

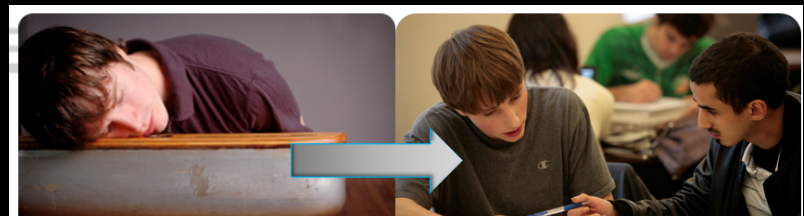
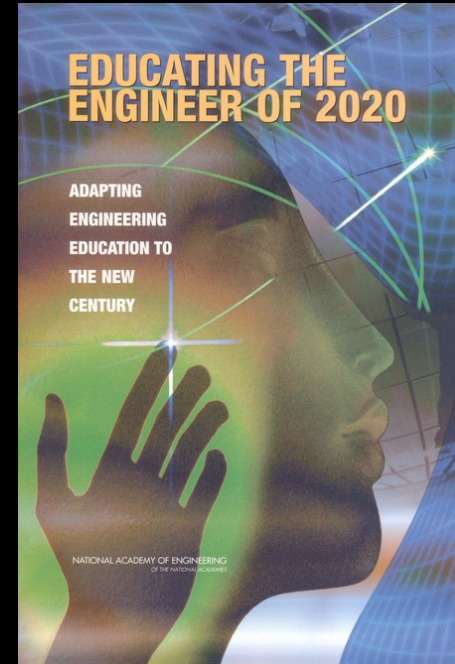


Thank you!
thoroughman@wustl.edu

Wireless: NCIIA_OPEN
 (short URL here to submit goals for online entre ed)



Lhmoore
 @stanford.edu

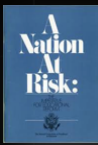


Re-Thinking Engineering Education
 Enabled by TI Microcontrollers

ASEE 2013 Workshops

<http://ti.com/asee2013>

With particular focus on:
 Student Engagement
 Lowest cost to university resources
 Project Based Learning
 Employable Industry Skills



- 1980: DOE formed
- 1981: Education Consolidation and Improvement Act (Reauth. Of ESEA)
- 1983: A Nation At Risk published
- 1989: Charlottesville Education Summit



- 1990: Individuals and Disabilities Education Act (IDEA)
- 1990: Teach For America founded
- 1991: First charter school
- 1994: Improving America's Schools Act (Reauthorization of ESEA)
- 1997: \$2.25B E-rate discounts
- 1997: The New Teacher Project

REALIZATION OF AN EDUCATION CRISIS

TIME OF CHOICE AND INNOVATION

(1979) Apple II
(1981) IBM 5150
(1979) Walkman
(1982) Proliferation of VCRs
(1982) Digital Storage
(1984) Motorola DynaTAC 800X
(1984) NES Video Game Console
(1984) DSL Modem
(1985) Casio fx-7000G
(1986) Apple IIc
(1988) Dell IPO
(1985) NES Video Game Console
(1989) Nintendo Gameboy
(1990) HP expands PC offering
(1990) TI 81
(1990) Apple Macintosh Classic
(1991) Super Nintendo
(1992) HP LaserJet 4
(1995) Sony PlayStation
(1993) Intel Pentium
(1997) Video & Data Storage
(1997) Palm Pilot
(1998) Apple iMac
(1998) eMachines Founded
(1998) TI 89
(1999) Two-...
(1999) Wireless Routers

DIGITAL AGE 1980'S

HARDWARE 2.0 1990'S



(1978) Oracle Version 1
(1973) SAP R/1

(1984) AppleWorks
(1982) Term "internet" is coined
(1983) Microsoft Word

(1985) Windows 1.0

(1991) Linux released

(1992) Windows 3.1

(1993) AOL for Mac & Win 3.X

(1994) Netscape

(1995) Windows 95

(1995) ebay

(1995) Amazon

(1995) Yahoo!

(1997) AOL Instant Messenger
(1996) Hotmail

(1999) Salesforce.com
(1998) Google
(1999) Netflix

THE AGE OF PROCESSING

WORLD WIDE WEB

(1981) The Oregon Trail for Apple II

(1983) IBM 5150
(1983) Apple II

(1989) Math Blaster!

(1991) First SMART Interactive Whiteboard

(1992) Many computers in schools - lack of latest software
(1992) The Oregon Trail for Macintosh

(1994) 3% of classrooms had internet access
(1994) Math Blaster Episode I

(1997) Blackboard Inc.

(1997) Florida Virtual School

(1998) GreatSchools.org

(1998) Newschools Venture Fund

(1999) 64% of class had internet access
(1999) PowerSchool release
(1999) Desire2Learn

TECH AS A PERIPHERAL TOOL

TECH BEGINS TO SUPPLEMENT

In 2s, 3s, 4s: Write and Post Best Practices in:

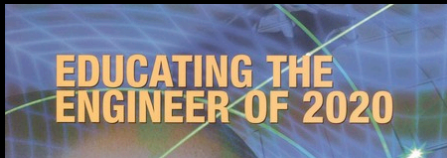
Goals (short URL)

Offline

Entre



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Engineering

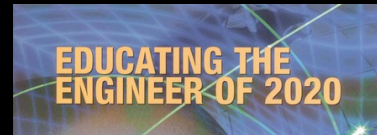


Online

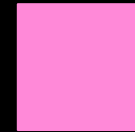
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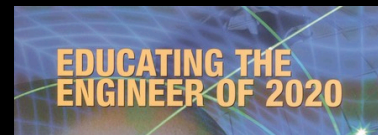
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or



Needs & mashups
(given tech of 2014)



[11 a-noon,
here: Future
tech]



How the rest of the session went...

- All discussed in small groups, posted ideas on room wall around prompts from last slide
- Laurie led discussion of very best practices / ideas / needs from post-its
- Kurt showed paragraphs uploaded in response to prompt: “In a full paragraph please describe your goals for online teaching of engineering, innovation, and entrepreneurship.”
- Kurt processed compilation of submitted text into textisbeautiful.net/create
- Web app discovered themes, connections arising from submitted text; one visualization of this emergent structure shown in next slide “correlation wheel”

