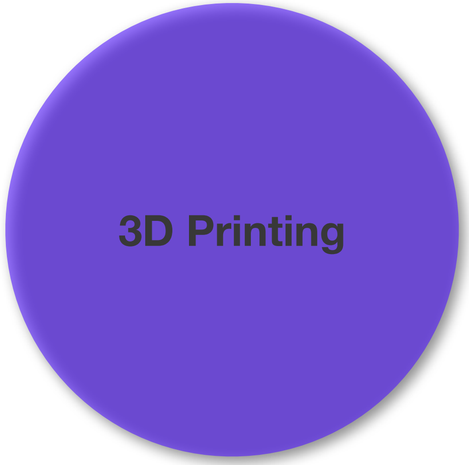
Paths to Transformation:
Putting SAMR and the Horizon Report to Work

Ruben R. Puentedura, Ph.D.

The Horizon Report: 2013 Higher Education Edition

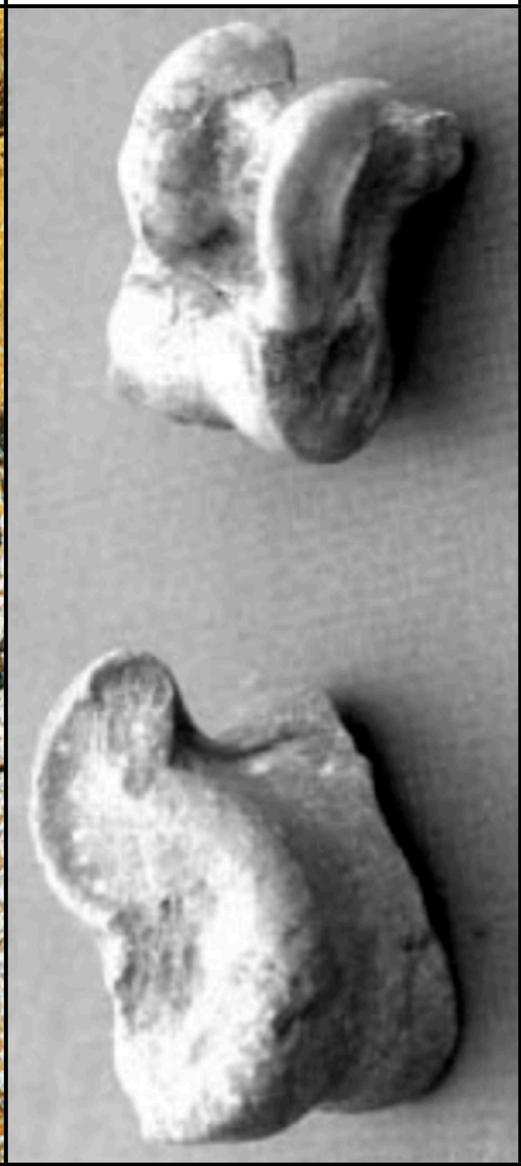
Time-to-Adoption:
One Year or Less

Time-to-Adoption:
Two to Three Years



Time-to-Adoption:
Four to Five Years

Social	Mobility	Visualization	Storytelling	Gaming
200,000 years	70,000 years	40,000 years	17,000 years	8,000 years



The Horizon Report

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
One Year or Less	Learning Objects	Ubiquitous Wireless	Personal Broadcasting	User-Created Content	Grassroots Video	Cloud Computing	Open Content	Electronic Books	Mobile Apps	Massively Open Online Courses
	Scalable Vector Graphics	Extended Learning	Social Computing	Social Networking	Collaboration Webs	Mobiles	Mobile Computing	Mobiles	Tablet Computing	Tablet Computing
Two to Three Years	Rapid Prototyping	Intelligent Searching	The Phones in Their Pockets	Mobile Phones	Mobile Broadband	The Personal Web	Electronic Books	Game-Based Learning	Game-Based Learning	Games and Gamification
	Multimodal Interfaces	Educational Gaming	Educational Gaming	Virtual Worlds	Data Mashups	Geo-Everything	Simple Augmented Reality	Augmented Reality	Learning Analytics	Learning Analytics
Four to Five Years	Knowledge Webs	Social Networks & Knowledge Webs	Augmented Reality and Enhanced Visualization	Massively Multiplayer Educational Gaming	Social Operating Systems	Semantic-Aware Applications	Gesture-Based Computing	Gesture-Based Computing	Gesture-Based Computing	3D Printing
	Context Aware Computing	Context-Aware Computing/ Augmented Reality	Context-Aware Environments and Devices	The New Scholarship & Emerging Forms of Publication	Collective Intelligence	Smart Objects	Visual Data Analysis	Learning Analytics	Internet of Things	Wearable Technology

Redefinition
Tech allows for the creation of new tasks, previously inconceivable

Modification
Tech allows for significant task redesign

Transformation

Augmentation
Tech acts as a direct tool substitute, with functional improvement

Substitution
Tech acts as a direct tool substitute, with no functional change

Enhancement

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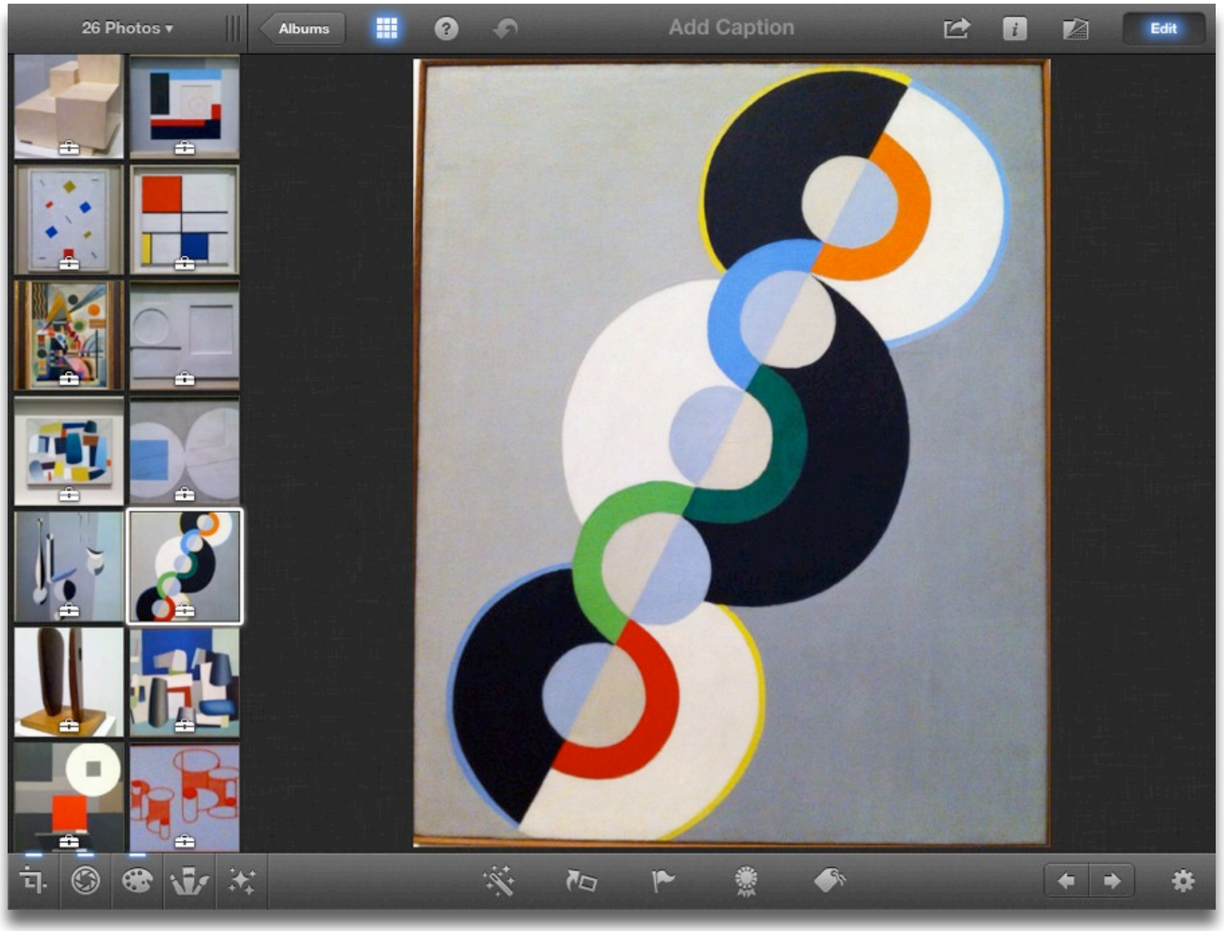

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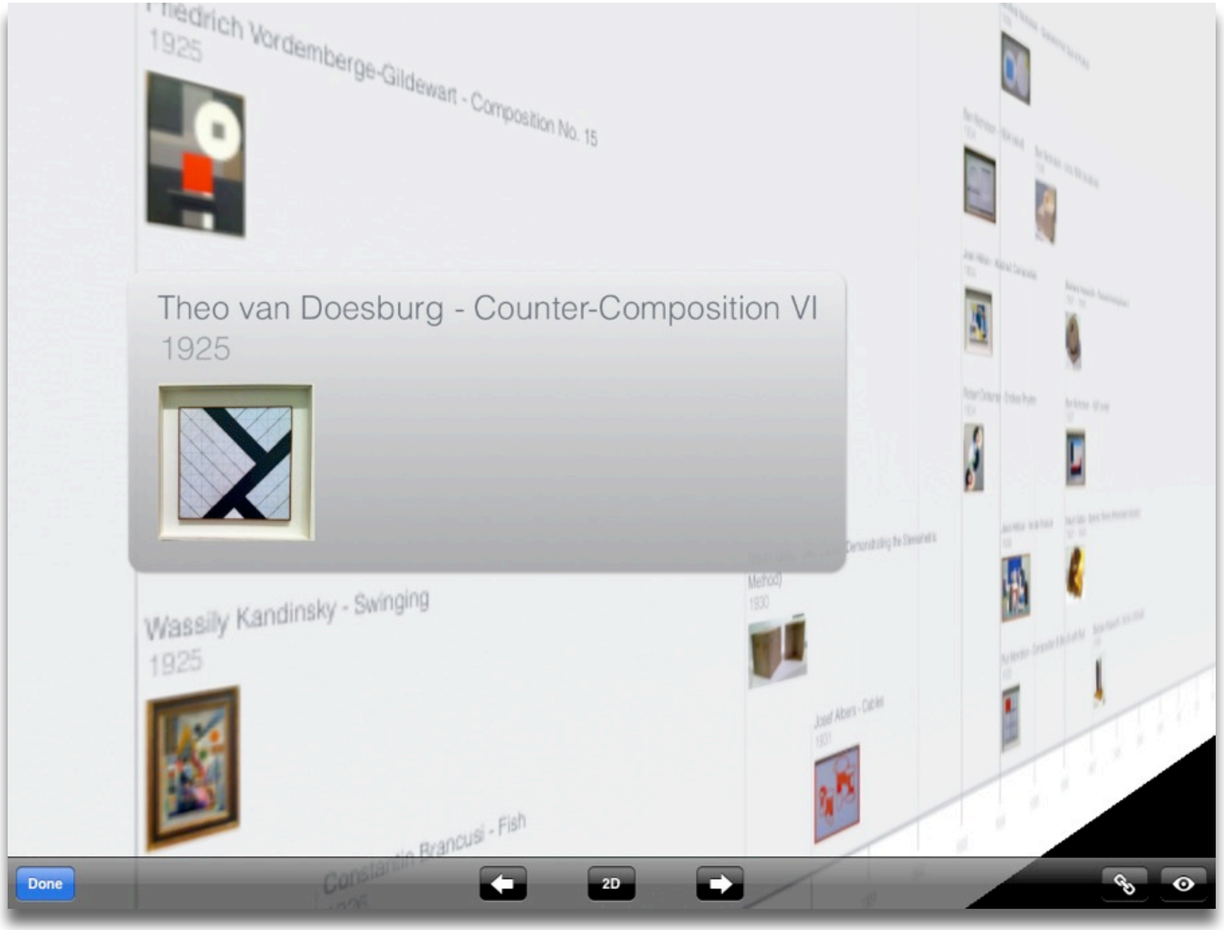

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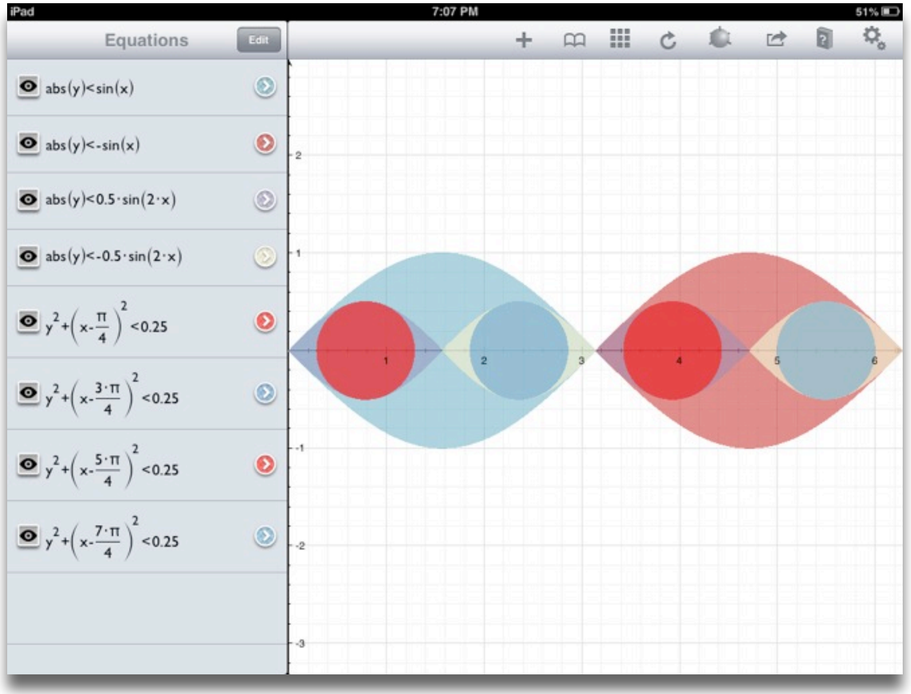

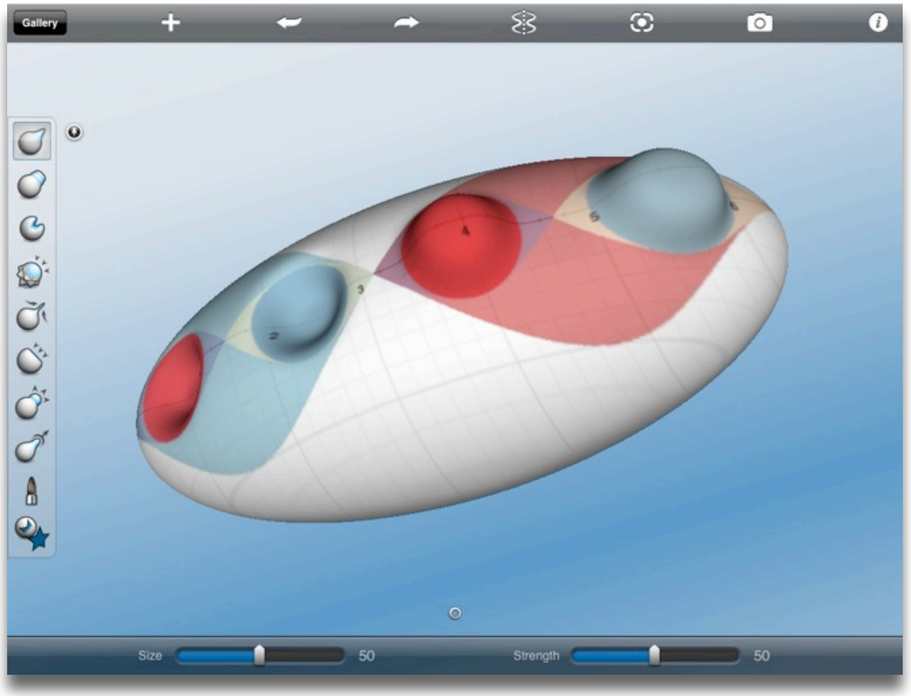

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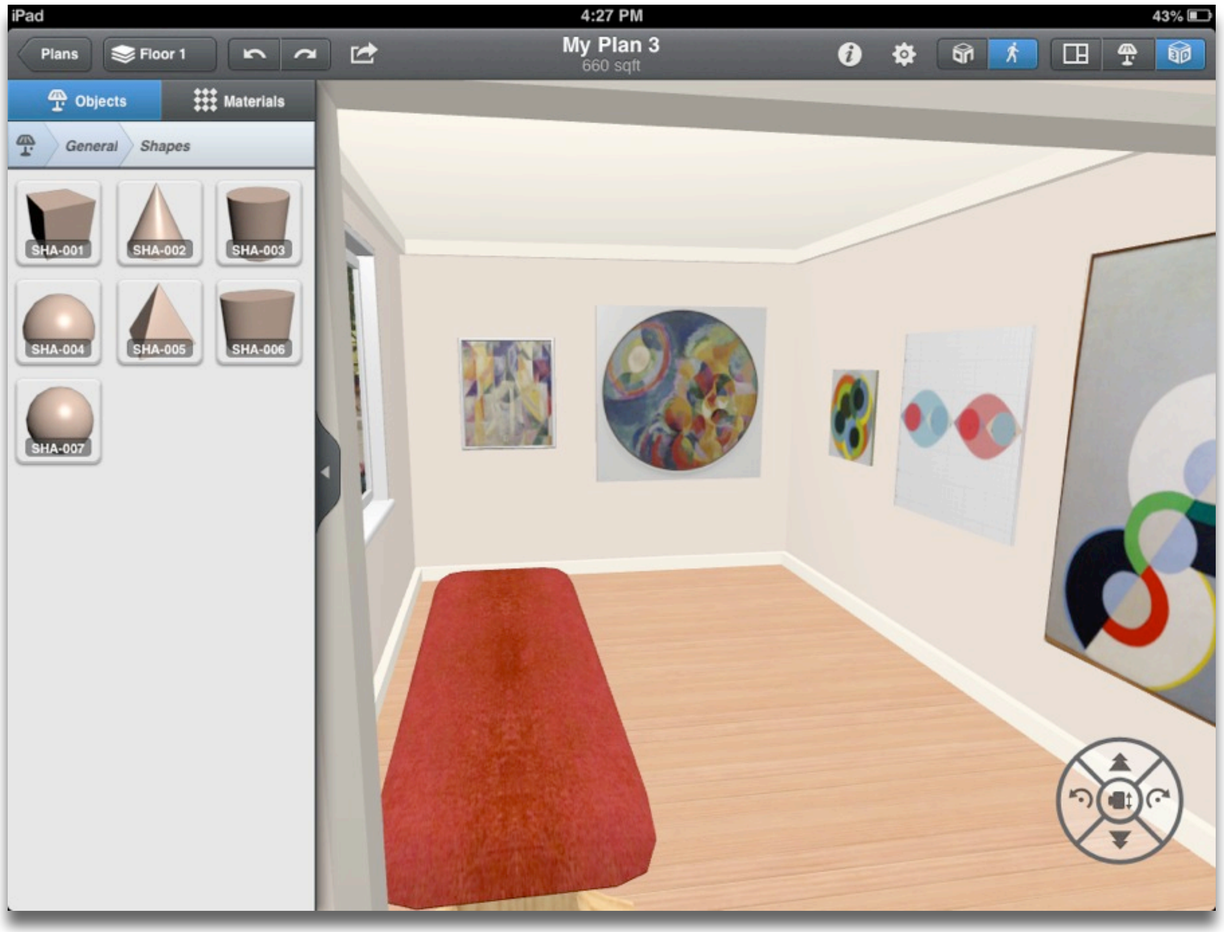

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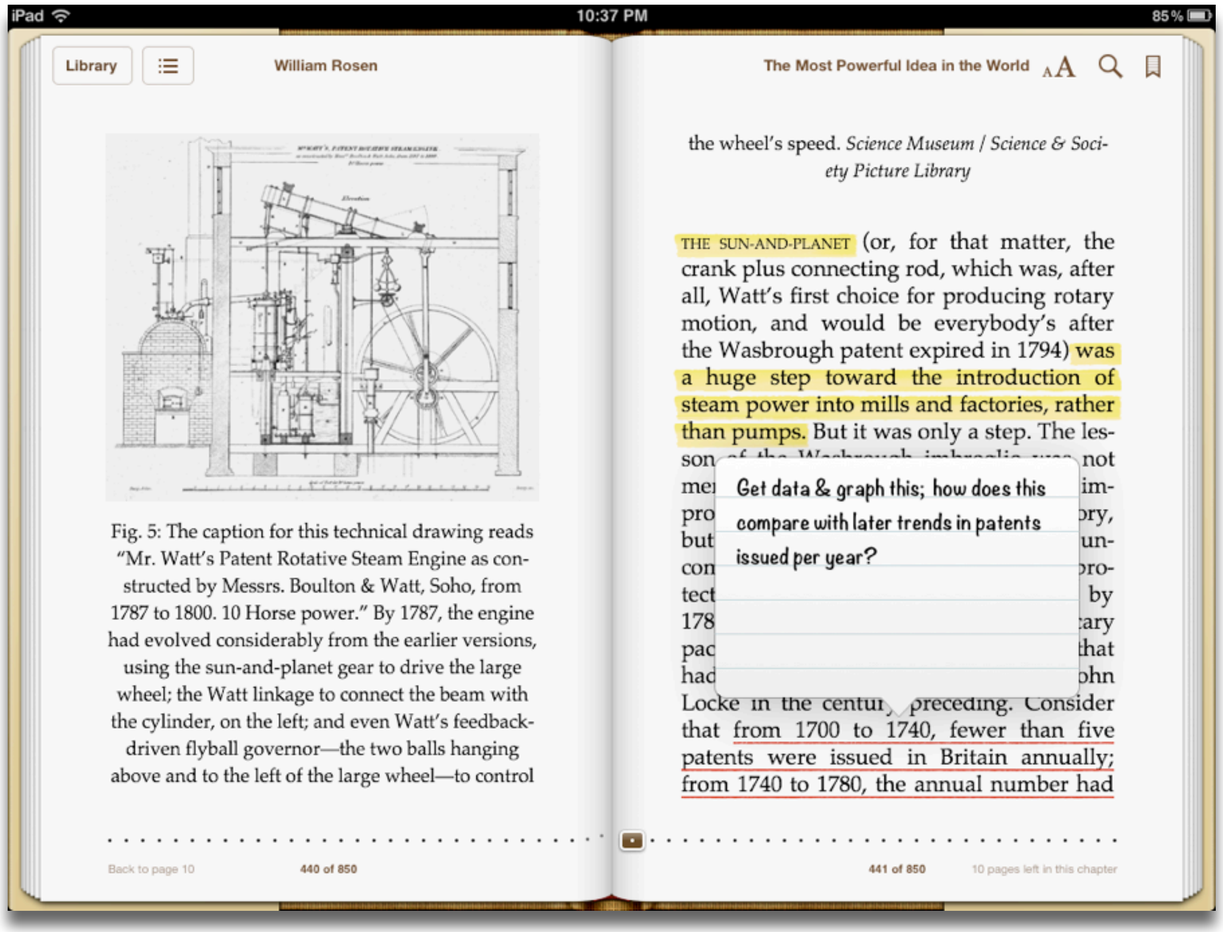

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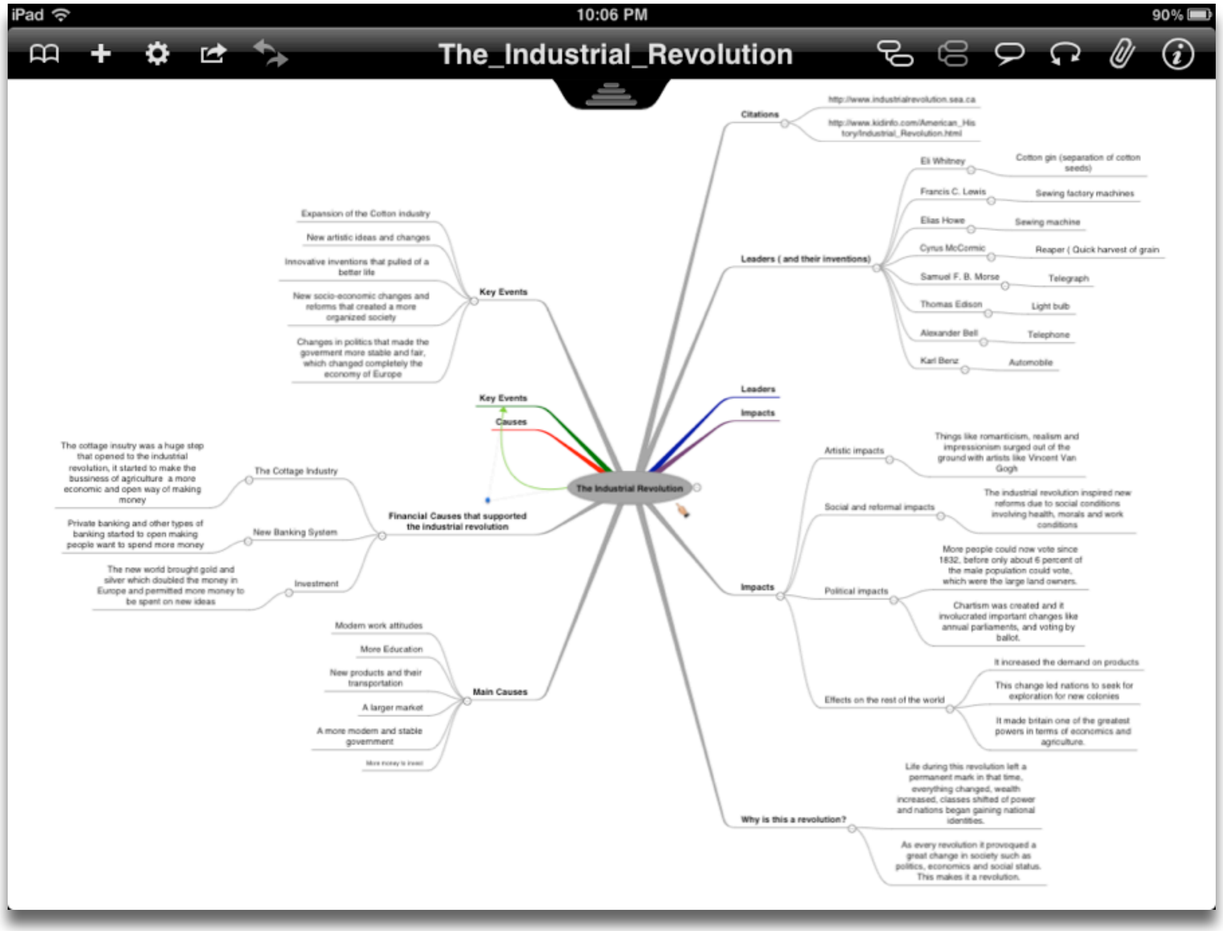

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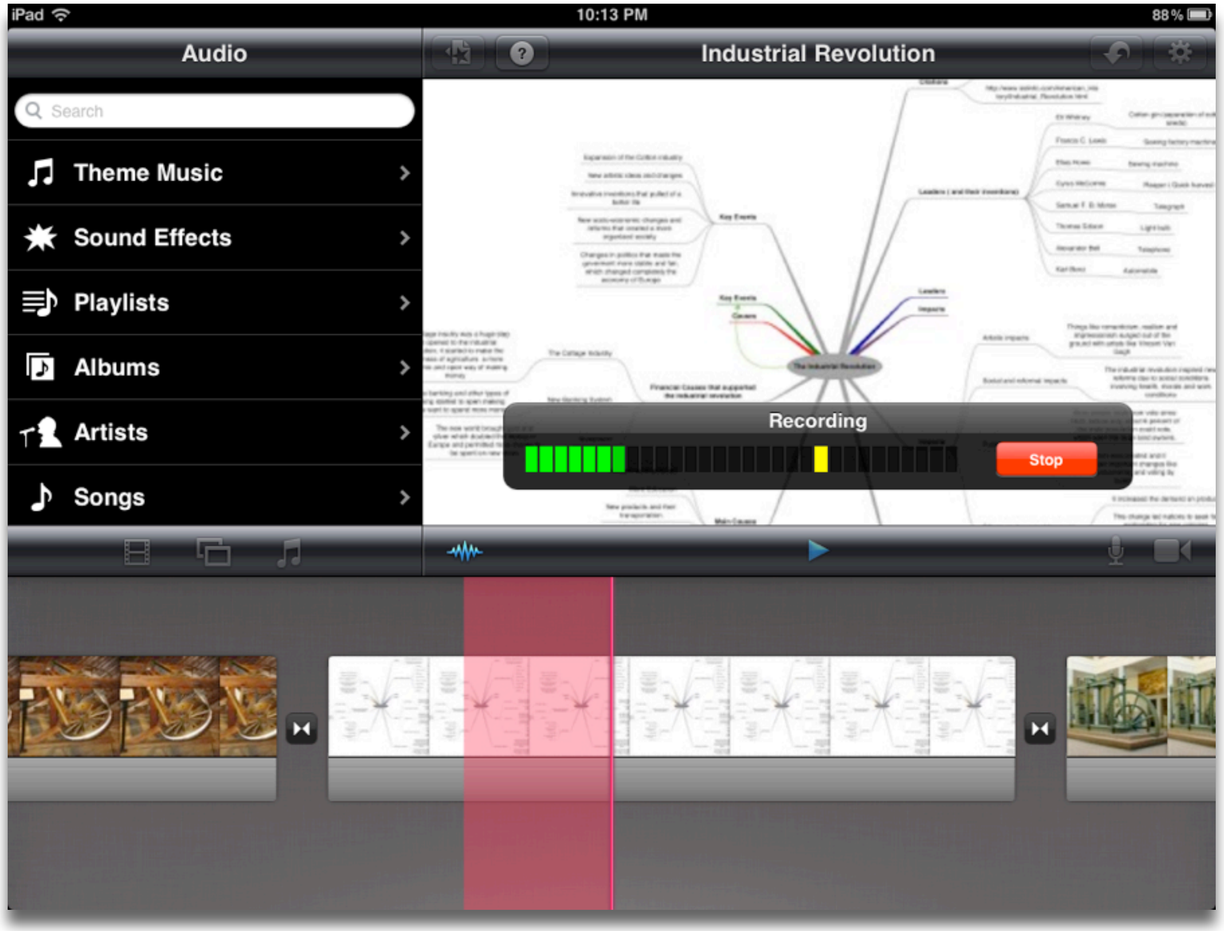

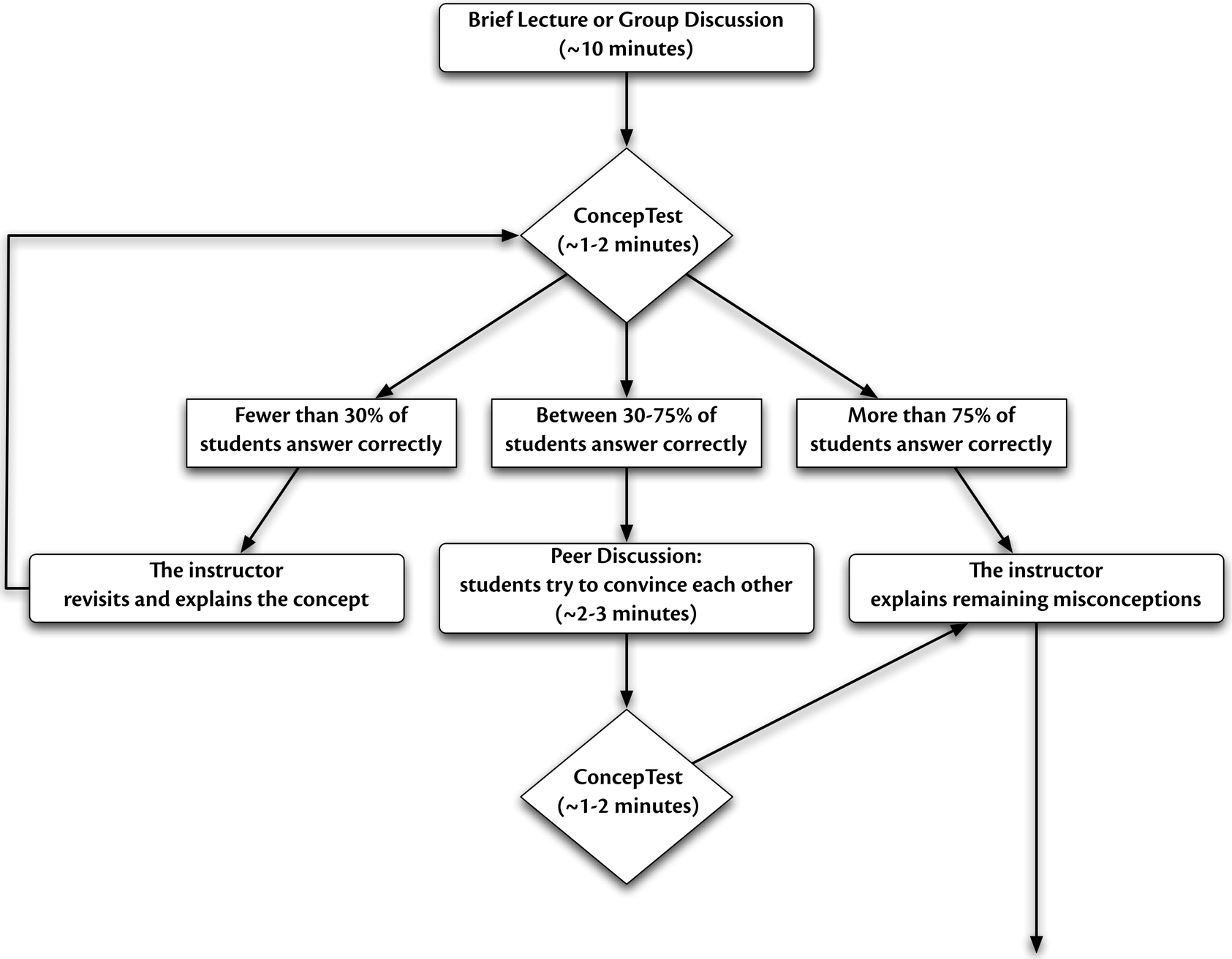
Brief Lecture or Group Discussion
(~10 minutes)
ConcepTest
(~1-2 minutes)
Fewer than 30% of
students answer correctly
Between 30-75% of
students answer correctly
More than 75% of
students answer correctly
The instructor
revisits and explains the concept
Peer Discussion:
students try to convince each other
(~2-3 minutes)
The instructor
explains remaining misconceptions
ConcepTest
(~1-2 minutes)

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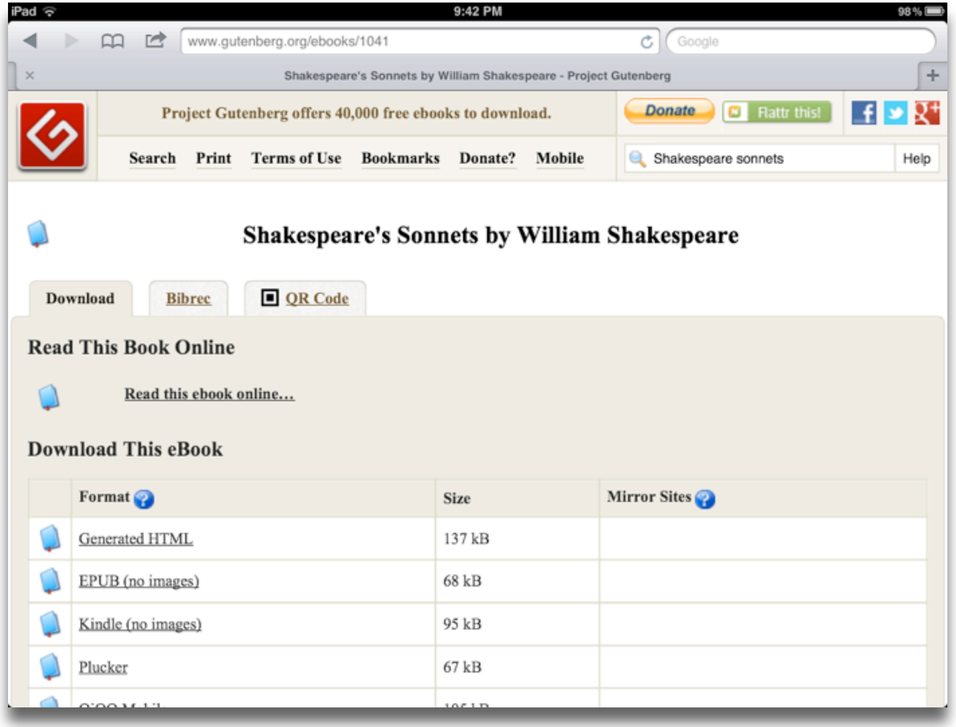

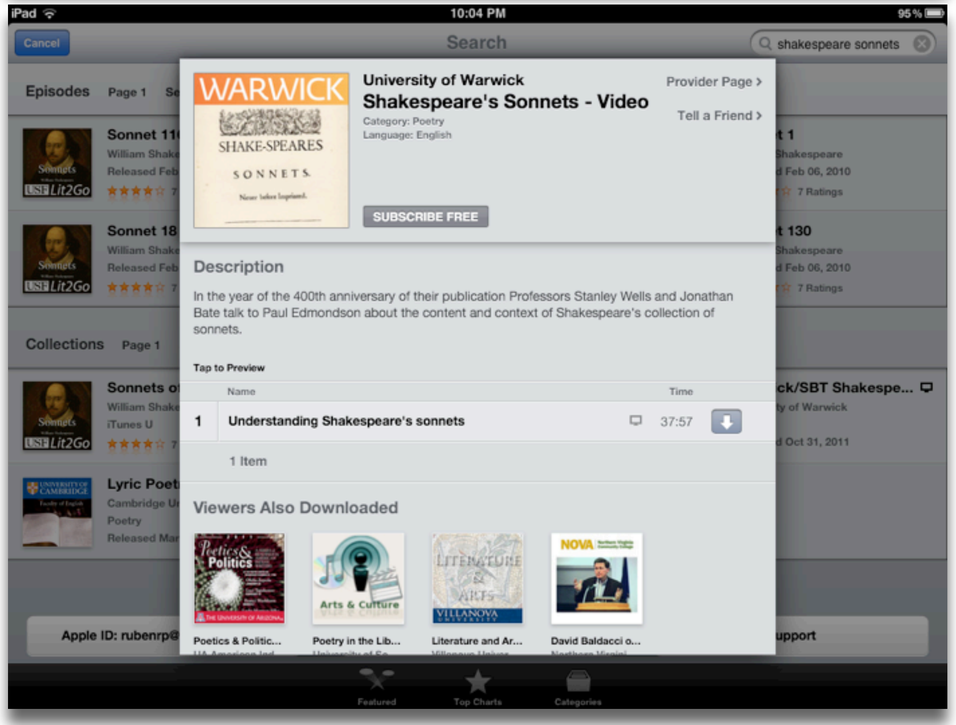

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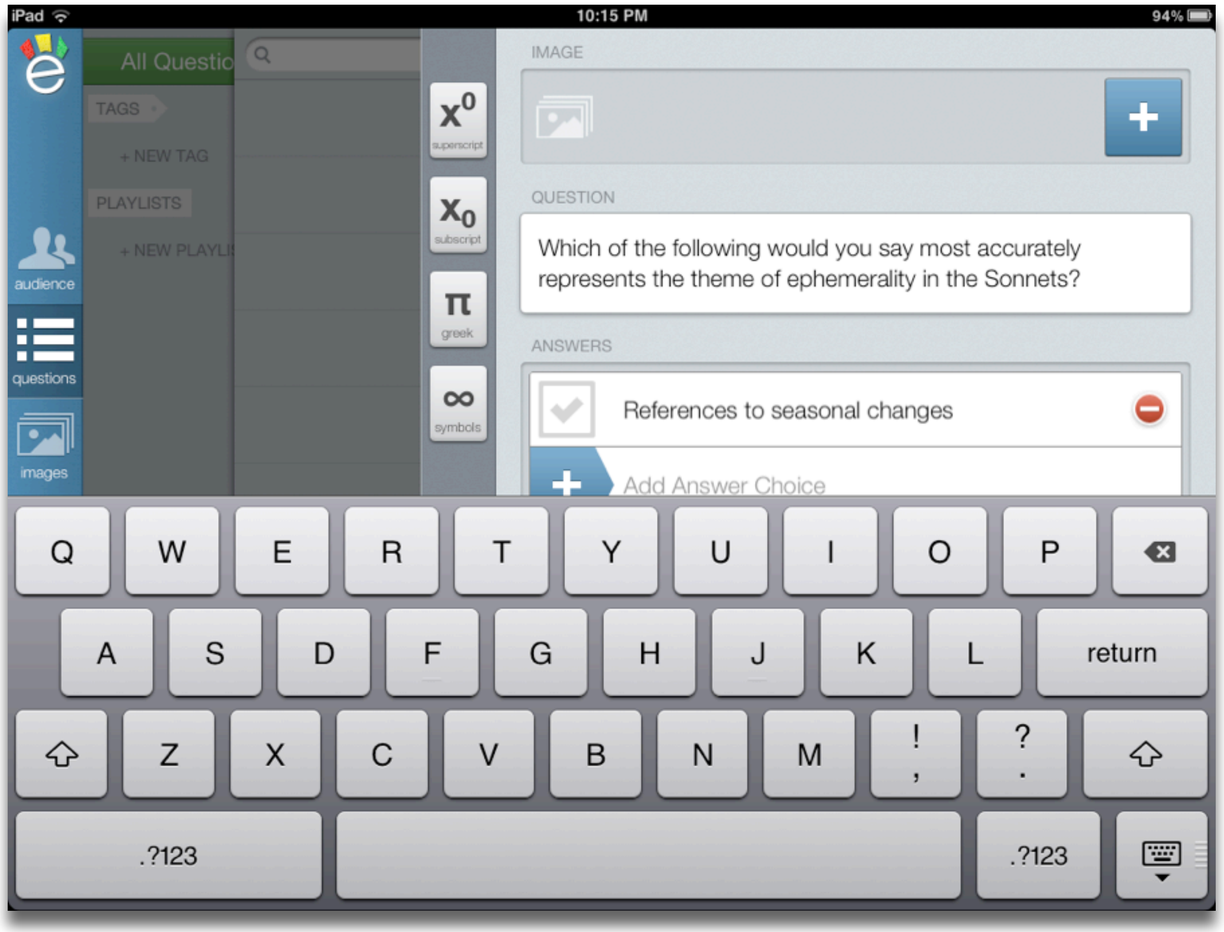

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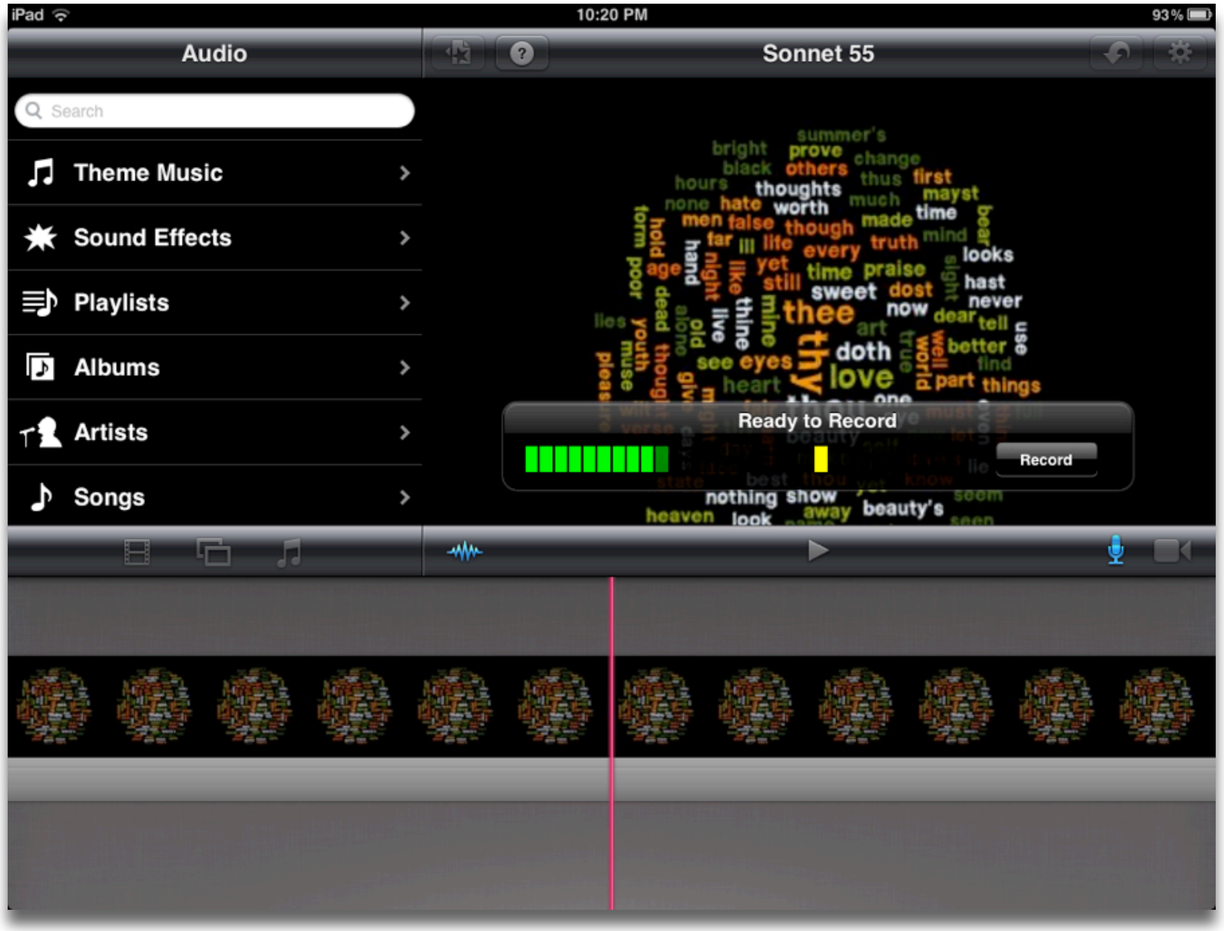

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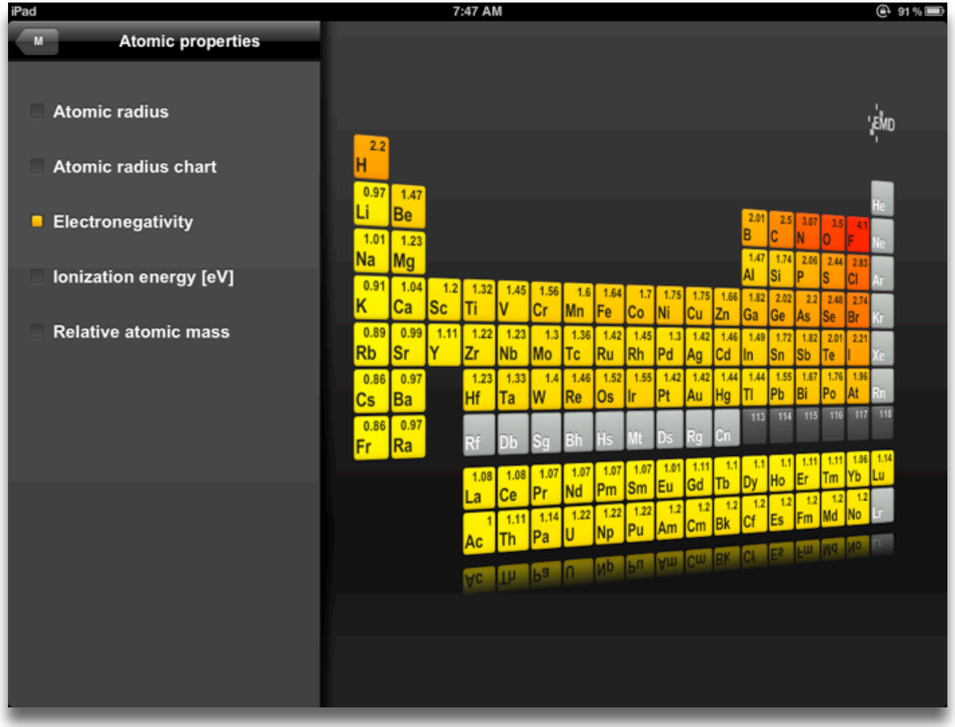

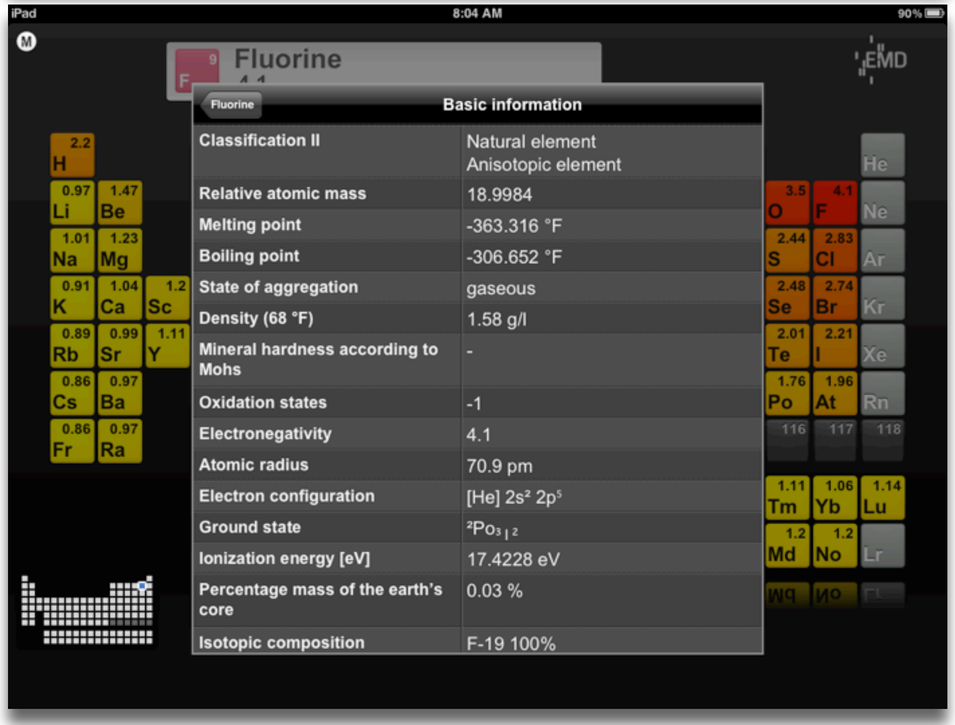

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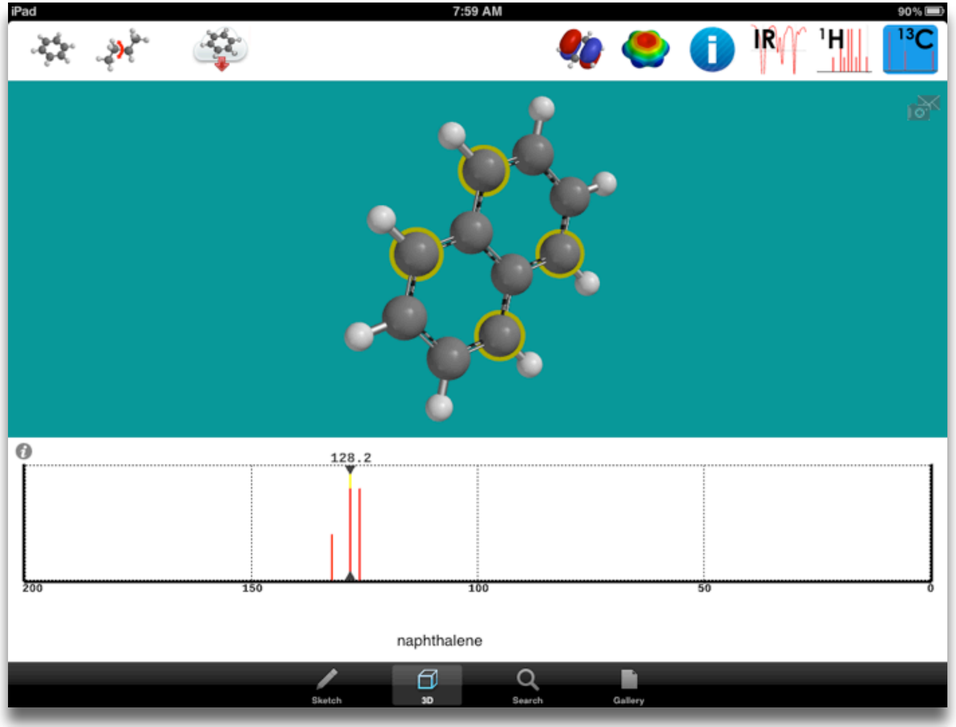

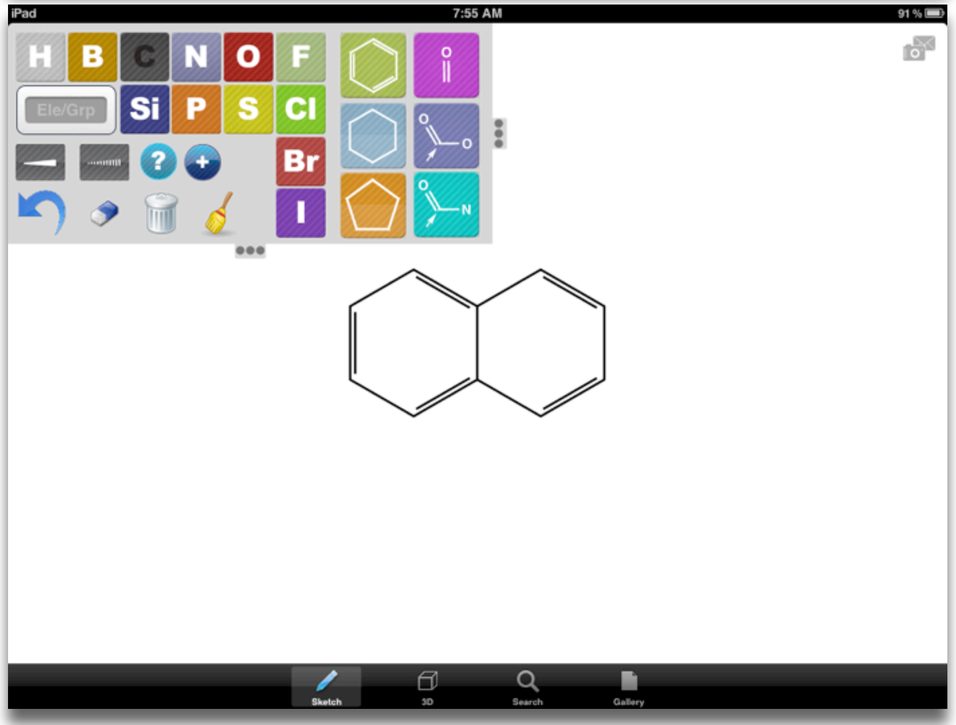

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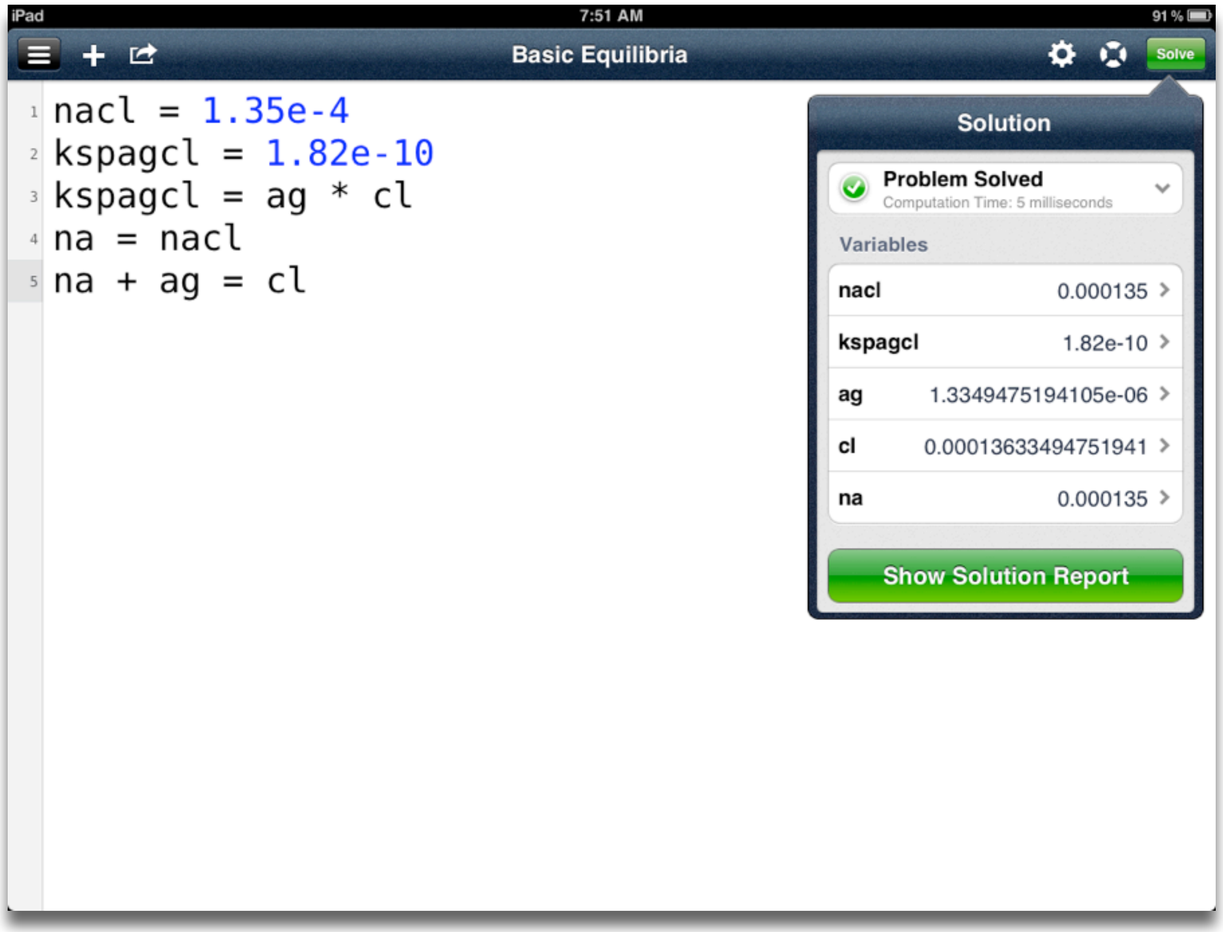

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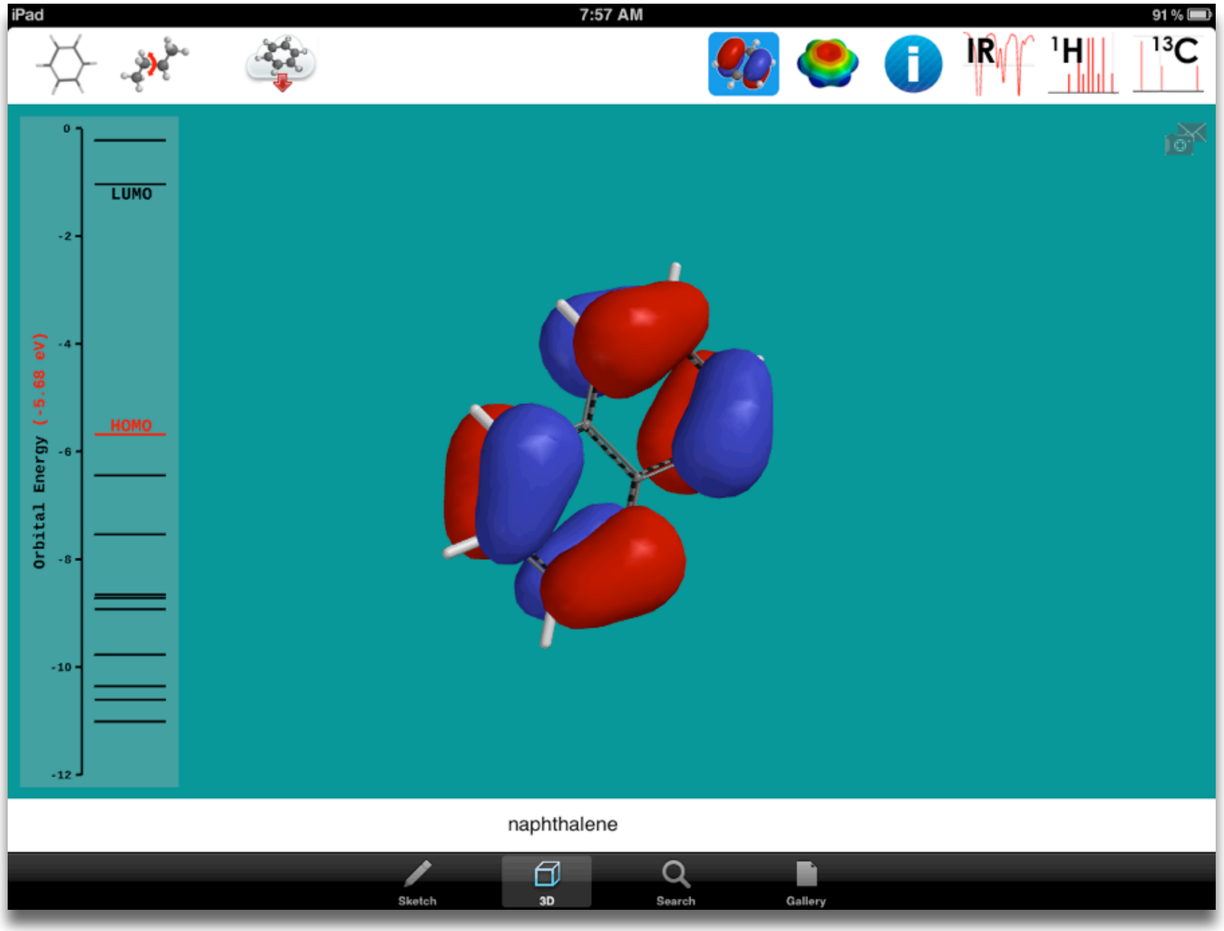
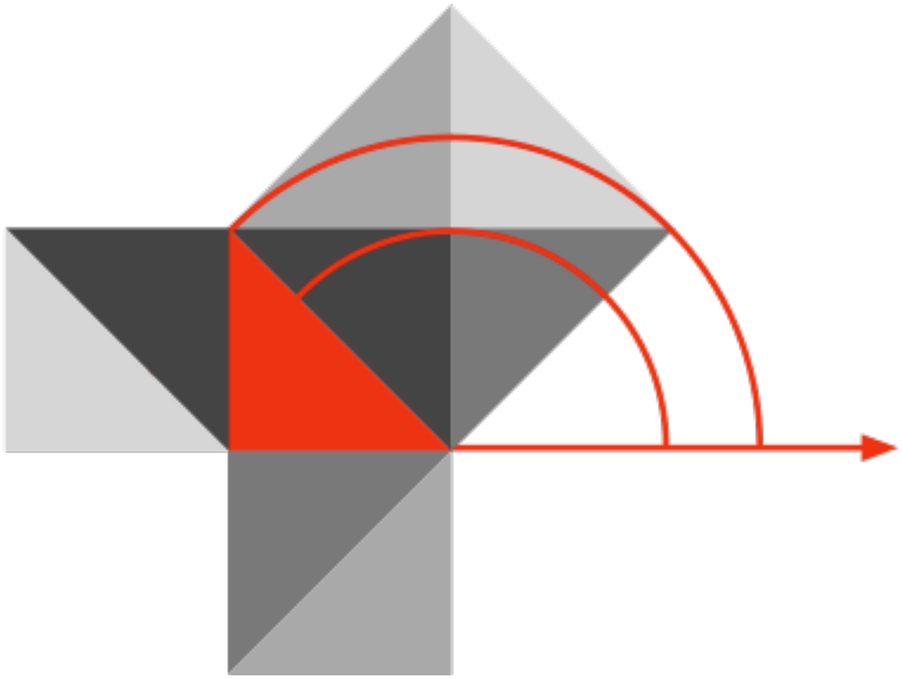


Resources

- The Horizon Report: all editions online at:
  http://www.nmc.org/publications
- Horizon Report Wiki: all editions since 2006 online at:
  http://horizon.wiki.nmc.org/
- Ruben R. Puentedura, *Transformation, Technology, and Education*. (2006) Online at:
  http://hippasus.com/resources/tte/
- Ruben R. Puentedura, *As We May Teach: Educational Technology, From Theory Into Practice*. (2009) Online at:
  http://tinyurl.com/aswemayteach
- Ruben R. Puentedura, “Technology In Education: The First 200,000 Years” *The NMC Perspective Series: Ideas that Matter*. NMC Summer Conference. (2012) Online at:
  http://www.youtube.com/watch?v=NemBarqD6qA
- Eric Mazur, *Peer Instruction - A User's Manual*. Prentice Hall (1997)

Hippasus



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