[Image of a child using a "Winky Dink" drawing kit to draw on a TV screen as they watch the 1950s kids program.]

A girl uses her “Winky Dink” drawing kit to draw on a TV screen as they watch the 1950s kids program.

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**Technology of the 1980s**

- **Commodore 64 Model II**
  - Built in: 400 electronics
  - Keyboard: 104 keys
  - RAM: 64K
  - Expansion: 800K
  - System: 8-bit
  - Features: Built-in sound, graphics, and MIDI

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**Technology of Today…**

- **iPad Apps for Calculus, Math, Biology, etc.**
  - iPad Apps for CollegeCourses / 1/30/11
  - Ben Wieder
  - Chronicle of Education

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**Tech #1. Tablet Computing**

- **At Pepperdine University**
  - Timothy Lucas, an assistant professor of mathematics, shows a class how to use iPads for calculus.
  - Linda Johnson, an assistant professor of biology at Chatham U., for her plant-physiology.
Lessons on iPad
(e.g., ShowMe: http://www.showme.com/)

10 Terrific iPad Apps for Toddlers, August 2, 2012, Mashable, Allegra Tepper
http://mashable.com/2012/08/03/ipad-apps-toddlers/

10 Terrific iPad Apps for Toddlers, August 2, 2012, Mashable, Allegra Tepper
http://mashable.com/2012/08/03/ipad-apps-toddlers/

Tech #2. Digital Books

How to turn Wikipedia into an e-book, John D. Sutter

Tech #4. Social Books
(e.g., Subtext; http://subtext.com/)
Tech #5. Smartphones and Mobile Learning

http://www.newyorker.com/online/blogs/johncassidy/2014/02/facebook-and-whatsapp-a-deal-too-far.html

Tech #6. Learning Portals

Logic Art Project, NBC Nightly News
http://www.msnbc.msn.com/id/3032619/vp/46945508#46945508

Tech #7. Media Tools: Timelines, Maps, Pics, Videos, etc. (e.g., USA Today, August 26, 2011)
Tech #8. Online Referenceware
(e.g. the (Encyclopedias, Dictionaries, etc.)
Encyclopedia of Life, Encyclopedia of Earth, etc.)

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

Tech #10. Simulations

Tech #11. Vlogs (Blogs with video)
Tech #12. Podcasts and Audio Files
(e.g., author book and research interviews)

Tech #13. Case-Based Learning: Online Cases and Scenarios (e.g., Mark Braun, IU)

Tech #14. Concept Mapping and Timeline Tools
(Bubbl.us, Cmap, Gliffy, Mindmeister, or Mindomo)

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

Google Hangouts Web Conferencing
(Jay Cross, 10 MOOC experts; February 27, 2013
http://www.jaycross.com/wp/2013/02/hangoutsinmoocs-the-hangout-recording/)
Adobe Connect
(Rey Junco, February 25, 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 Testing
(Quizlet; http://quizlet.com/)
Tech #19. Massive Open Online Courses (MOOCs).
(Courses from Statistics to Physics to Biology to ???)

August 19, 2013
Entrepreneurship Curriculum
NovoEd, Amin Saberi
https://novoed.com/courses/entrepreneurship

September 4, 2013
MOOC Course from Canvas
“The Walking Dead” (UC Irvine)
https://www.canvas.net/courses/the-walking-dead

Master’s Degree Is New Frontier of Study Online,
By Tamar Lewin
http://chronicle.com/article/MOOCs-May-Not-Be-So-Disruptive/140965/

Brazil’s Home-Grown MOOC, Holly Else for
the Times Higher Education,
Inside HE, January 16, 2014
http://www.timeshighereducation.co.uk/news/brazil-home-grown-mooc-veduca-hair-high-hopes/2010440.article

Tech #20.
Mobile MOOCs
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 Crowdsourcex Content

Tech #22. Twitter (microblogging)

Tech #23. Adventure Learning

Tech #24. Online Language Learning
(e.g., 300,000 people per month listening to ChinesePod, co-hosted by Jenny Zhu, John Pasden, and Ken Carroll)


Timothy posts videos of himself speaking several languages on YouTube.

Tech #25. Virtual Worlds and Augmented Reality
(Class Meetings with Experts in Virtual Worlds)
Second Life
(business, law, education, English, medicine)

ABC News, Google I/O Conference: Project Glass Prototype For Sale

Tech #27. Video Walls of Experts (IQ Wall)

Tech #28. Expert Access from Our Watches
September 4, 2013

Tech #29. Interactive News and Science Globes, January 7, 2013
Digital Globes Offer a Dynamic Vision, NY Times, Mark Vanhoenacker

Smartwatches
Tech #30. Concept Animations

Tech #31. Interactive Simulations
http://phet.colorado.edu/en/simulation/energy-skate-park

Tech #32. Screencasts and Tutorials
(Jing, GoView, Screencast)

Tech #33. Comprehensive Online Databases
(e.g., WolframAlpha)
http://www.wolframalpha.com/

Tech #34. Online Anatomy and Biology
http://www.cyber-anatomy.com/

Tech #35. Human Embryology Animations
(Valerie O’Loughlin, Indiana University)
Tech #36.
Survey Research and Market Analysis (e.g., SurveyShare, Zoomerang, SurveyMonkey)

Tech #37.
Student Collaborative Knowledge Building and Sharing (e.g., Popplet: http://popplet.com/)

Tech #38.
Short Video Animations and Reflections (e.g., Ohm’s Law)

Tech #39.
Online Quizzes with Videos (e.g., Want to be an activist? Start with your toys - McKenna Pope, TEDEd) http://ed.ted.com/lessons/want-to-be-an-activist-start-with-your-toys-mckenna-pope

Tech #40.
I Done This, Milestone Planner, and 43 Things

Tech #41.
Simulation Games
Gamification: Separating Fact From Fiction, Chief Learning Officer, Karl Kapp, March 2014

Tech #42.
Video Animations and Simulations

Tech #43.
Social Networking Gaming
CityVille 16.8 million daily users, FarmVille's 16.4 million. CityVille 61.7 million monthly users, FarmVille 56.8 million users. Mashable.

Tech #44.
Crowdsourced Website Donations
(e.g., Scholar Match, Zero Bound, Pave, GoFundMe; http://www.gofundme.com/)

Tech #45.
Collaborative Video Analysis
(Intergalactic Mobile Learning Center (IMLC), a joint University of Michigan (ES)/University of North Texas (CN) endeavor; http://www.intergalacticmlc.org/

Tech #46.
Competition Technology
(e.g., In-ter-stel-lar (math competitions); http://interstellar.mathematics.com/
Tech #47.
Mobile Health (bio sensors)
7 new smartphone features that will help define your future
February 23, 2014, Stewart Wolpin, CNN

Tech #48.
Big Data Visualization Tools
(Harvardx and MITx)
http://harvardx.harvard.edu/harvardx-insights
4. World map of gender composition

How Stuff Spreads:
How Videos Go Viral Part 1, November 11, 2013, Jess

January 20, 2014
6.00x Introduction to Computer Science and Programming MITx on EdX Course Report - 2013 Spring

Tech #49.
Personal Interest Portals
(e.g., Pinterest)
http://www.pinterest.com/pin/80713018296184706/
Tech #50. Mobile Apps for the other training and resources

Tech #51. Interactive Maps
(e.g., New USDA climate zone map reflects northward warming trends, By Janice Lloyd, USA TODAY, January 26, 2012)

Tech #52. Online Study Groups
(e.g., Open Study: http://openstudy.com/)

Tech #53. Mobile Dictionaries

Tech #54. Collaborate using Wikis: PBworks

Tech #55. Online Photomedia
Tech #56. Virtual or Augmented Reality Training
Web-based Land Navigation Trainer Tutorial
http://www.youtube.com/watch?v=KuYF8nQ5C6k
See article: http://www.defensenews.com/article/20130619/TSJ/306190025/LandNavMasses

Tech #57. Virtual Choir (e.g., Eric Whitacre)
http://vimeo.com/22960177
http://www.youtube.com/watch?v=D7o7BrlbaDs

Tech 58. Talking Dictionaries
Oral Online Dictionaries Help Preserve Languages, Cultures Muted by Modernity, The Wall Street Journal, February 18, 2002
http://online.wsj.com/article/SB10001424052970204880404577228982976760026.html

Tech #59. Remote Animal Streaming
Remote Maine puffin colony up close on HD web cam
Clarke Canfield, The Stateman, June 27, 2012

Any Questions?

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
Email: curt@worldisopen.com