Follow the River: Designing Robust iPad Flows

Ruben R. Puentedura, Ph.D.

LL2013 - Leveraging Learning:
the iPad in Primary Grades
November 13 - 15, 2013
Auburn, Maine

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

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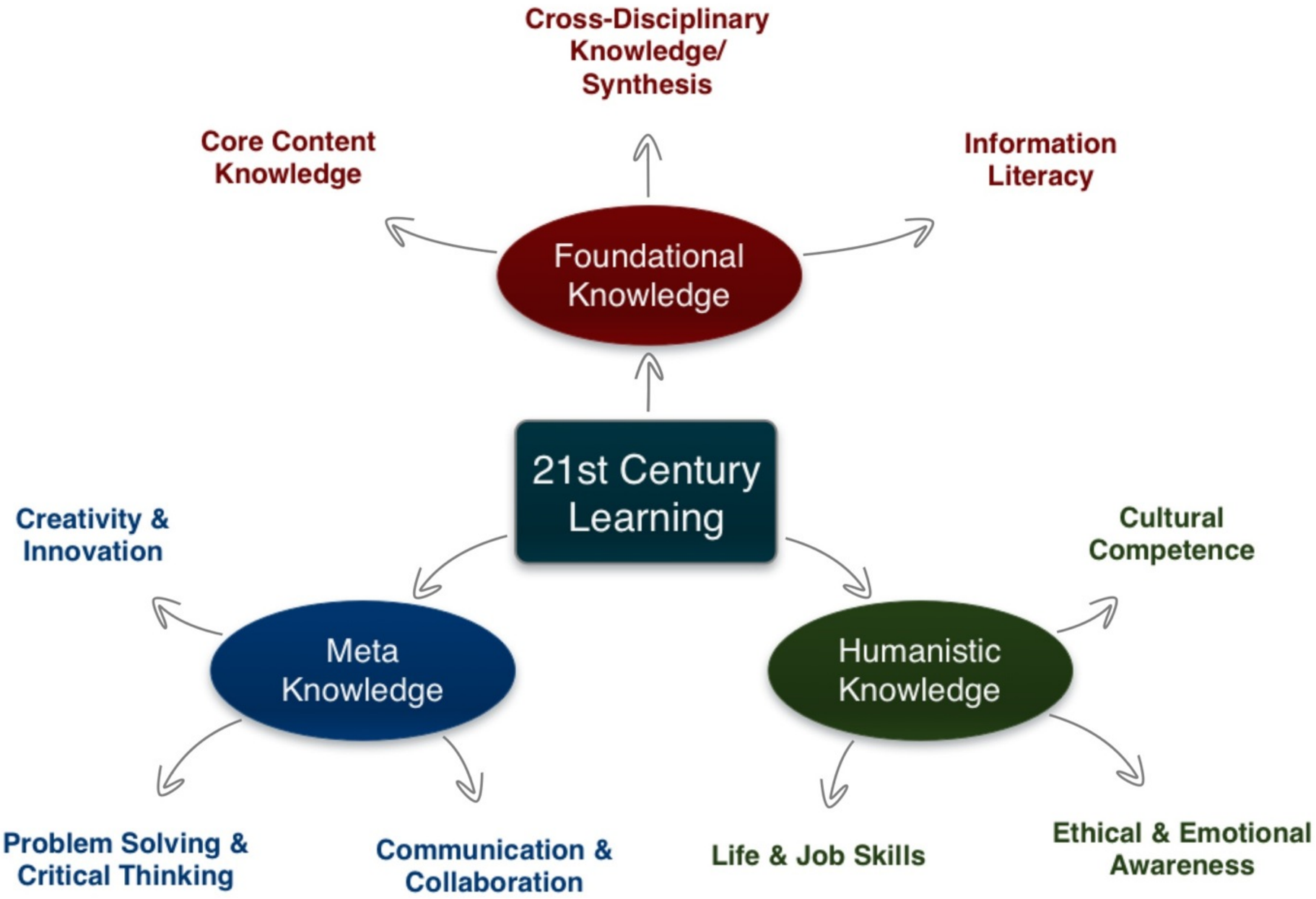
Enhancement

Ruben R. Puentedura, *As We May Teach: Educational Technology, From Theory Into Practice*. (2009)

Bloom's Taxonomy: Cognitive Processes

Anderson & Krathwohl (2001)	Characteristic Processes	
Remember	• Recalling memorized knowledge • Recognizing correspondences between memorized knowledge and new material	
Understand	• Paraphrasing materials • Exemplifying concepts, principles • Classifying items • Summarizing materials	• Extrapolating principles • Comparing items
Apply	• Applying a procedure to a familiar task • Using a procedure to solve an unfamiliar, but typed task	
Analyze	• Distinguishing relevant/irrelevant or important/unimportant portions of material • Integrating heterogeneous elements into a structure • Attributing intent in materials	
Evaluate	• Testing for consistency, appropriateness, and effectiveness in principles and procedures • Critiquing the consistency, appropriateness, and effectiveness of principles and procedures, basing the critique upon appropriate tests	
Create	• Generating multiple hypotheses based on given criteria • Designing a procedure to accomplish an untyped task • Inventing a product to accomplish an untyped task	

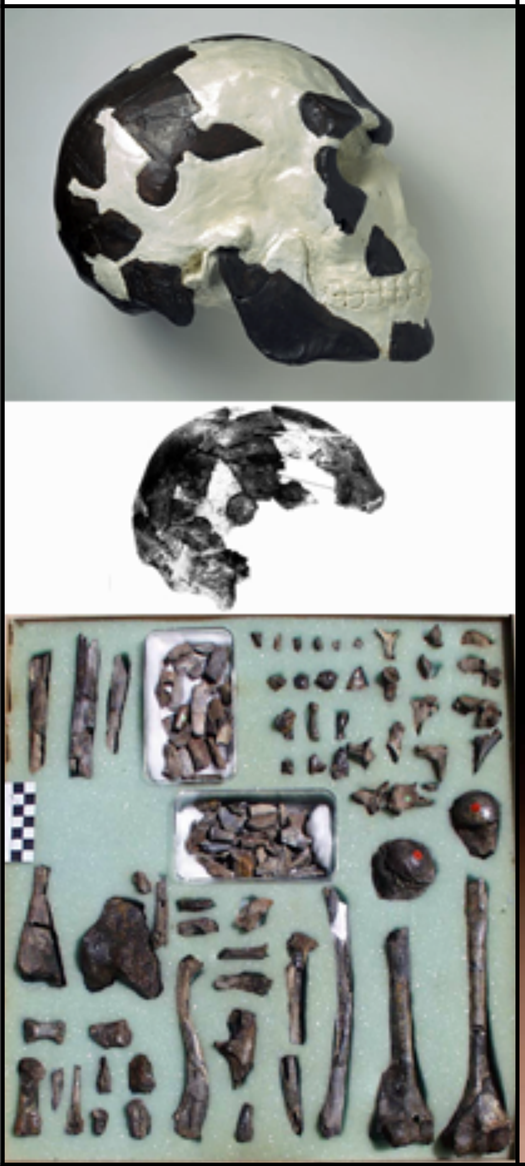
Lorin W. Anderson and David R. Krathwohl (Eds.), *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives, Complete Edition*. Longman. (2000)

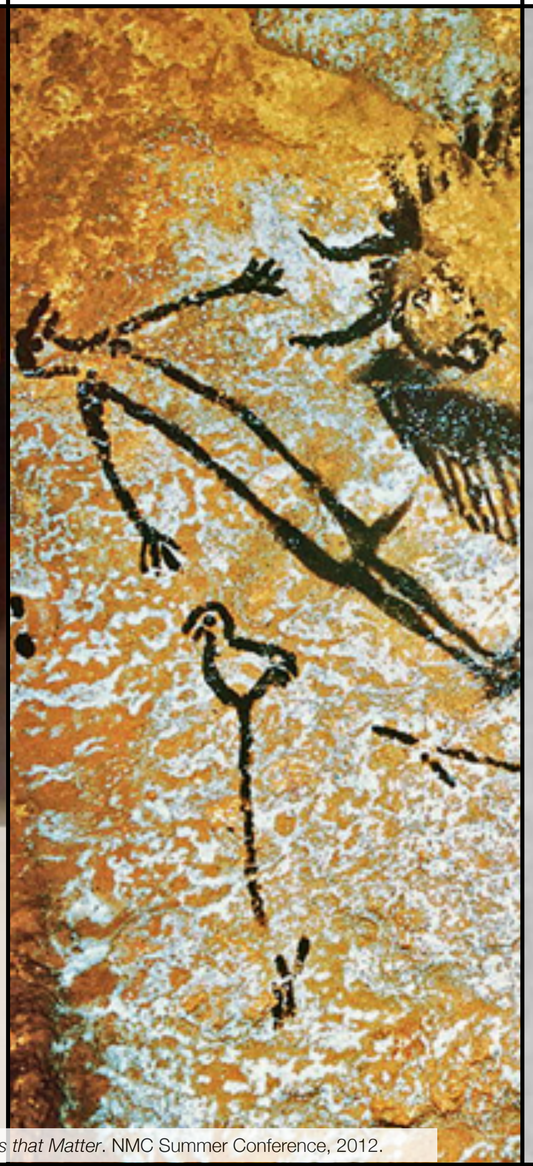


Kereluik, Kristen, Punya Mishra, Chris Fahnoe, and Laura Terry. "What Knowledge Is of Most Worth: Teacher Knowledge for 21st Century Learning." JDLTE 29:4 (2013).

The EdTech Quintet

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





Ruben R. Puentedura, “Technology In Education: The First 200,000 Years” *The NMC Perspective Series: Ideas that Matter*. NMC Summer Conference, 2012.

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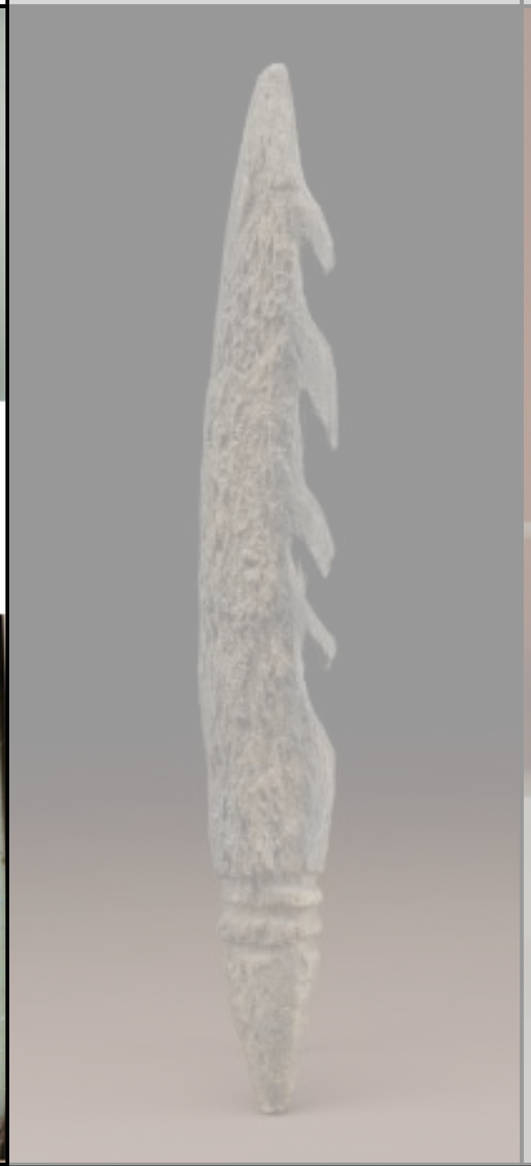

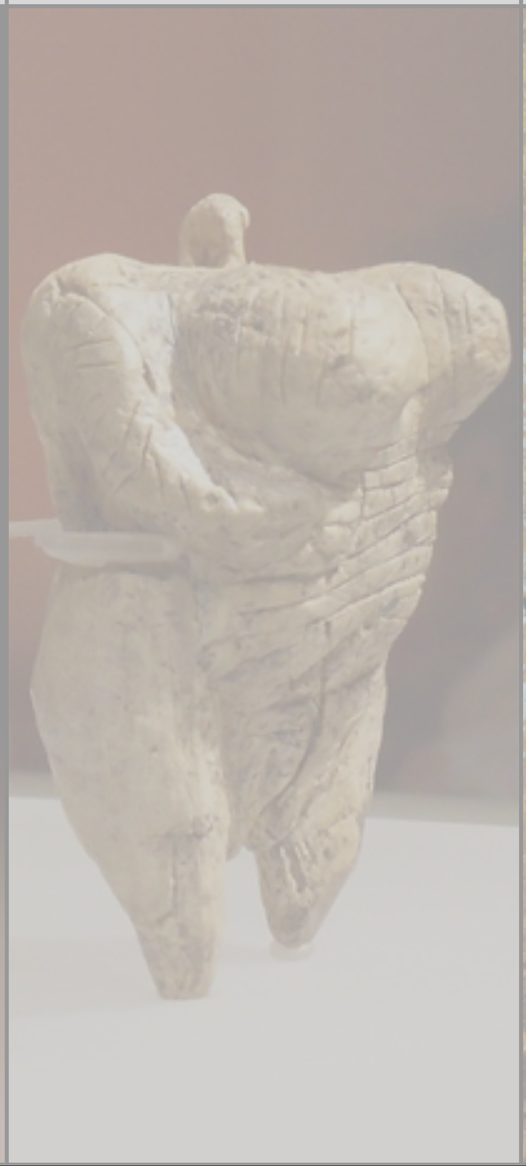

Bookmarks

RSS Feeds

Discussions

Microblogging

Blogging

Wikis

Telepresence

File Sharing

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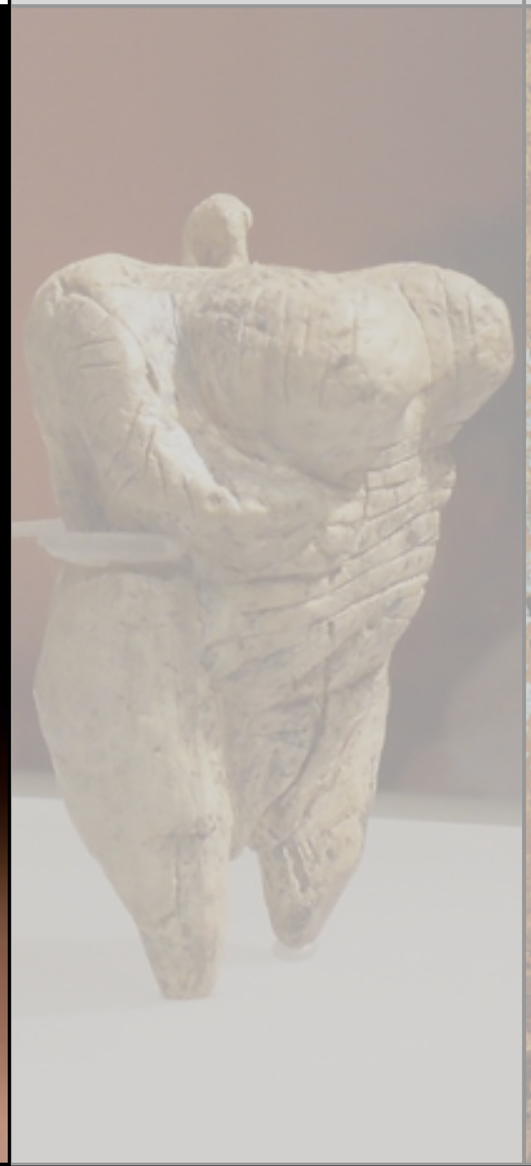

Class

Homework

School

World

Home

Learning Environments

Contextual Search
Augmented Reality

Cloud Resources
Mobile Tools

Sensors
Recorders

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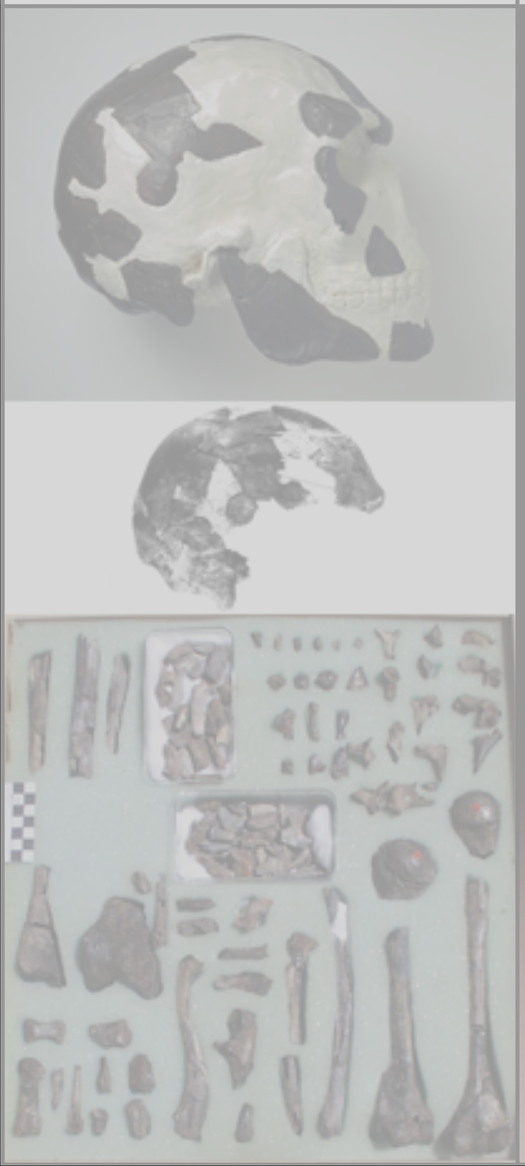
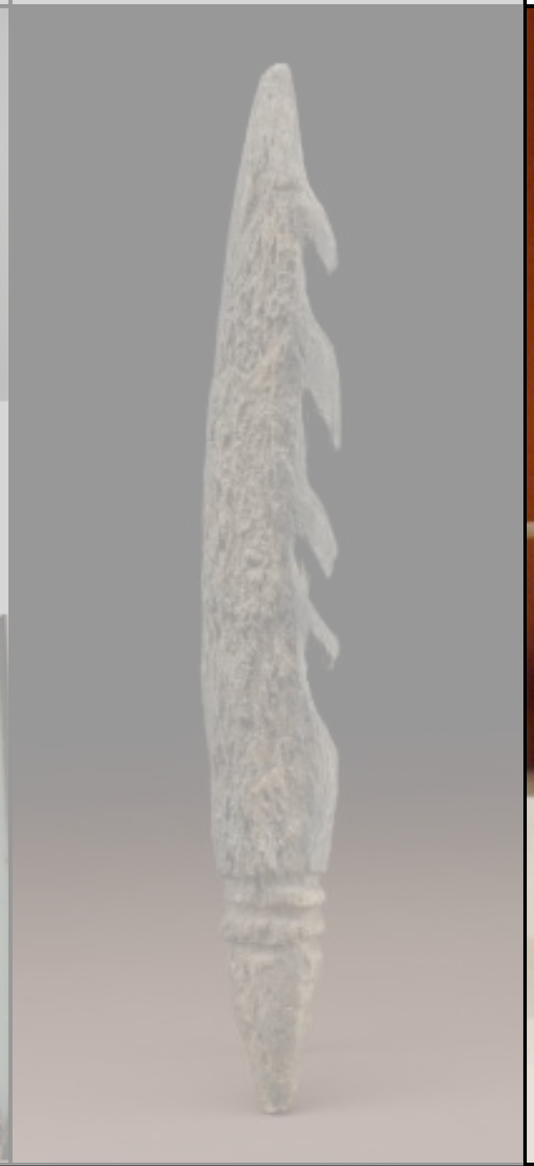
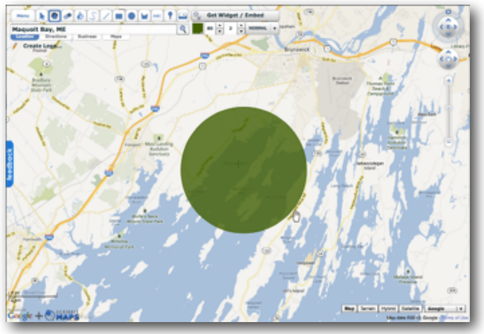





Timeline JS
Beautifully crafted timelines that are easy, and intuitive to use.
Website


3D


Maquoit Bay, ME

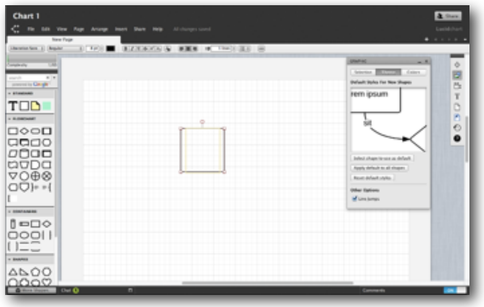


Chart 1
Lorem ipsum


word tree
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Word
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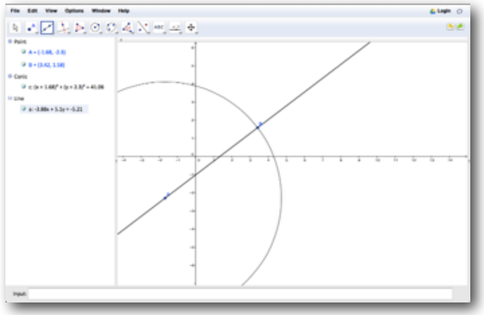

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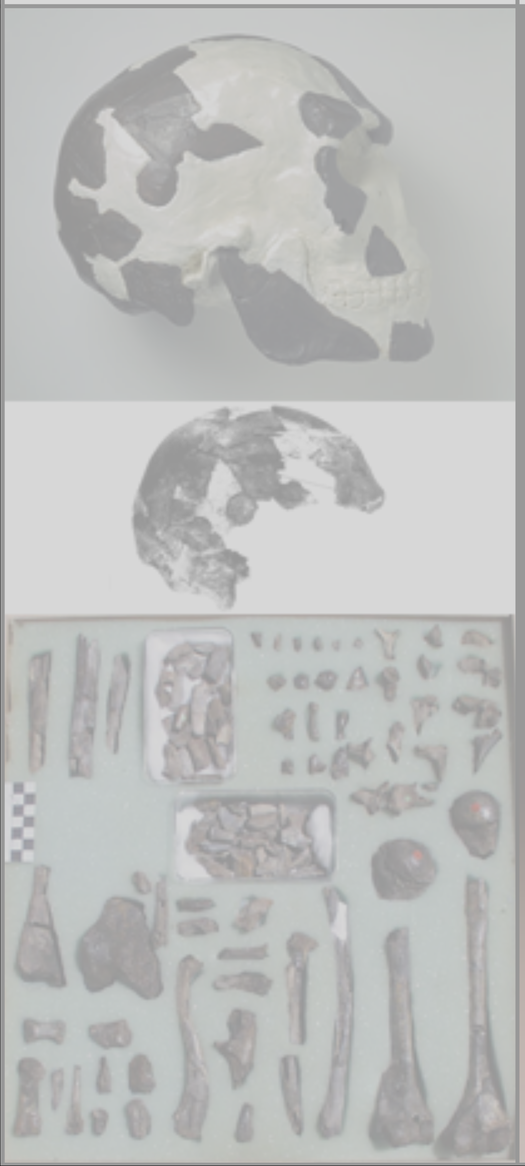

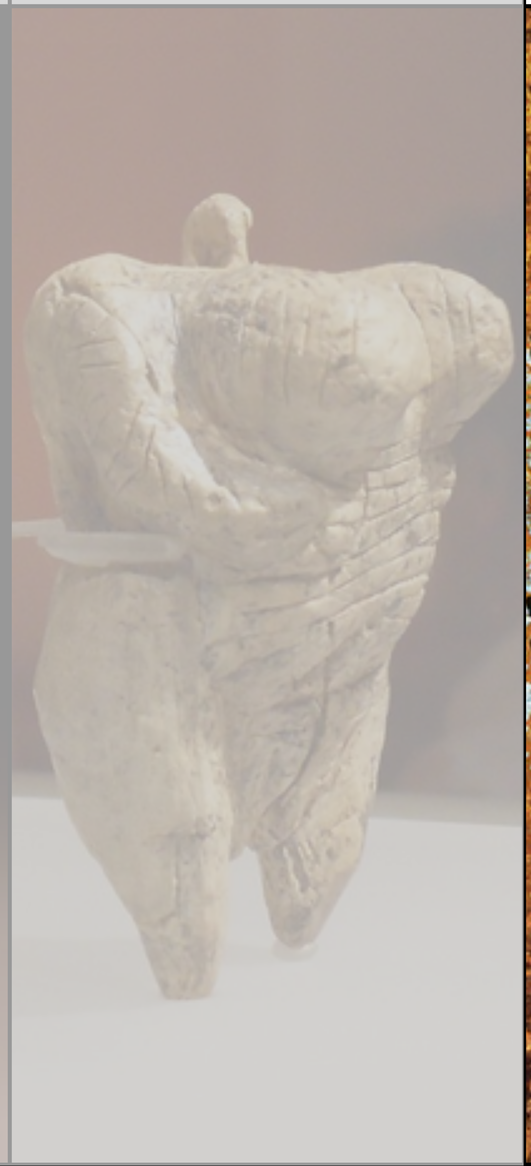

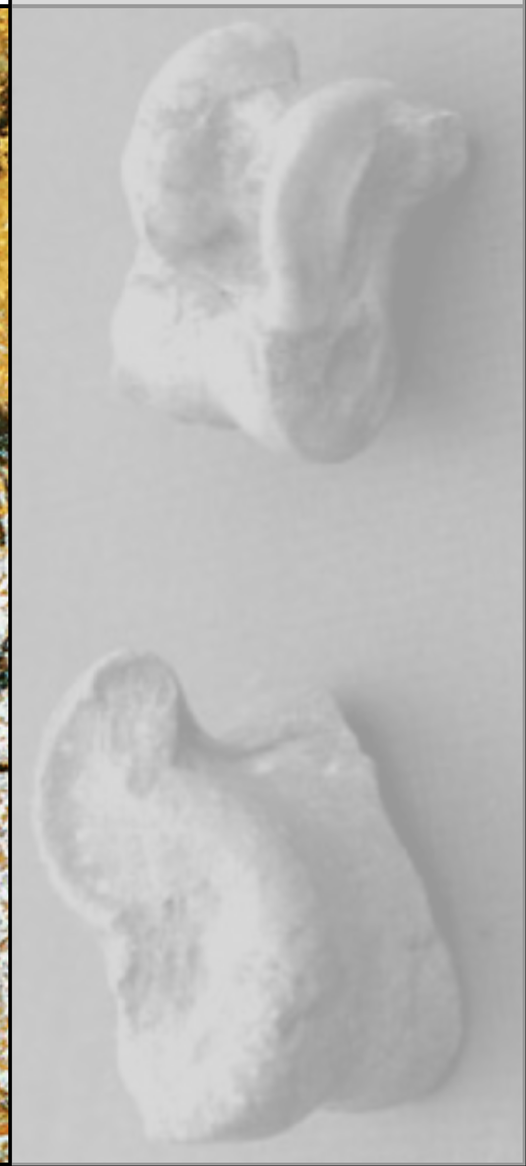

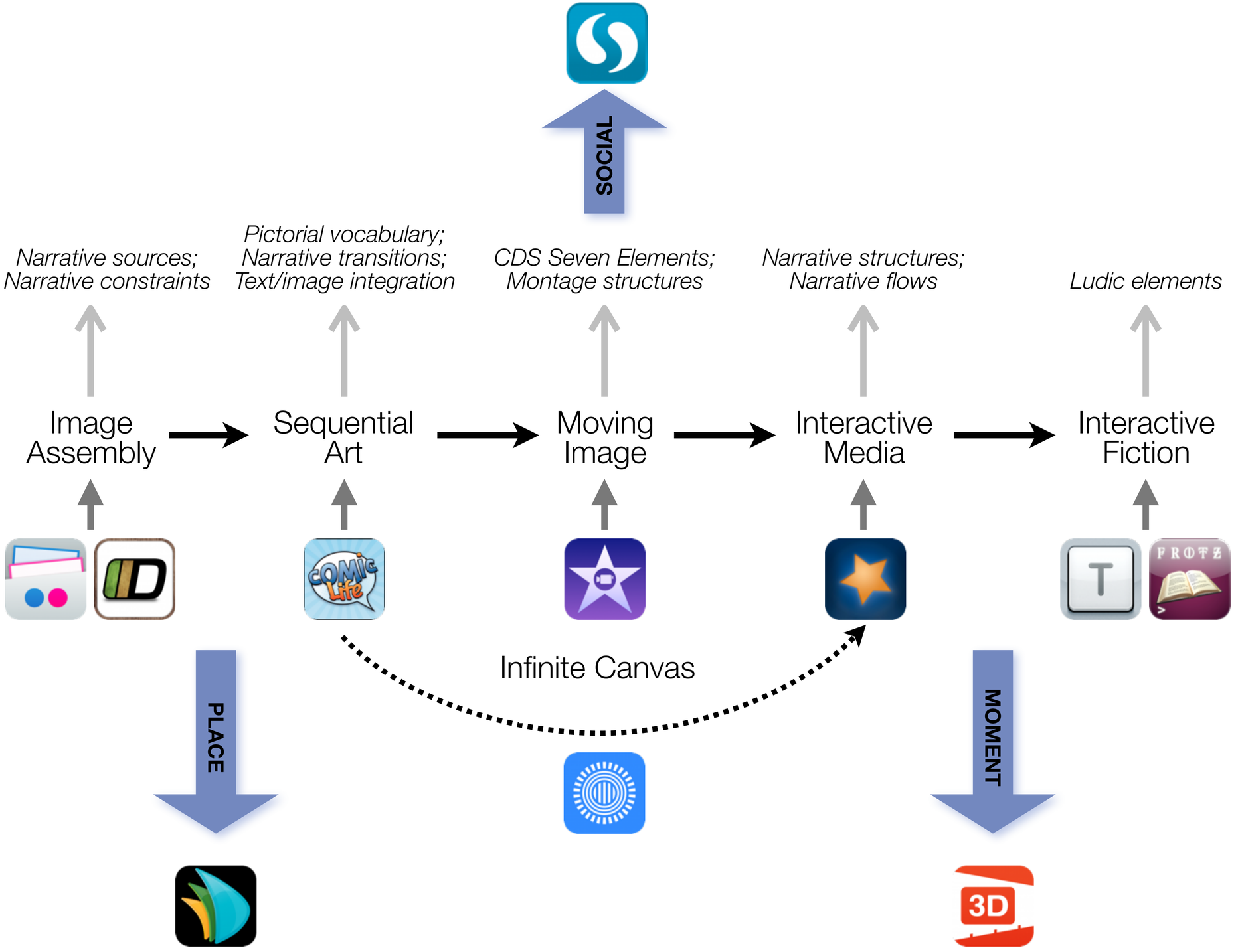
SOCIAL
Narrative sources;
Narrative constraints
Pictorial vocabulary;
Narrative transitions;
Text/image integration
CDS Seven Elements;
Montage structures
Narrative structures;
Narrative flows
Ludic elements
Image Assembly
Sequential Art
Moving Image
Interactive Media
Interactive Fiction
Infinite Canvas
PLACE
MOMENT
3D

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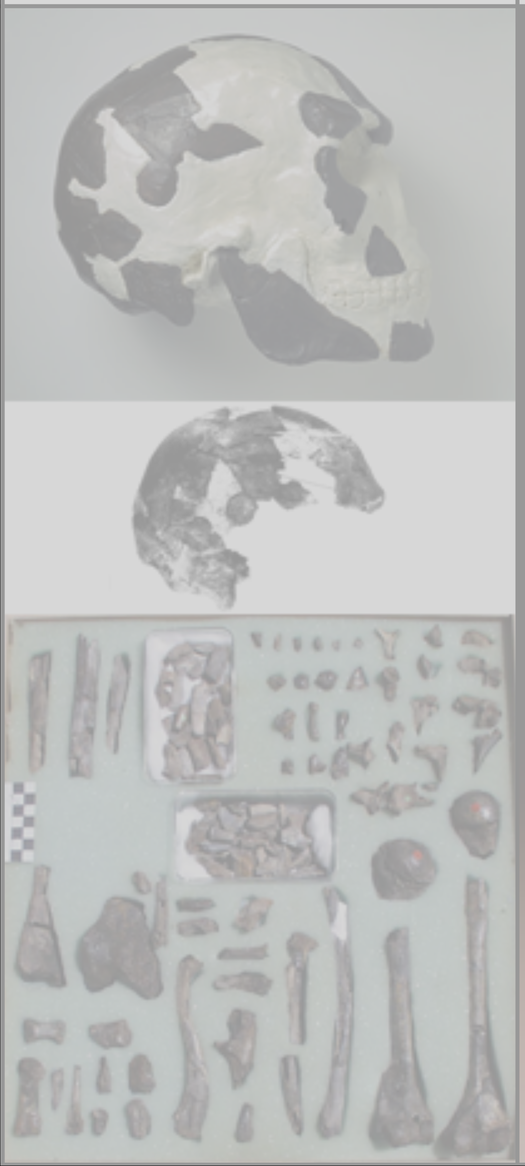

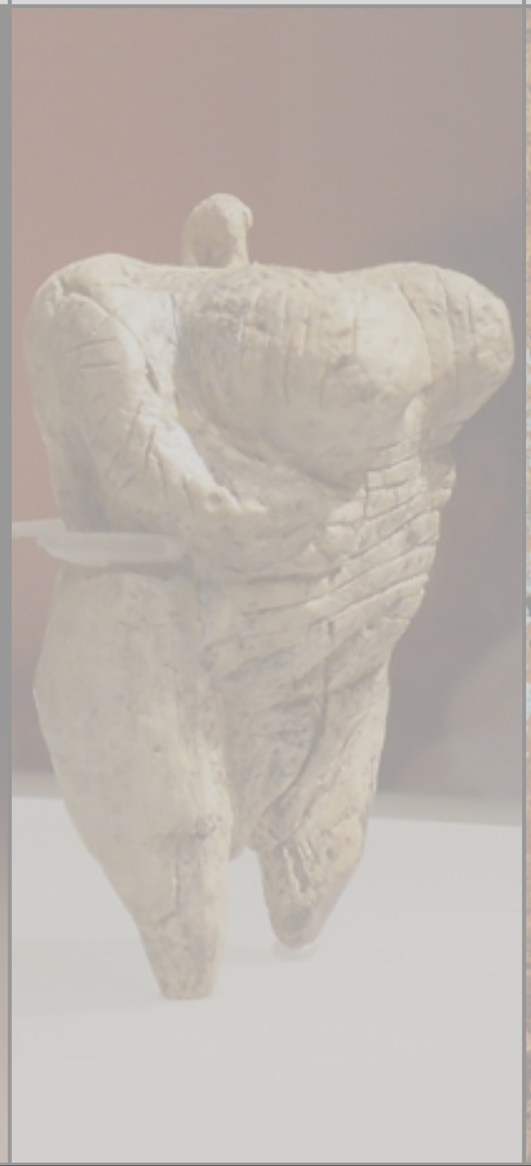

Formal Definition of **Game** (Salen & Zimmerman)

"A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome."




Salen, K. and E. Zimmerman. *Rules of Play: Game Design Fundamentals*. The MIT Press. (2003)

Example #1: Science

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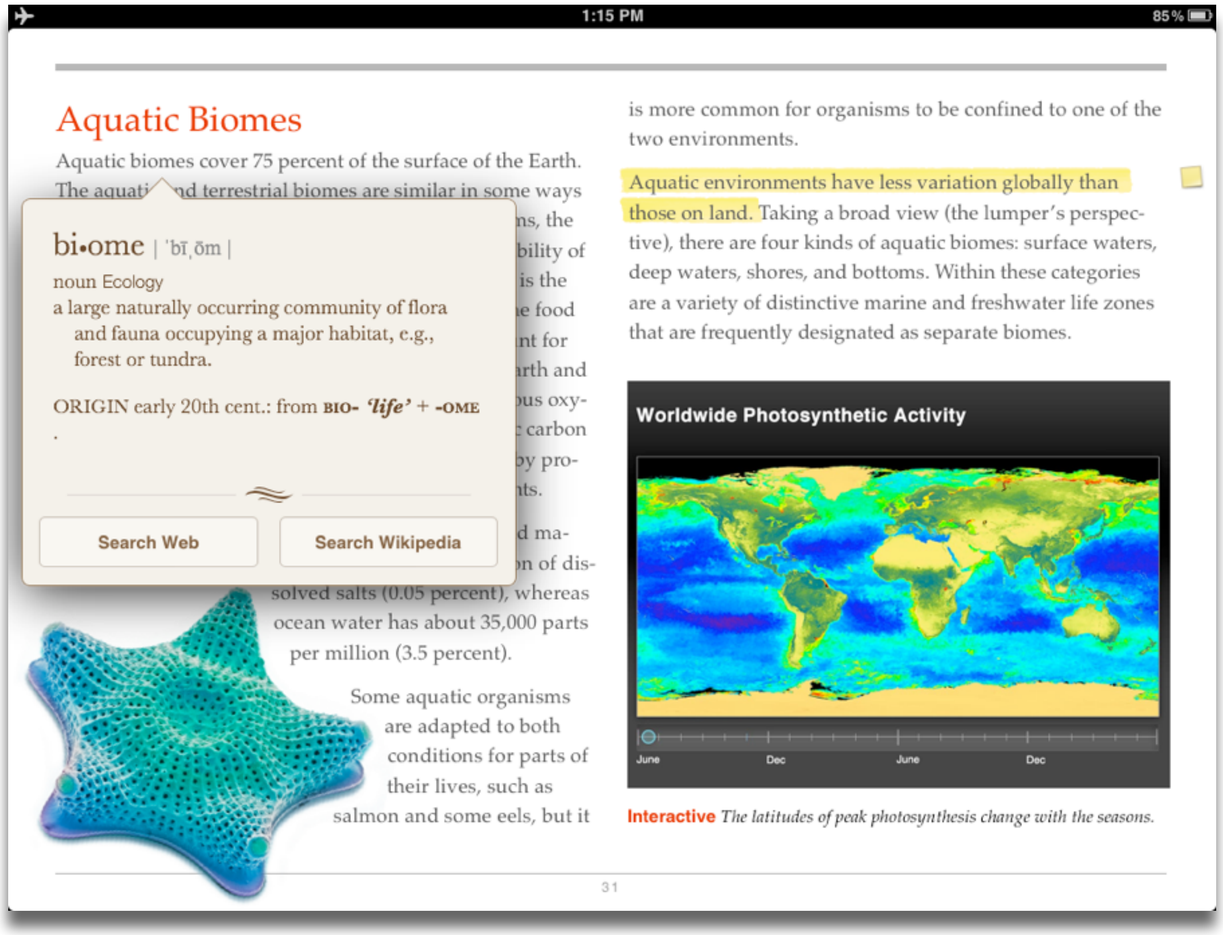

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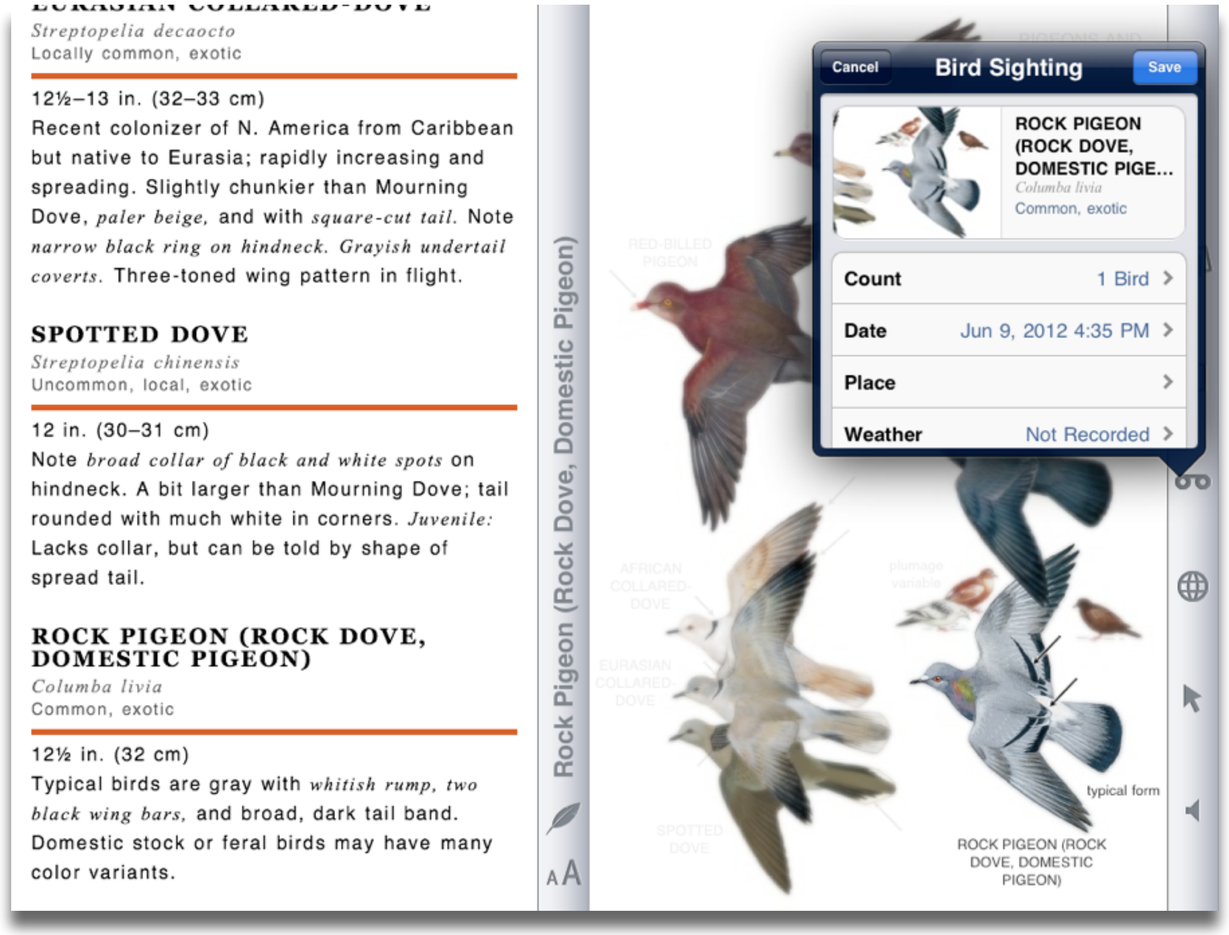

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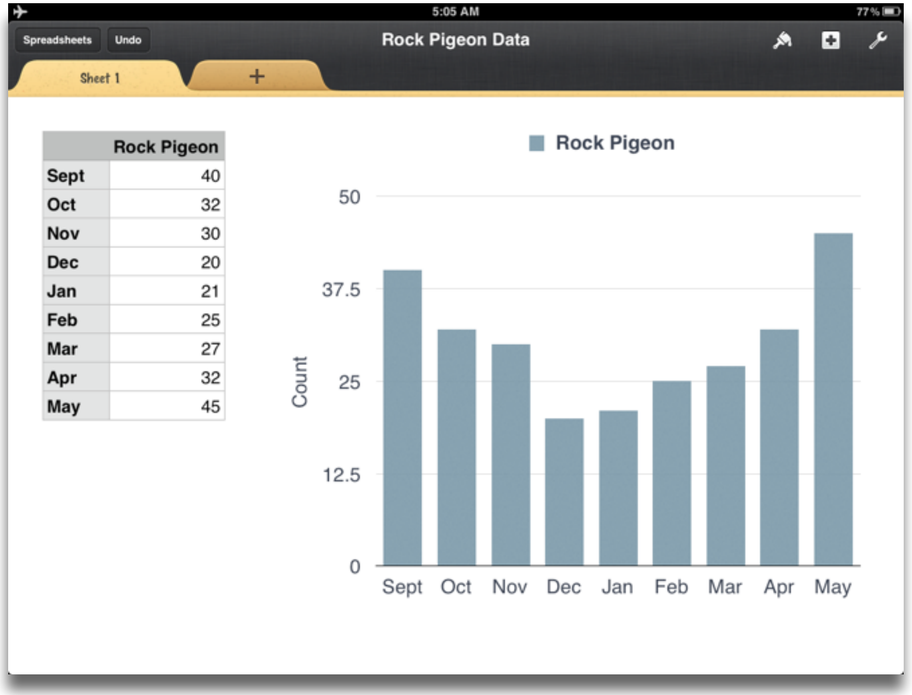

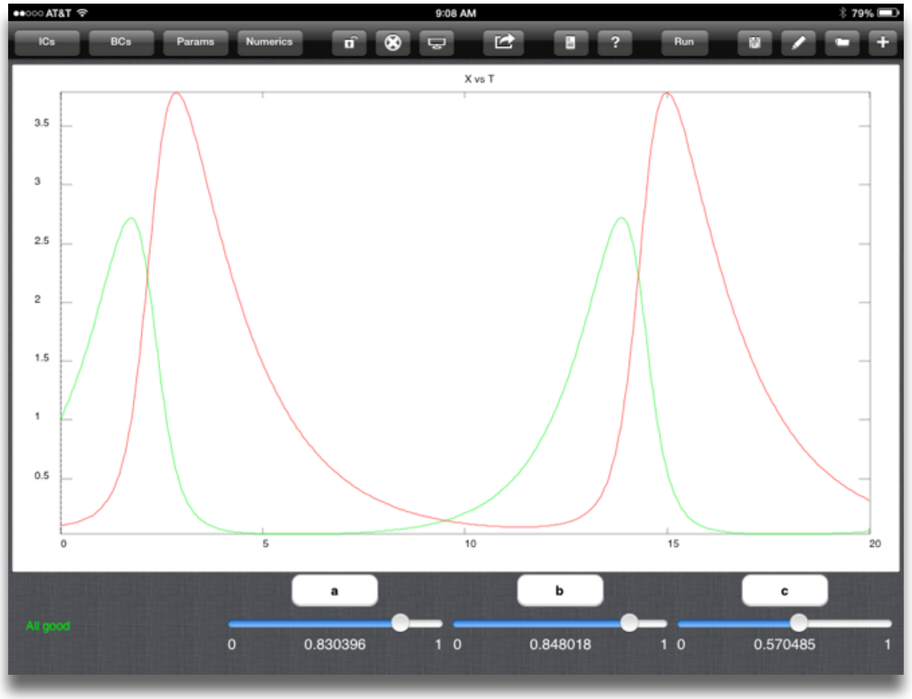

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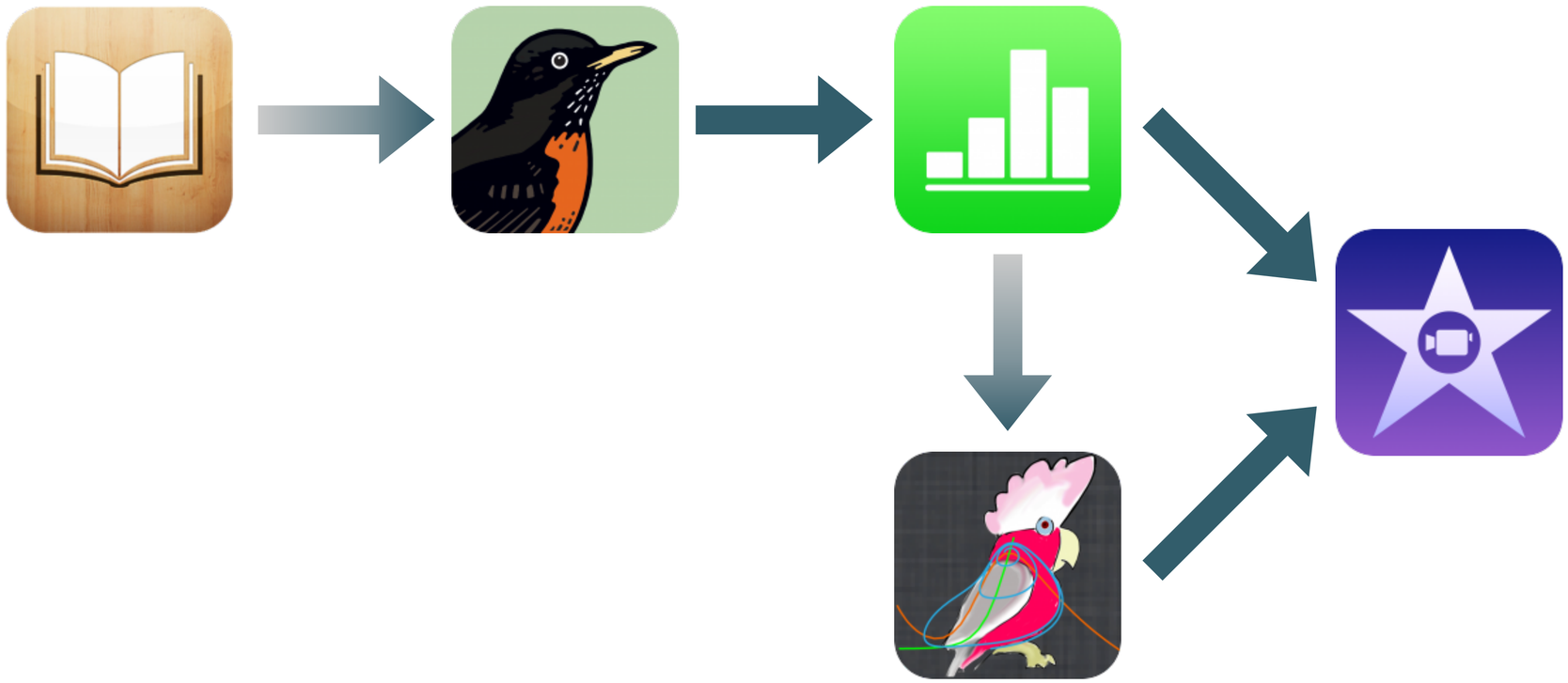
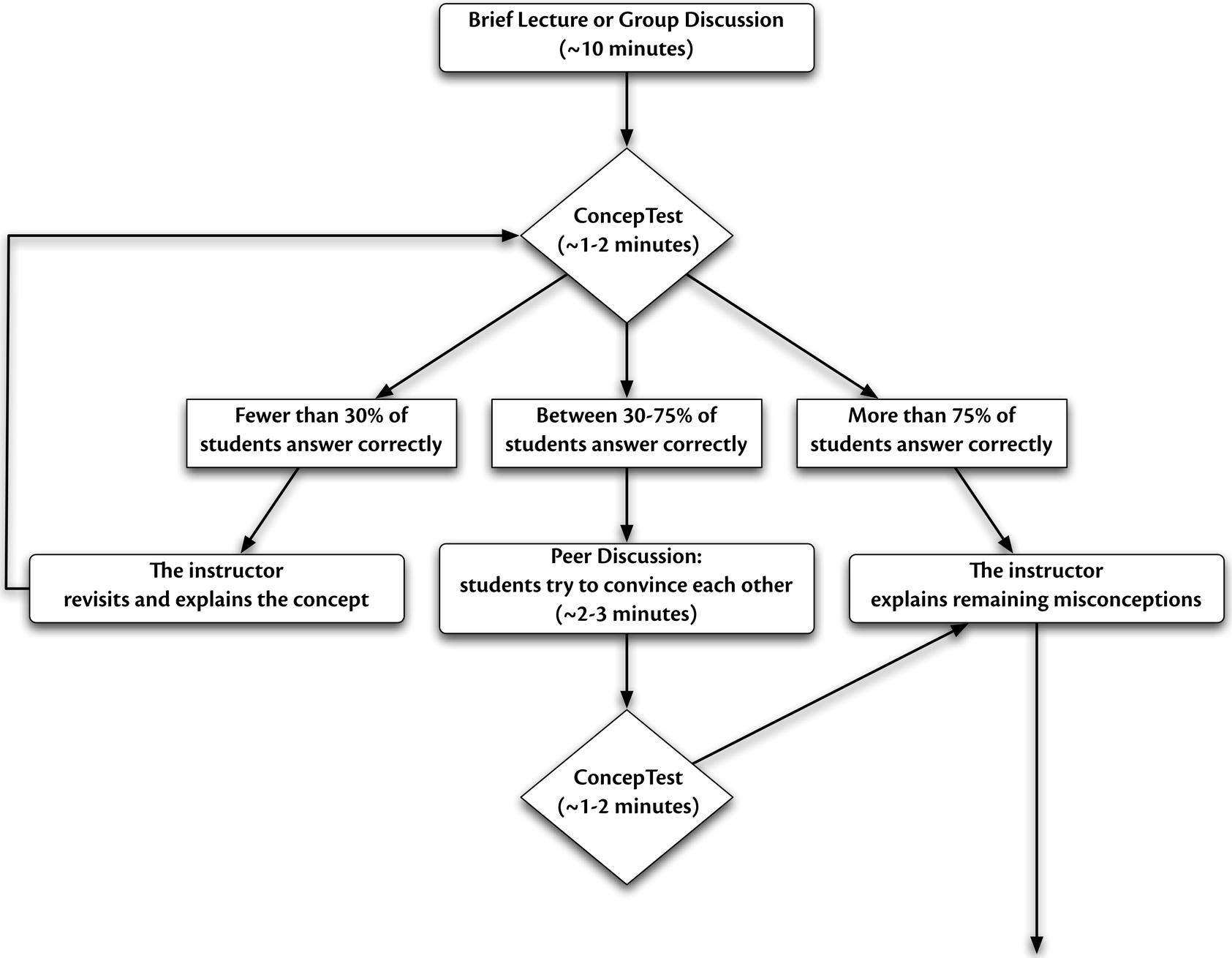


Example #2: ELA



Mazur, E. *Peer Instruction - A User's Manual*. Prentice Hall (1997)

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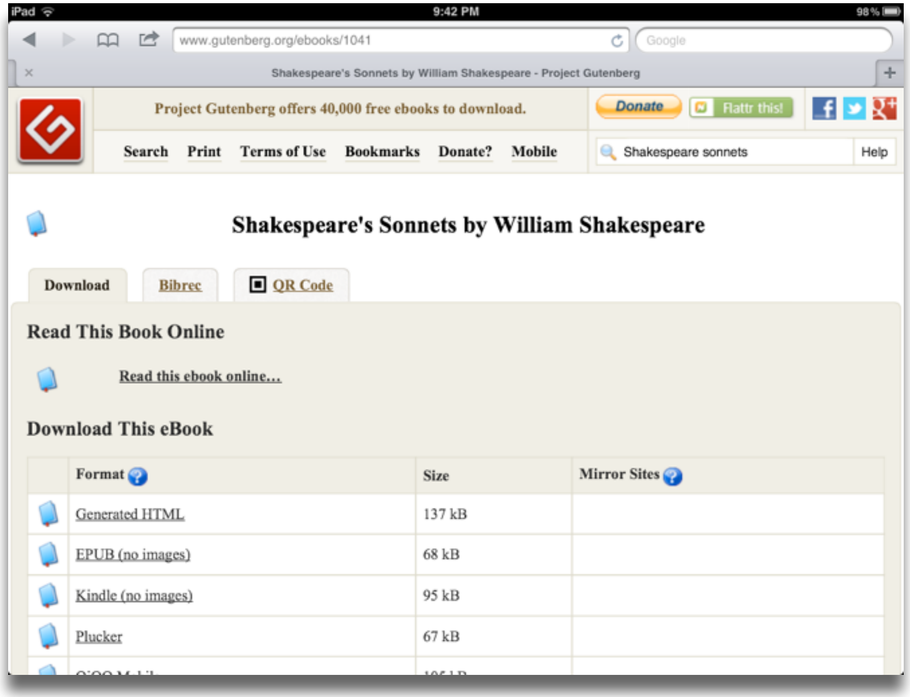

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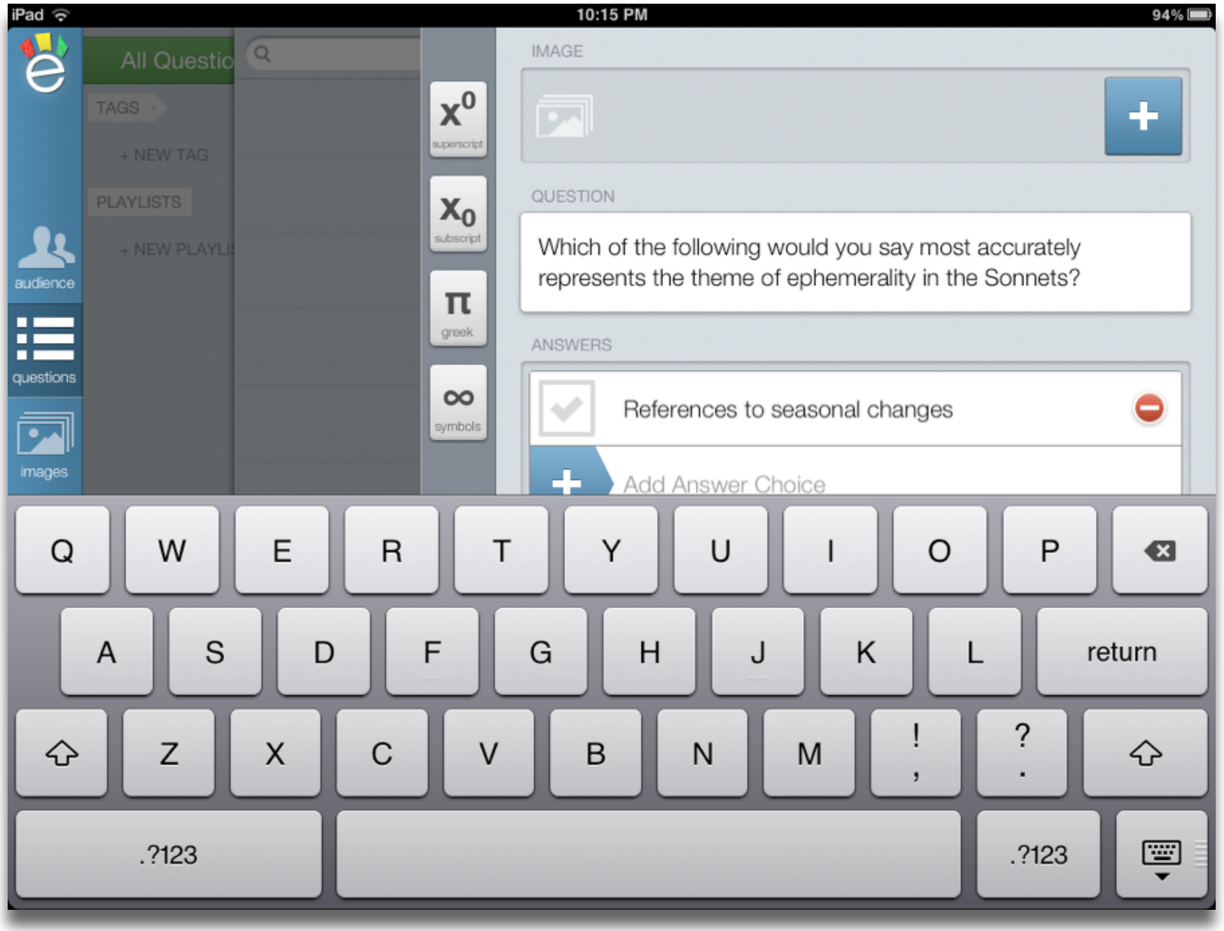

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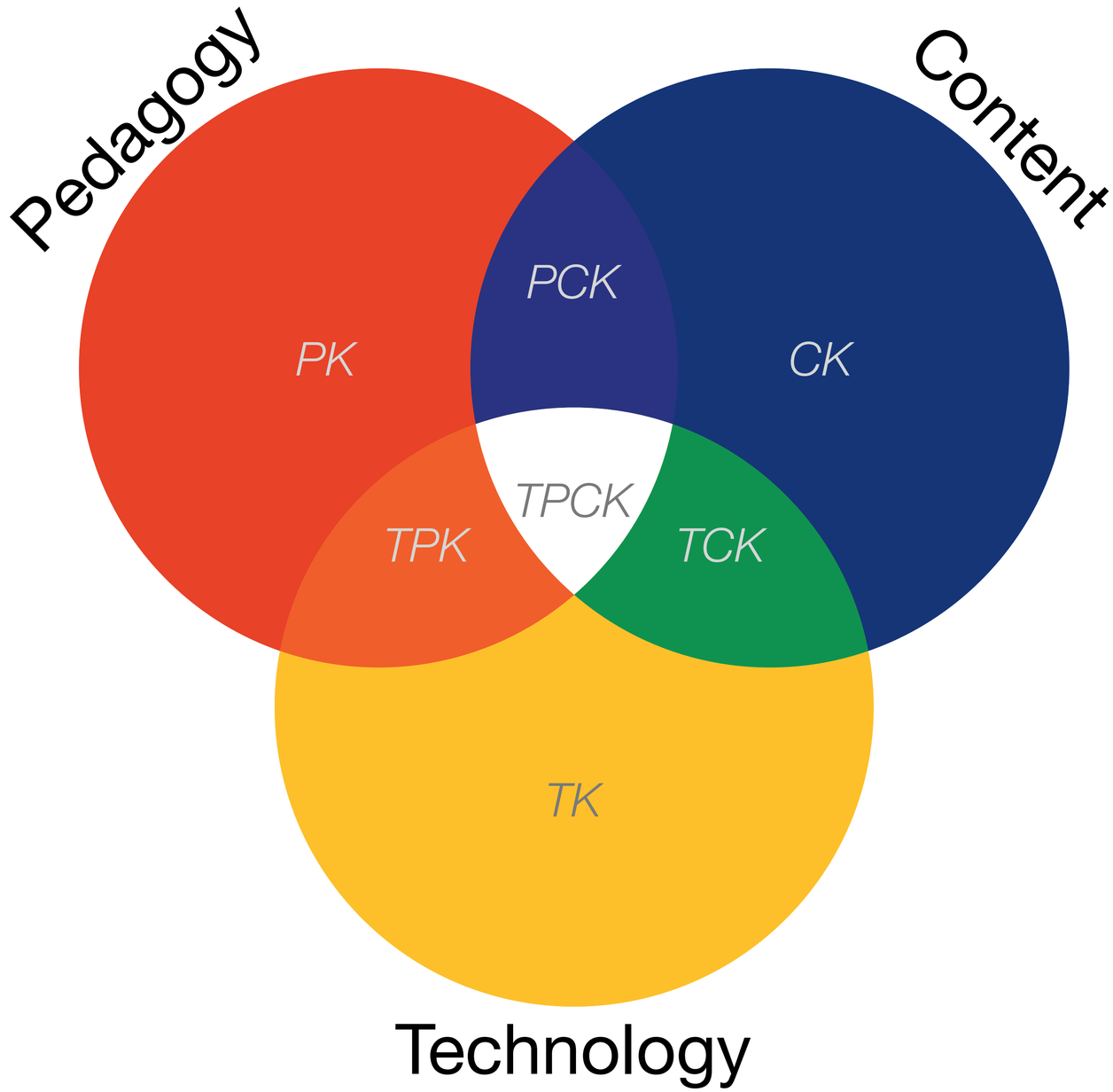
Example #3: History


Pedagogy
Content
PK
PCK
CK
TPCK
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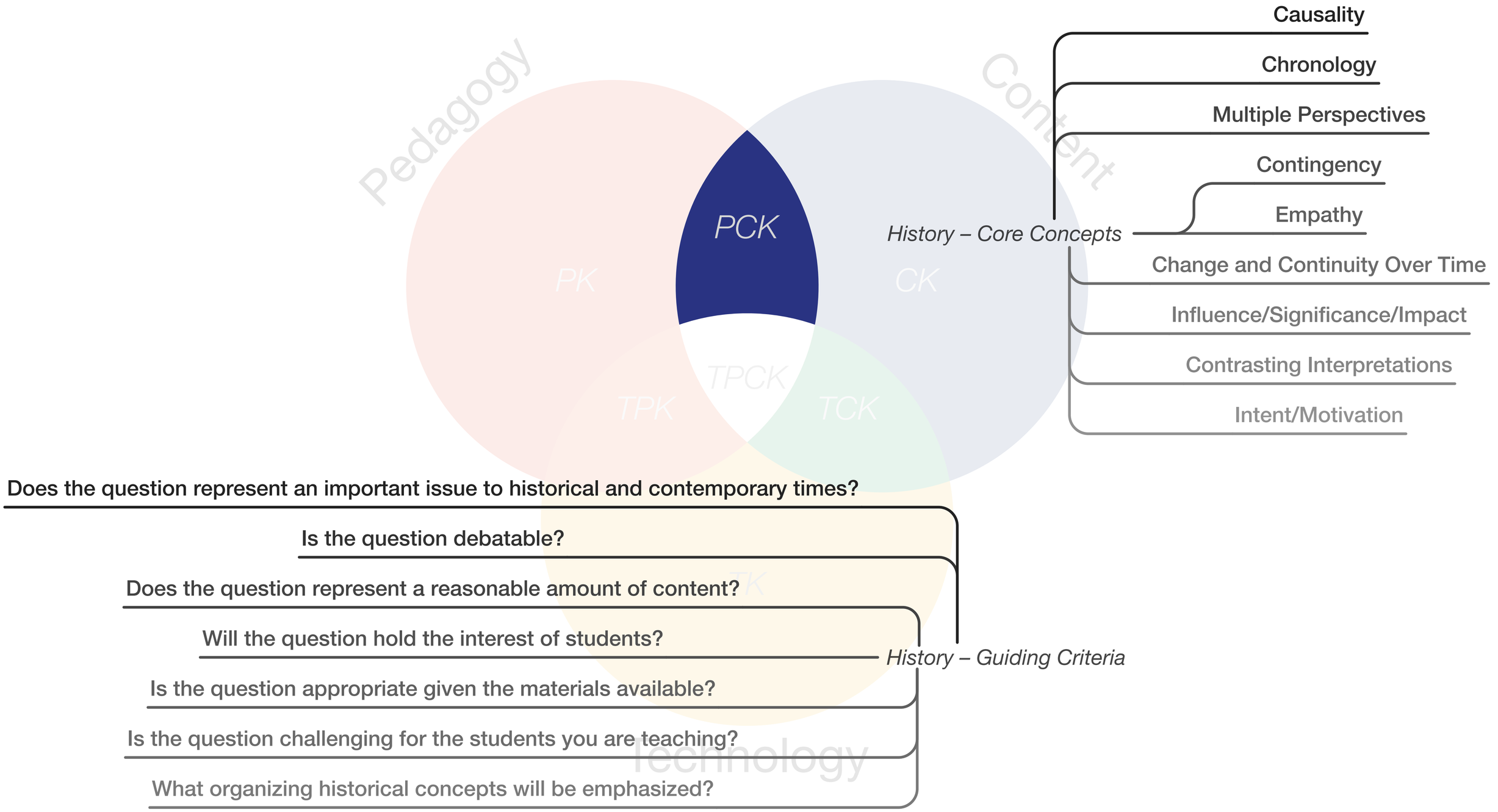
TCK
TK
Technology



Lee S. Shulman, "Those Who Understand: Knowledge Growth in Teaching." *Educational Researcher*, Vol. 15, No. 2 (Feb., 1986)

Bruce Lesh. ''*Why Won't You Just Tell Us the Answer?*'' *Teaching Historical Thinking in Grades 7-12*. Stenhouse Publishers. (2011)

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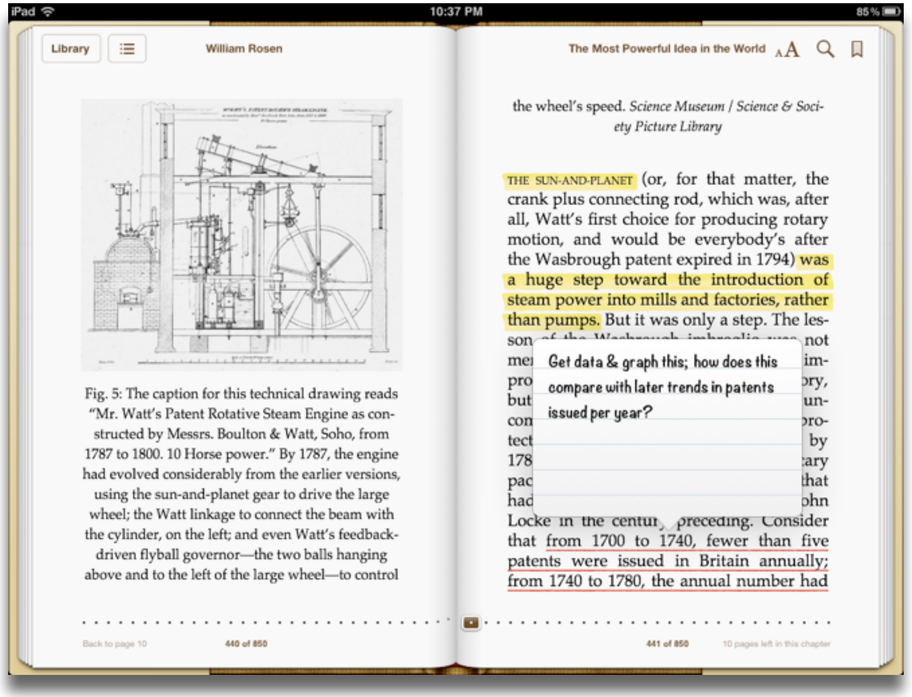

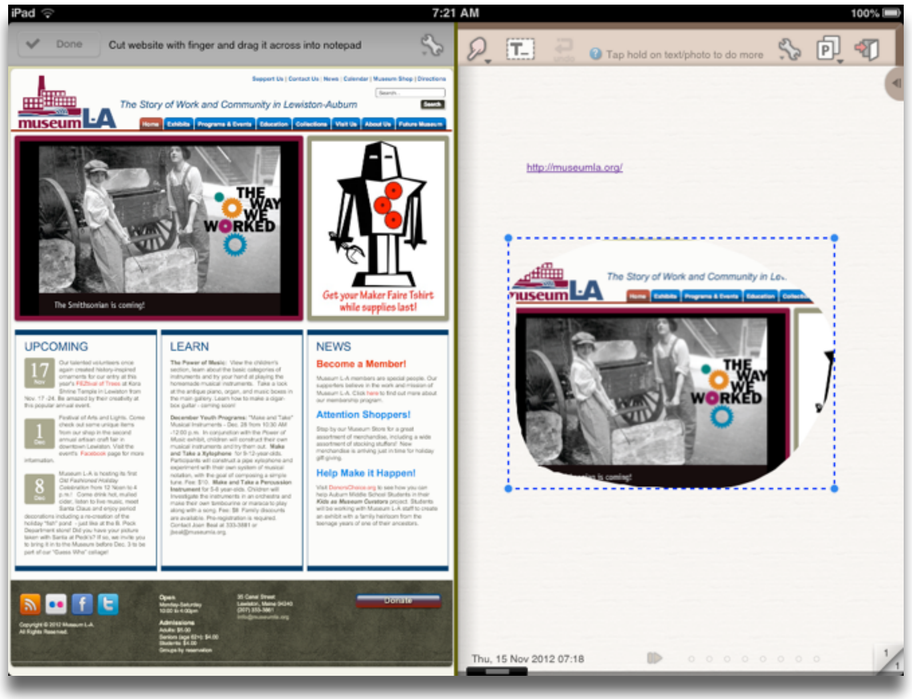

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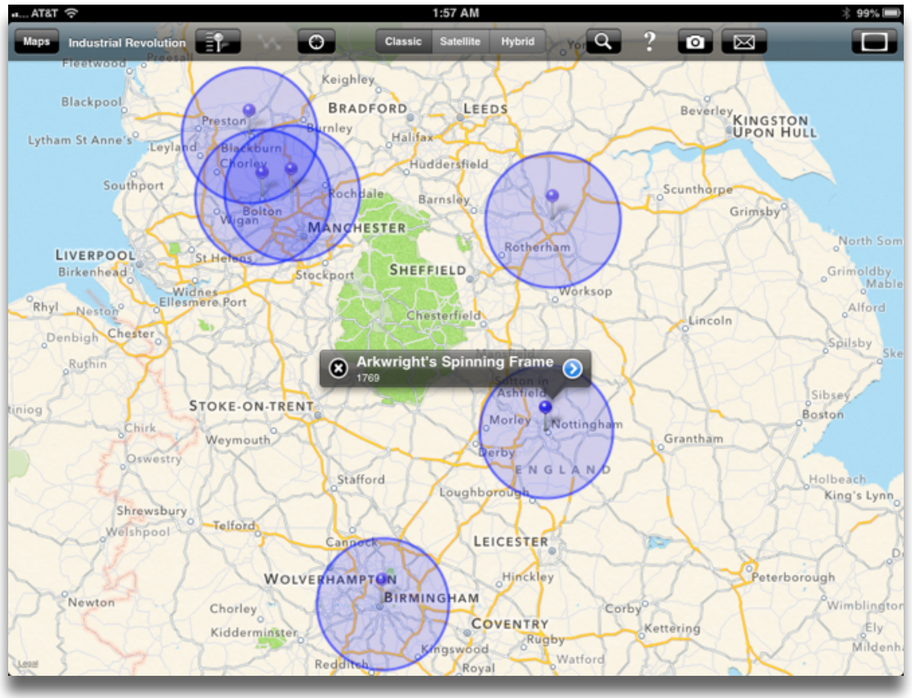

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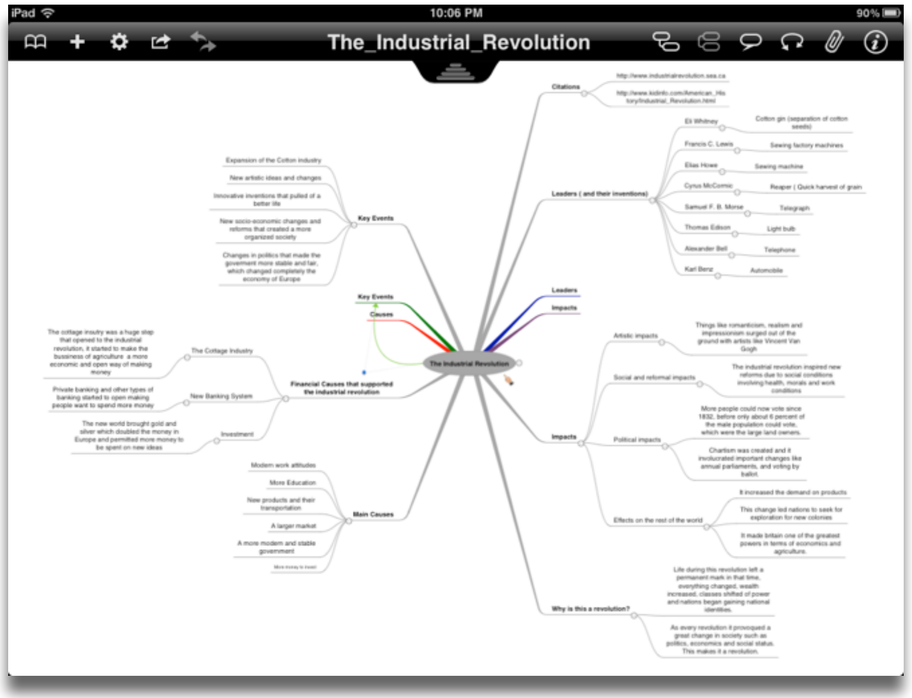

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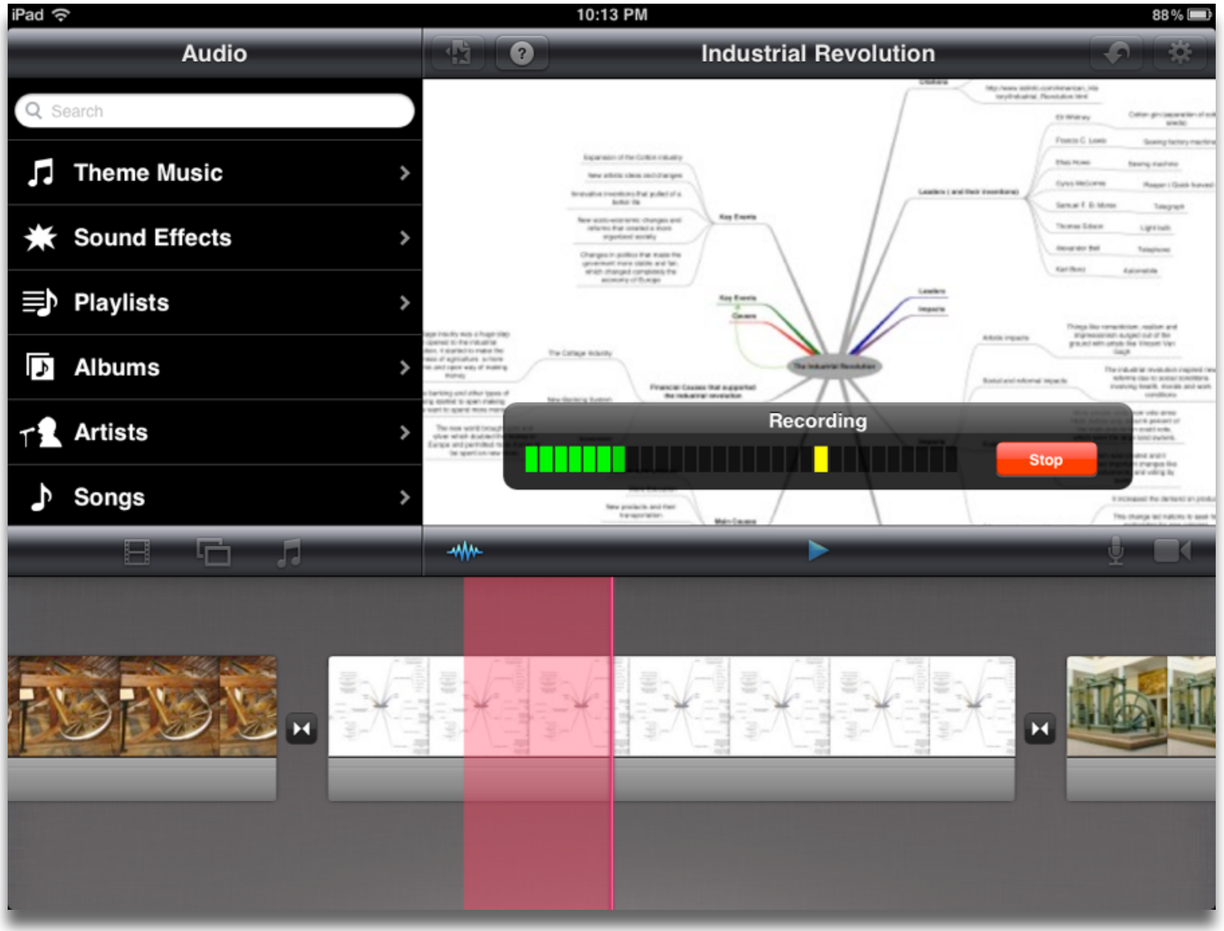
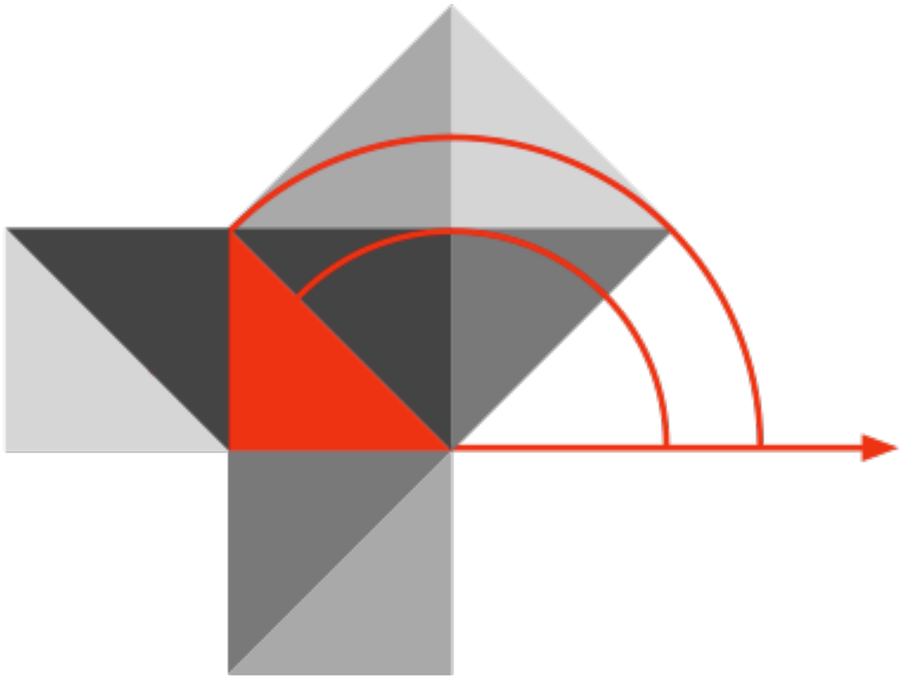


Hippasus



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Twitter: @rubenrp