

# 30 Emerging Learning Technologies

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# Technology of the 1980s



**Radio Shack TRS-80 Model III**  
Introduced: July 1983  
Price: US \$899 base model / US \$245 w/ 20K, dual drives  
CPU: Zilog Z-80, 2.03 MHz  
RAM: 4K, 48K max.  
Ports: Cassette tape, expansion, serial  
Display: 12 inch B&W monitor 8.4 x 11.6 in.  
Storage: 0, 1, or 2 internal 175K floppy drives / External cassette @ 500 / 1500 baud  
OS: BASIC in ROM, TRS-DOS on disk



# Knowledge Navigator (1987) Apple Computer

<http://www.youtube.com/watch?v=hb4zF6wEoc>



# Fast Forward 25+ Years... "Anyone can now learn anything from anyone at any time."

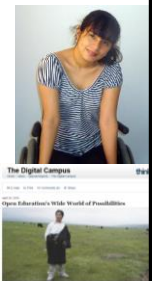


# Learning is Changing New Technologies = New Delivery Methods...



# Learning is More Open (80-Year-Old WGU Texas Grad Keeps His Promise, November 30, 2012, Reeve Hamilton, Texas Tribune)

THE TEXAS TRIBUNE  
An 80-Year-Old Graduate With an Online Marketing Degree Kept His Promise



## Tech #1. Tablet Computing



## Tech #2. Digital Books



## OpenStax College

(OpenStax College offers students free textbooks that meet scope and sequence requirements for most courses. These are peer-reviewed texts written by professional content developers.)

<http://openstaxcollege.org/>

## Tech #3. User-Designed E-Books. How to turn Wikipedia into an e-book, John D. Sutter

[http://www.cnn.com/2012/09/18/tech/mobile/wikipedia-e-book/index.html?hpt=hp\\_13](http://www.cnn.com/2012/09/18/tech/mobile/wikipedia-e-book/index.html?hpt=hp_13)

## Tech #4. Social Books (e.g., Subtext; <http://subtext.com/>)

## Tech #5. Smartphones and Mobile Learning

## How Are You Feeling Today? A New Mood-Measuring App Can Tell You, Paula Bernstein, Fast Company, December 2013

<http://www.fastco2rate.com/1682514/how-are-you-feeling-today-a-new-mood-measuring-app-can-tell-you>



### HOW ARE YOU FEELING TODAY? A NEW MOOD-MEASURING APP CAN TELL YOU

BY PAULA BERNSTEIN

A new mood-sensing app could help people track their emotions and their emotional triggers.

2 NOTES 2 PIN 7 PLAN 203 TWIST 30 LIKE 24 SHARE

Feeling stressed out? Angry? Happy? Not sure how you're feeling? Soon there will be an app that will help you identify and track your moods.

Apresion, developed by U.K.-based IT Technogig, is a mood-sensing app intended to enable people to track their emotions as well as what triggers them.

## Tech #6. Learning Portals Google Art Project, NBC Nightly News

<http://www.msnbc.msn.com/id/3032619/vp/46945508#46945508>



## Announcing MERLOT II: Multimedia Educational Resource for Learning and Online Teaching

<http://www.merlot.org/merlot/index.htm?action=find>



## Possible Learning Portals for ACSM?



## Tech #7. Media Tools: Timelines, Maps, Pics, Videos, etc. (e.g., USA Today, August 26, 2011)

<http://www.usatoday.com/story/news/nation/2011/08/25/Martin-Luther-King-Jr-Memorial-in-Washington-a-closer-look/31303-3#st=3>

### Martin Luther King Jr. Memorial in Washington: A closer look

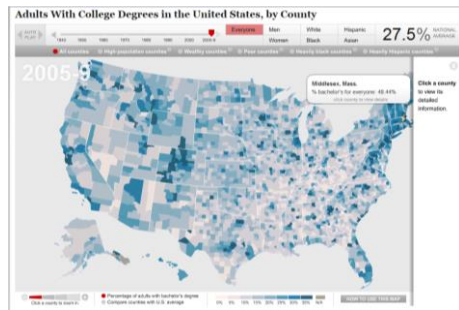


### New USDA climate zone map reflects northwest warming trends

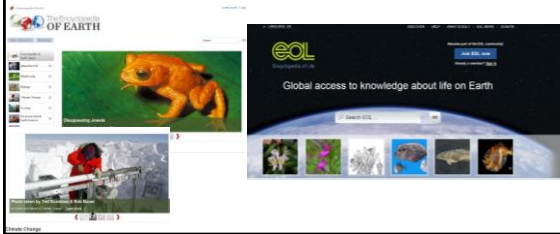


## Interactive Map Timelines (adults with college degrees by county, May 7, 2012)

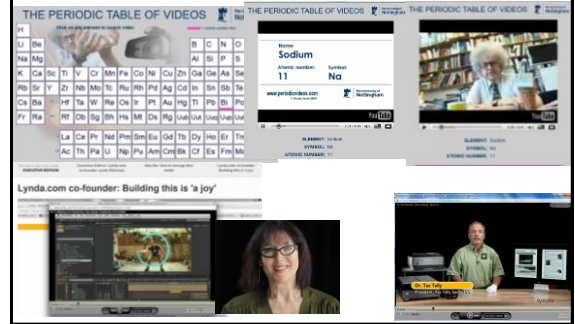
[http://todayscampus.com/article/North\\_Hampson\\_interviews\\_sash\\_keller\\_on\\_interactive\\_graphics\\_for\\_higher\\_education](http://todayscampus.com/article/North_Hampson_interviews_sash_keller_on_interactive_graphics_for_higher_education)



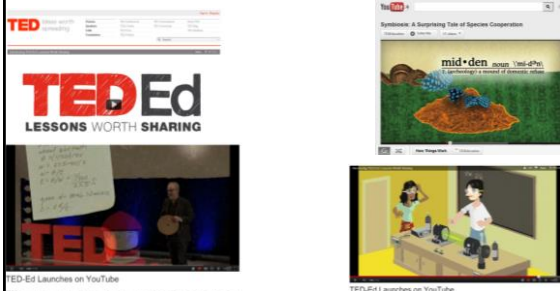
**Tech #8. Online Referenceware**  
 (e.g. the (Encyclopedias, Dictionaries, etc.)  
 Encyclopedia of Life, Encyclopedia of Earth, etc.)  
<http://www.eoearth.org/> <http://eol.org/>



**Tech #9. Shared Online Video.**  
 (Videos of the Periodic Table, Univ of Nottingham)



**March 13, 2012**  
**Educational Videos: TED-Ed**  
<http://education.ted.com/>



**Videos for clinical education**  
 (Sungkyunkwan University School of Medicine,  
[www.mededu.or.kr](http://www.mededu.or.kr))



**TV Lesson**  
 (expert videos)

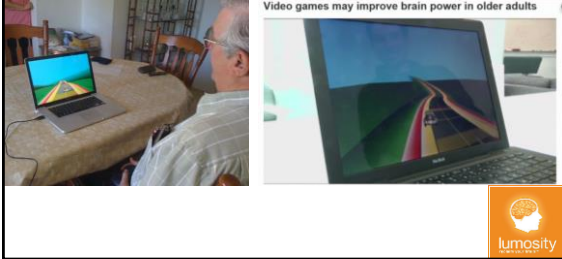


**Tech #10. Simulations**



**Tech #11. Video games** Video games may improve brain power in older adults

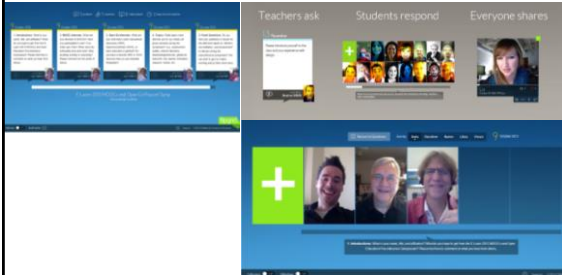
Video games may improve brain power in older adults, September 5, 2013  
<http://www.usatoday.com/story/news/nation/2013/09/04/video-games-brain-power-STEM/276452/>



**Tech #12.** Vlogs (Blogs with video)



**Tech #13. Video-Based Online Discussions** (e.g., Flipgrid; see <http://flipgrid.com/#429f88c5>)



**Tech #14. Audio and Voice Feedback**

Vocaroo; <http://vocaroo.com/>  
 ACSM: <http://vocaroo.com/i/s0ttwy2B8qlA>

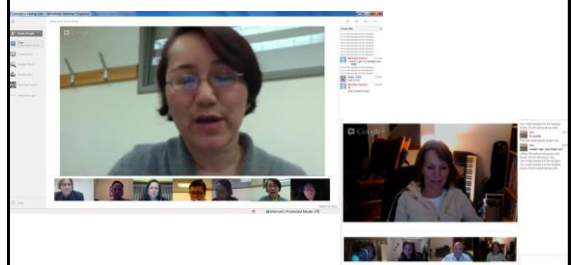


**Collect and Listen to Interactive Stories**

(e.g., Meograph: <http://www.meograph.com/>)  
 Timelines with Oral Histories, Slavery and the Making of America  
 Time and Place, PBS  
<http://www.pbs.org/wnet/slavery/timeline/1857.html>



**Tech #15. Web Conferencing Using Google Hangouts for Class** (January 2013)



## Jabber Web Conferencing


December 2013




## Guest Speakers

### Designing a New Learning Environment

Professor Paul Kim, Stanford University  
<http://venture-lab.org/education/lectures/45>



## Tech #16. Videoconferencing

(first demo in 1964 at the World's Fair; use increased in 2003)



## Tech #17. Virtual Mentoring and Tutoring



## Tech #18. Online Learning

### Why I spent 10<sup>th</sup> grade online. Sophia Pink, Washington Post, August 23, 2013

<http://www.washingtonpost.com/opinions/why-i-spent-10th-grade-online/2013/08/23/>

Why I spent 10th grade online




Video: Sophia Pink describes how she finished 10th grade online and why she's choosing to go back to the classroom.

By Sophia Pink, Published: August 22. E-mail the writer

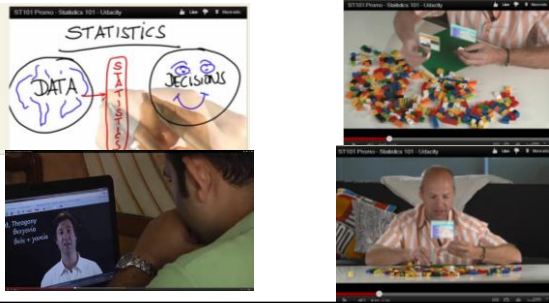
## Tech #19. Online Testing

(Quizlet; <http://quizlet.com/>)



## Tech #20. Massive Open Online Courses (MOOCs).

(Courses from Statistics to Physics to Biology to ???)



**August 5, 2013**

## Free Online Higher Education: 5 Best MOOCs

By **Kannan Sankaran, Epoch Times**

<http://www.theepochtimes.com/n3/229540-5-best-moocs-for-free-online-higher-education/>

MOOC at UPenn; Recession Fuels Explosion of Online Learning

<http://www.youtube.com/watch?v=52rFIM40ISw>



**November 2, 2012**

## The Year of the MOOC, New York Times, Laura Pappano,

[http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html?\\_r=1](http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html?_r=1)



Clockwise, from top left: an online course in circuits and electronics with an M.I.T. professor (edX); statistics, Stanford (Udacity); machine learning, Stanford (Coursera); organic chemistry, University of Illinois, Urbana (Coursera).

## Master's Degree Is New Frontier of Study Online, August 17, 2013, The New York Times

By **Tamar Lewin**

<http://chronicle.com/article/MOOCs-May-Not-Be-So-Disruptive/140965/>



Dr. Gail, the dean of the College of Computing at the Georgia Institute of Technology, the institute plans to offer a master's degree in computer science through massive open online courses, or MOOCs.

## This Holiday Season, Learn on the Go with the New Coursera App for iOS!

**Coursera Blog, December 8, 2013**

<http://blog.coursera.org/post/69518555384/this-holiday-season-learn-on-the-go-with-the-new>



## Tech #21. Wikis: Collaborate and Crowdsource Content



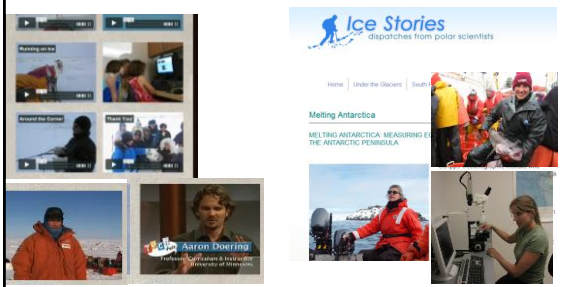
### Tech #22. Twitter (microblogging)



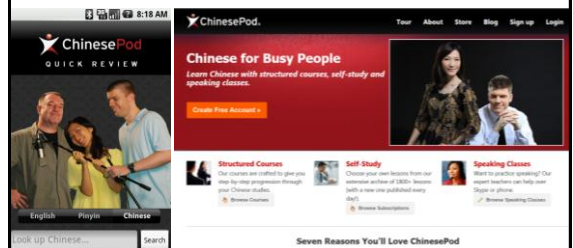
### Tech #23. Facebook Fan Pages (class, department, university collaboration sites)



### Tech #24. Adventure Learning



### Tech #25. Online Language Learning (e.g., 300,000 people per month listening to ChinesePod, co-hosted by Jenny Zhu, John Pasden, and Ken Carroll)



### Tech #26. Virtual Worlds and Augmented Reality (Class Meetings with Experts in Virtual Worlds)



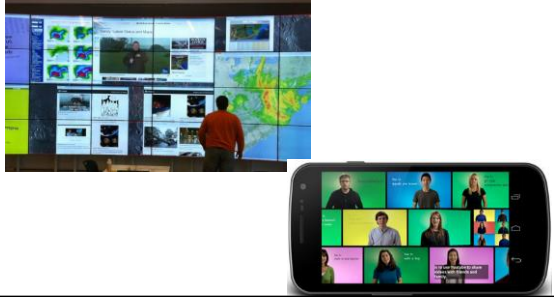
### Tech #27. Google Glass. June 27, 2012 ABC News, Google I/O Conference: Project Glass Prototype For Sale

<http://abcnews.go.com/Technology/google-project-glass-2012/google-offer-of-people-i-o-conference/story?id=16663325>

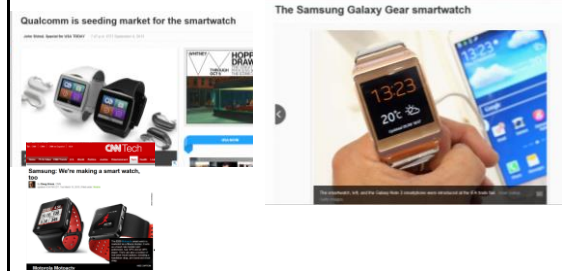




## Tech #28. Video Walls of Experts (IQ Wall)



## Tech #29. Expert Access from Our Watches September 4, 2013



## Tech #30. Interactive News and Science Globes, January 7, 2013, Digital

Globes Offer a Dynamic Vision, NY Times, Mark Vanhoenacker  
[http://www.nytimes.com/2013/01/08/science/digital-globes-a-new-way-to-view-the-world.html?r=1&hpid=hp\\_tech&hpt=hp\\_tech](http://www.nytimes.com/2013/01/08/science/digital-globes-a-new-way-to-view-the-world.html?r=1&hpid=hp_tech&hpt=hp_tech)

Digital Globes Offer a Dynamic Vision



## Any Questions?



Slides at: [TrainingShare.com](http://TrainingShare.com)  
 Papers: [PublicationShare.com](http://PublicationShare.com)  
 Book: <http://worldisopen.com/>  
 Email: [curt@worldisopen.com](mailto:curt@worldisopen.com)

