daddy longlegs named after 'Lord of the Rings'

January 14, 2016
3. Curiosity, Fun:
C. Something in the News
Move over T. rex, new dinosaur unveiled, Amanda Jackson, CNN
http://www.cnn.com/2016/01/14/living/titanosaur-new-dinosaur-on-display-new-york-irpt/

3. Curiosity, Fun:
D. Something in the News
(e.g., This may be the oldest surviving Photo of a human,
November 7, 2014, CNN, Brandon Griggs; But this
image, taken in Paris, France, in 1838)
http://www.cnn.com/2014/11/06/living/oldest-photograph-human-daguerre/index.html?hpt=hp_t4 kong
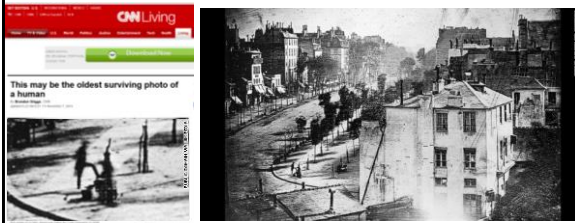
4. Variety, Novelty, Fun, Fantasy:
A. Voice/Audio Feedback
Vocaroo: http://vocaroo.com/
http://vocaroo.com/delete/s0x8moQAYAiu/a37bbc9408bb8c95
(Recorded by Curt Bonk for the Open University of China)

4. Variety, Novelty, Fun, Fantasy:
B. Video Editing and Commenting Tools
(e.g., TubeChop)

How Does It Work?

1. Find the video you want to chop.
2. Select & cut interesting part of the video.
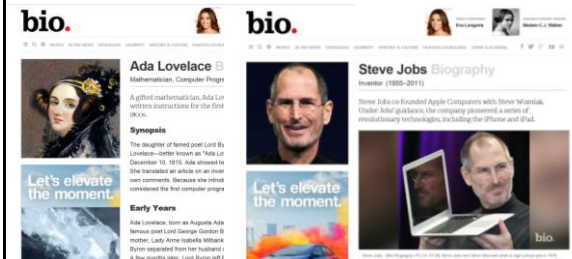3. Share it with friends.

Watch Examples

5. Autonomy, Choice:
A. Enroll in a MOOC and Reflect
(e.g., see Class Central)
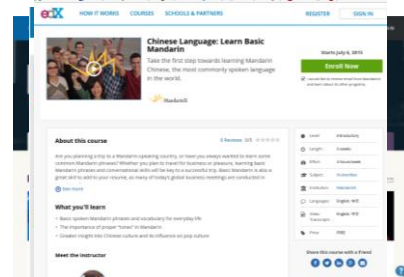
5. **A**utonomy, Choice:
B. Tracking the Life of a Computer Scientist (bio.com)
http://www.biography.com/people/steve-jobs-9354805
http://www.biography.com/people/ada-lovelace-20825323

6. **R**elevance, Meaningfulness:
A. Guest Chats (e.g., Emily Hixon, January 20, 2015)
https://connect.iu.edu/p259wpiabg9/

June 12, 2015
6. **R**elevance, Meaningfulness:
B. Something in the News and Infographic
Twitter CEO Dick Costolo replaced by co-founder Jack Dorsey, Laura Onita

7. **I**nteractive, Collaborative:
A. Backchannel Chat (TodaysMeet)
https://todaysmeet.com/
R678_Emerging_Learning_Technologies
https://todaysmeet.com/R678_Emerging_Learning_Technologies
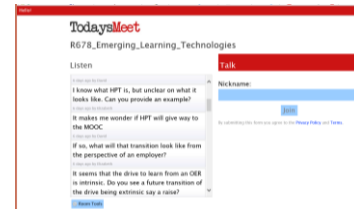
7. **I**nteractive, Collaborative:
B. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)
http://blogs.elon.edu/technology/6-collaborative-writing-applications-for-group-projects-or-papers/
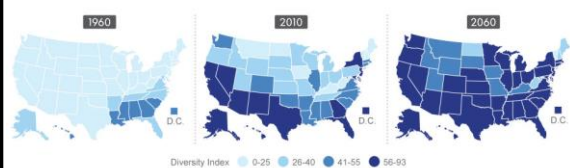**MeetingWords, Google Docs, NowComment, MixedInk**

8. **E**ngagement, Effort:
A. Interactive Timeline Maps,
October 22, 2014, Second immigration wave lifts diversity to record high, Edward Greg Toppo and Paul Overberg, USA Today
http://www.usatoday.com/longform/news/nation/2014/10/21/diversity-race-ethnicity-change-100-years/18211133/

March 13, 2015
9. Tension, Challenge, etc.:
A. Controversial Issue Debates
R511 Midterm Video How to Create an Authentic Environment in a Content-Driven School?, R511, Nick and Nik
https://www.youtube.com/watch?v=Bcr3_aZT_xQ&feature=youtu.be

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10. Yields Products, Goals:
A. Student Created Videos
Piercarlo Abate: http://www.youtube.com/watch?v=_-TURzHO0aU
Qi Li, Gangnam: http://www.youtube.com/watch?v=7Q429lqxZaU&feature=youtu.be
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9lW8
Kendal Rasnake (Is IT Right For You?): https://www.youtube.com/watch?v=MJ3GUDICIGw
Kimberly Vincent-Layton: https://www.youtube.com/watch?v=4Ic39_rYLII&feature=youtu.be

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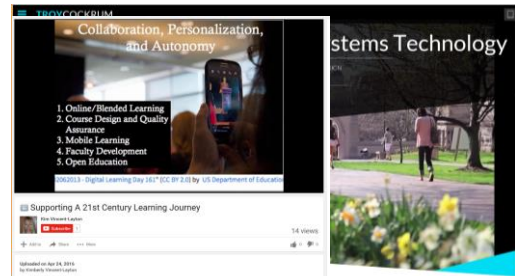
10. Yields Products, Goals:
B. Student Created Videos
R678 Final Projects, April 2016
The Making of an Adventurer (video), Troy Cockrum
https://www.youtube.com/watch?v=ew6e7Chd9I8

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10. Yields Products, Goals:
C. Collection Tools
Design Article Database in Pinterest, Meina Zhu
https://www.pinterest.com/zhumeina0000/r-678-emerging-learning-technology/

Poll #5: Which do you prefer... (A) TEC-VARIETY or (B) R2D2?

Merrill's First Principles of Instruction
http://mdavidmerrill.com/Papers/FirstPrinciplesReigeluthCarr.pdf

Bonk's Last Principles of Teaching/Instruction
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

1. The Principle of Flexibility
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

2. The Principle of Convenience
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

3. The Principle of Collegiality
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

4. The Principle of Cheerfulness and Optimism
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

5. The Principle of High Expectations
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

6. The Principle of Choice and Options
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

7. The Principle of Empowerment and Autonomy
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

8. The Principle of Support and Feedback
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

9. The Principle of Spontaneity
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

10. The Principle of Organization
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

11. The Principle of Sharing
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

12. The Principle of Nontraditional Learning
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

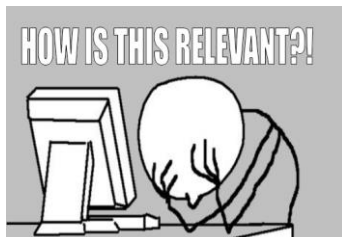## 13. The Principle of Passion and Inspiration
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

14. The Principle of Relevance and Meaningfulness
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

15. The Principle of Trial and Error (i.e., it is ok to fail)
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

16. The Principle of Expanded Resources
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

17. The Principle of Human Connectedness
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

18. The Principle of Cognitive Apprenticeship
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

19. The Principle of Purpose and Vision
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

"One Purpose"

20. ??? (what is missing)
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

SOMETHING IS MISSING
and i dnt know what it is

Debriefing of Bonk's Last Principles of Instruction and New Instructor Roles
http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html

Poll 6: How many ideas did you get from this talk?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.
7. More than 10.

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