

The iPad in Practice: Designing Flows and Ladders for the Classroom

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Transformation

Redefinition

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

Modification

Tech allows for significant task redesign

Augmentation

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

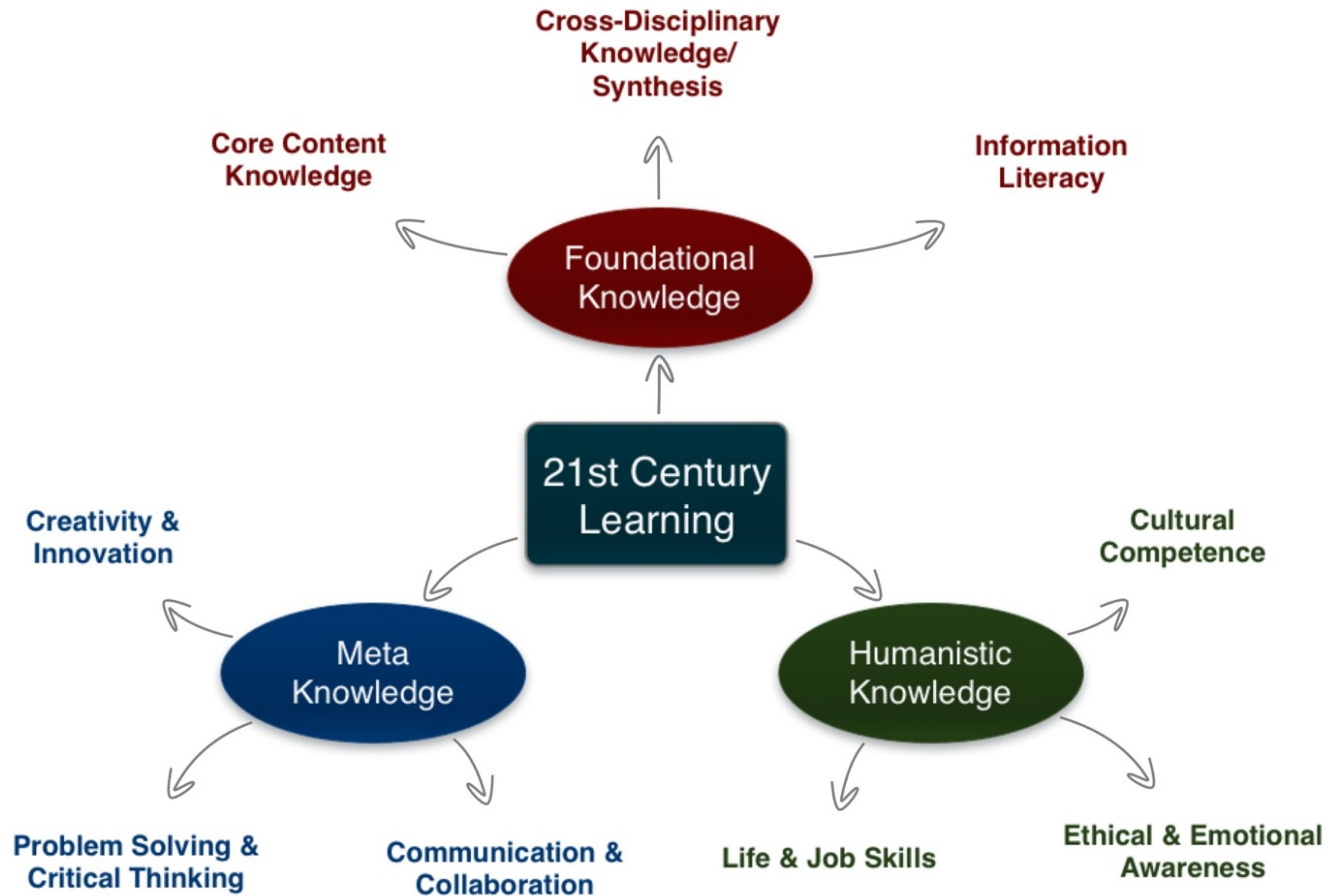
Substitution

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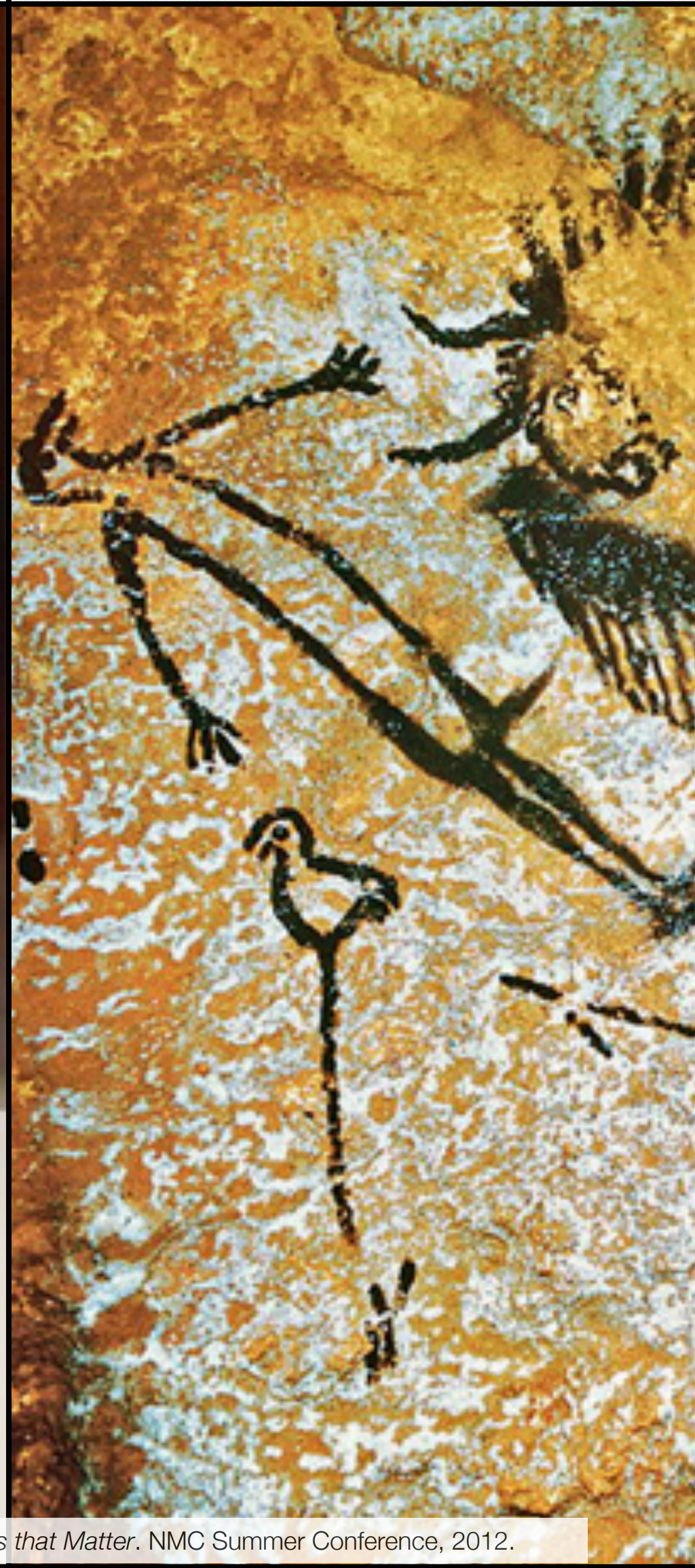

Enhancement

Bloom's Taxonomy: Cognitive Processes

Anderson & Krathwohl (2001)	Characteristic Processes	
Remember	<ul style="list-style-type: none">Recalling memorized knowledgeRecognizing correspondences between memorized knowledge and new material	
Understand	<ul style="list-style-type: none">Paraphrasing materialsExemplifying concepts, principlesClassifying itemsSummarizing materials	<ul style="list-style-type: none">Extrapolating principlesComparing items
Apply	<ul style="list-style-type: none">Applying a procedure to a familiar taskUsing a procedure to solve an unfamiliar, but typed task	
Analyze	<ul style="list-style-type: none">Distinguishing relevant/irrelevant or important/unimportant portions of materialIntegrating heterogeneous elements into a structureAttributing intent in materials	
Evaluate	<ul style="list-style-type: none">Testing for consistency, appropriateness, and effectiveness in principles and proceduresCritiquing the consistency, appropriateness, and effectiveness of principles and procedures, basing the critique upon appropriate tests	
Create	<ul style="list-style-type: none">Generating multiple hypotheses based on given criteriaDesigning a procedure to accomplish an untyped taskInventing a product to accomplish an untyped task	



The EdTech Quintet

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

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Bookmarks



RSS Feeds

Discussions



Microblogging

Blogging










Wikis

Telepresence

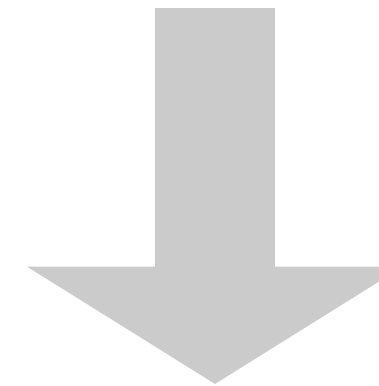


File Sharing

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

Class

Homework



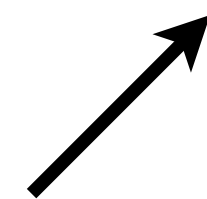
School

World

Home



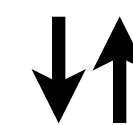
Learning Environments



*Contextual Search
Augmented Reality*





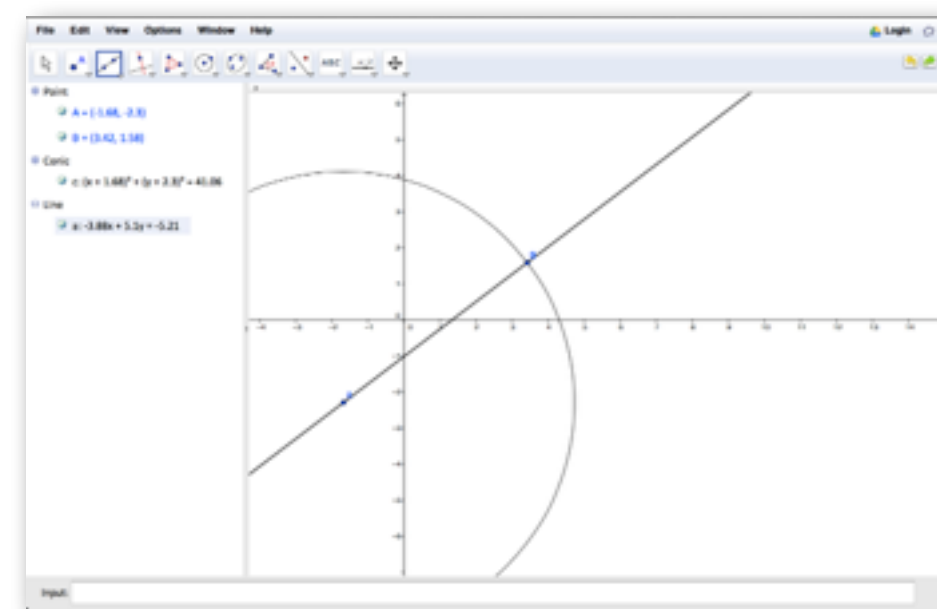
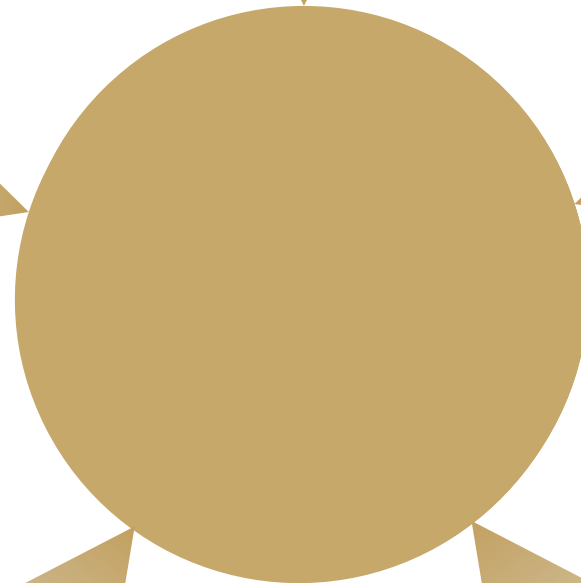
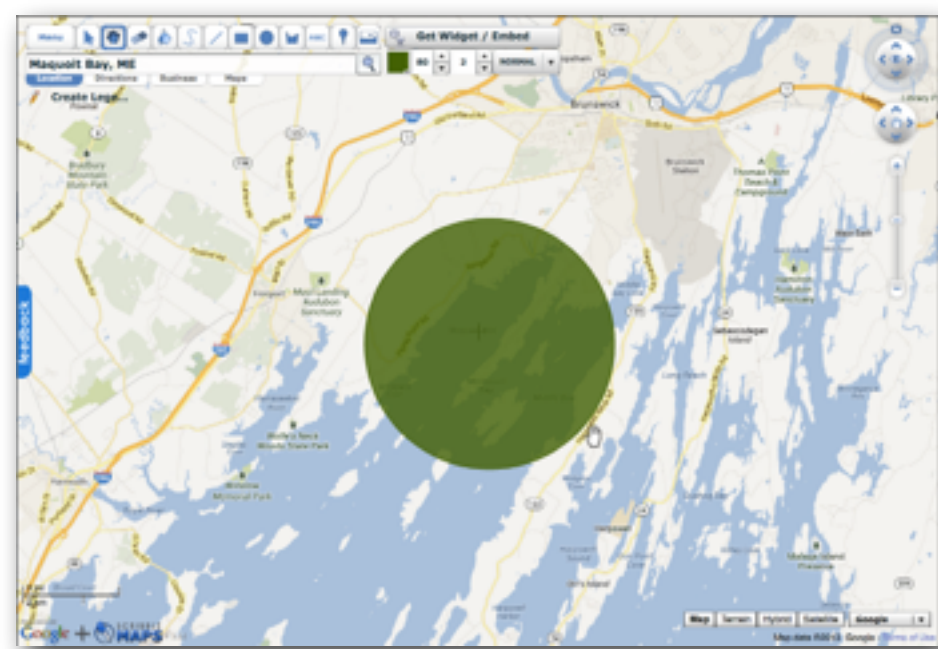
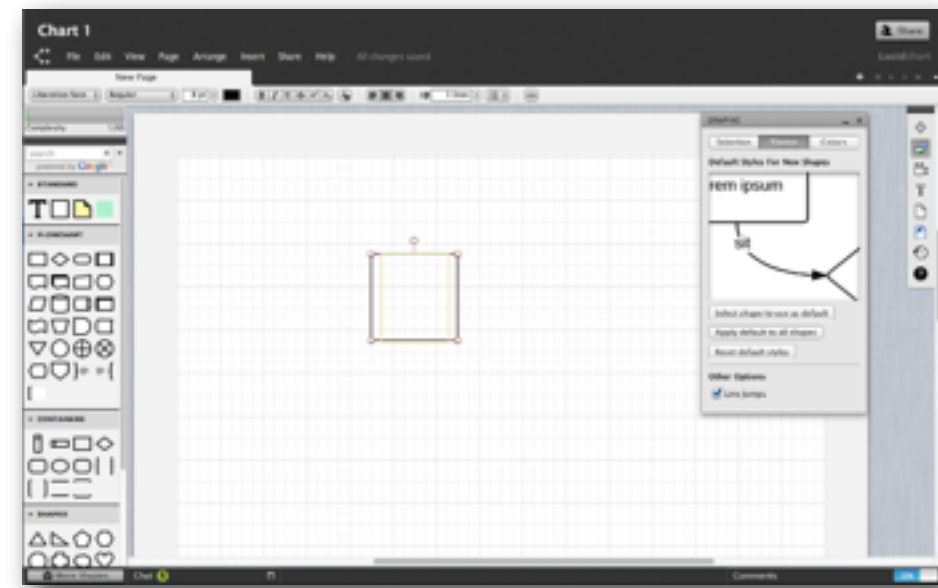
*Cloud Resources
Mobile Tools*



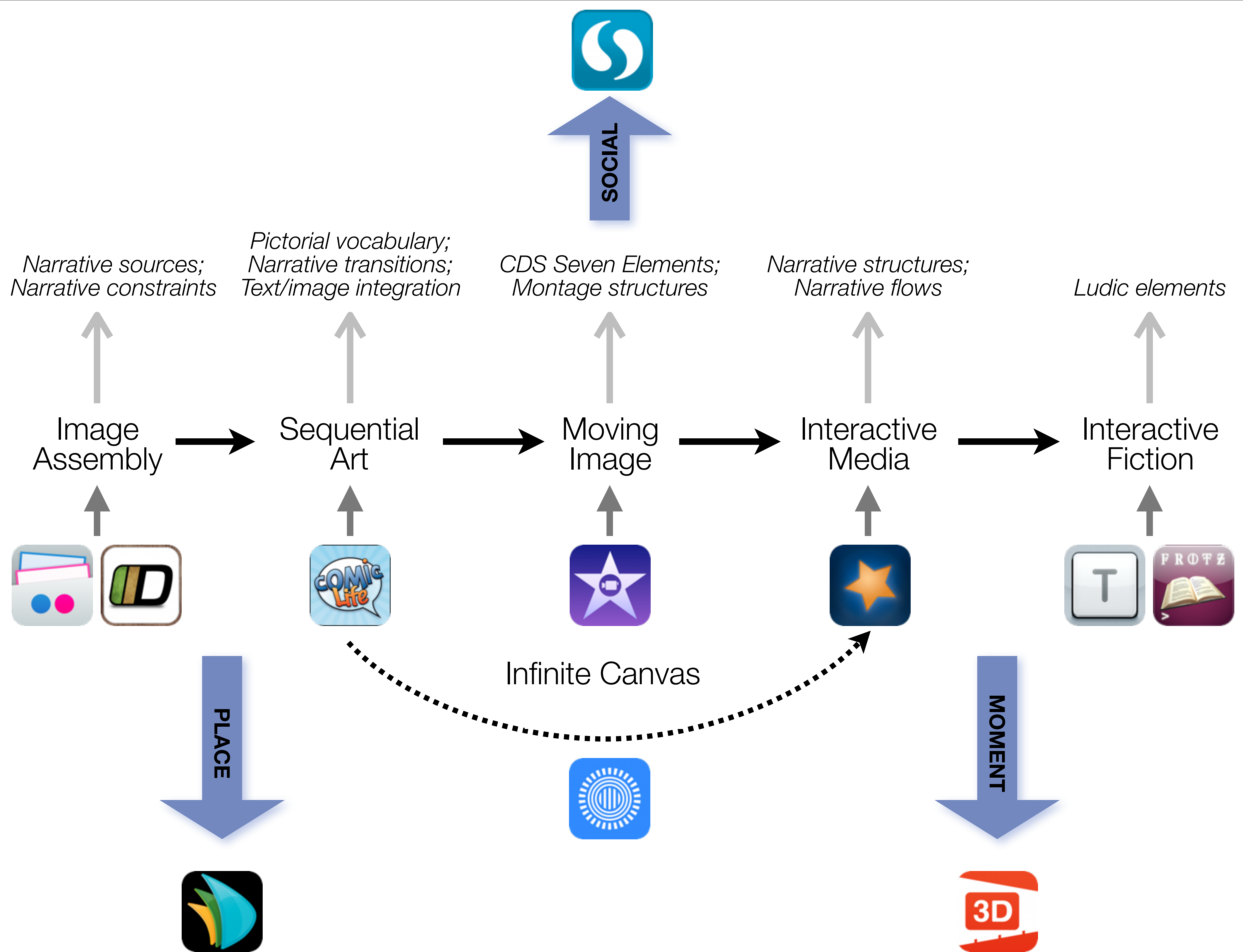
*Sensors
Recorders*



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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.”



Example #1: Science

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1:15 PM 85%

Aquatic Biomes

Aquatic biomes cover 75 percent of the surface of the Earth. The aquatic and terrestrial biomes are similar in some ways. In aquatic biomes, the availability of food is the most important factor for determining the distribution of organisms. In terrestrial biomes, the availability of water is the most important factor.

bi•ome | 'bī,ōm |
noun Ecology
a large naturally occurring community of flora and fauna occupying a major habitat, e.g., forest or tundra.

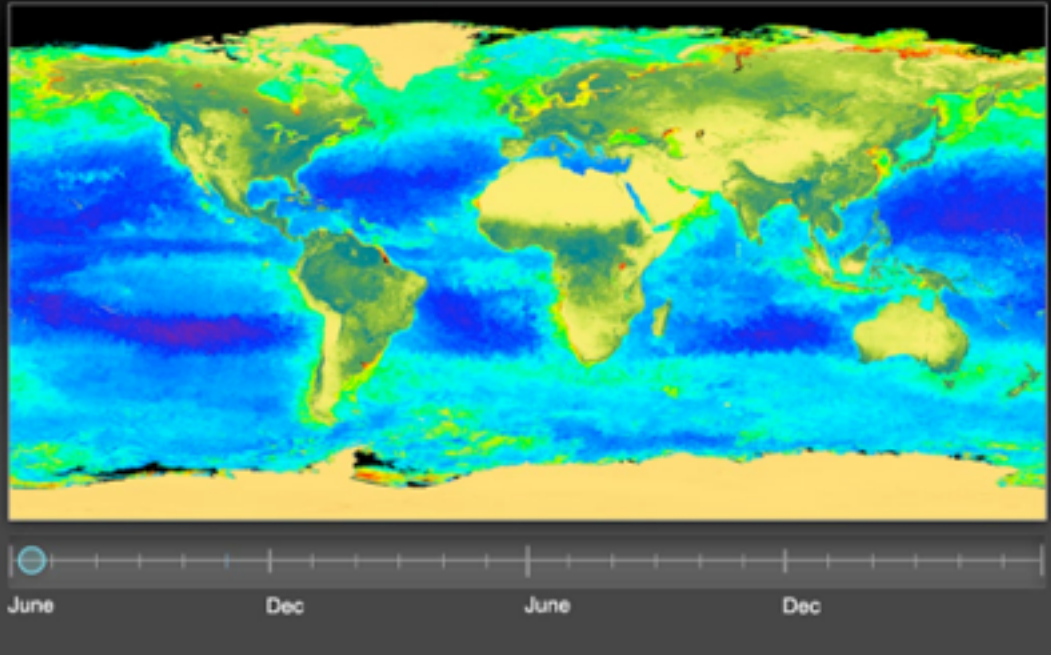
ORIGIN early 20th cent.: from BIO- 'life' + -OME

[Search Web](#) [Search Wikipedia](#)

Some aquatic organisms are adapted to both conditions for parts of their lives, such as salmon and some eels, but it is more common for organisms to be confined to one of the two environments.

Aquatic environments have less variation globally than those on land. Taking a broad view (the lumpers' perspective), there are four kinds of aquatic biomes: surface waters, deep waters, shores, and bottoms. Within these categories are a variety of distinctive marine and freshwater life zones that are frequently designated as separate biomes.

Worldwide Photosynthetic Activity



Interactive The latitudes of peak photosynthesis change with the seasons.

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EURASIAN COLLARED-DOVE

Streptopelia decaocto
Locally common, exotic

12½–13 in. (32–33 cm)

Recent colonizer of N. America from Caribbean but native to Eurasia; rapidly increasing and spreading. Slightly chunkier than Mourning Dove, *paler beige*, and with *square-cut tail*. Note *narrow black ring on hindneck*. *Grayish undertail coverts*. Three-toned wing pattern in flight.

SPOTTED DOVE

Streptopelia chinensis
Uncommon, local, exotic

12 in. (30–31 cm)

Note *broad collar of black and white spots* on hindneck. A bit larger than Mourning Dove; tail rounded with much white in corners. *Juvenile*: Lacks collar, but can be told by shape of spread tail.

ROCK PIGEON (ROCK DOVE, DOMESTIC PIGEON)

Columba livia
Common, exotic

12½ in. (32 cm)

Typical birds are gray with *whitish rump*, *two black wing bars*, and *broad, dark tail band*. Domestic stock or feral birds may have many color variants.



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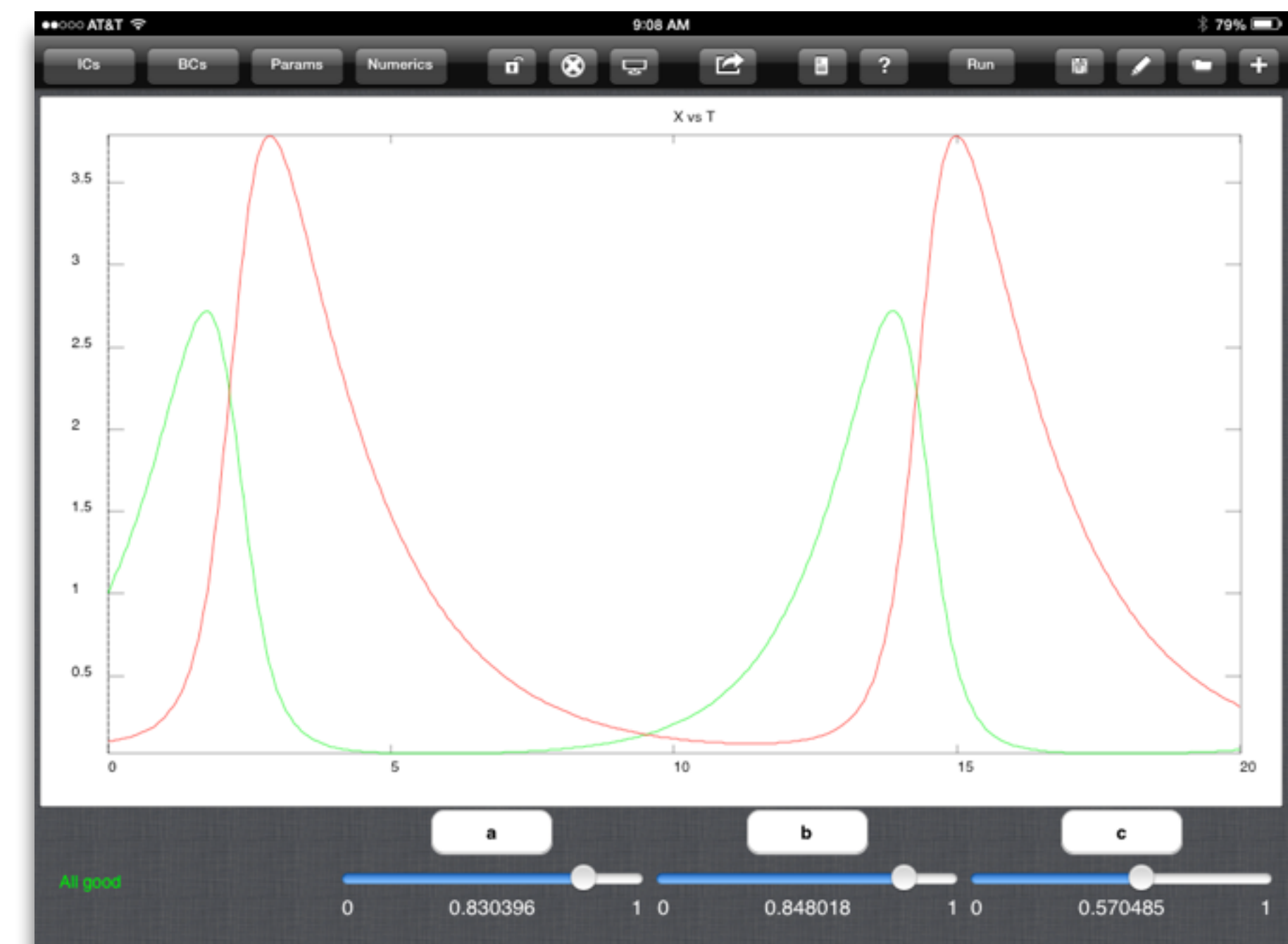
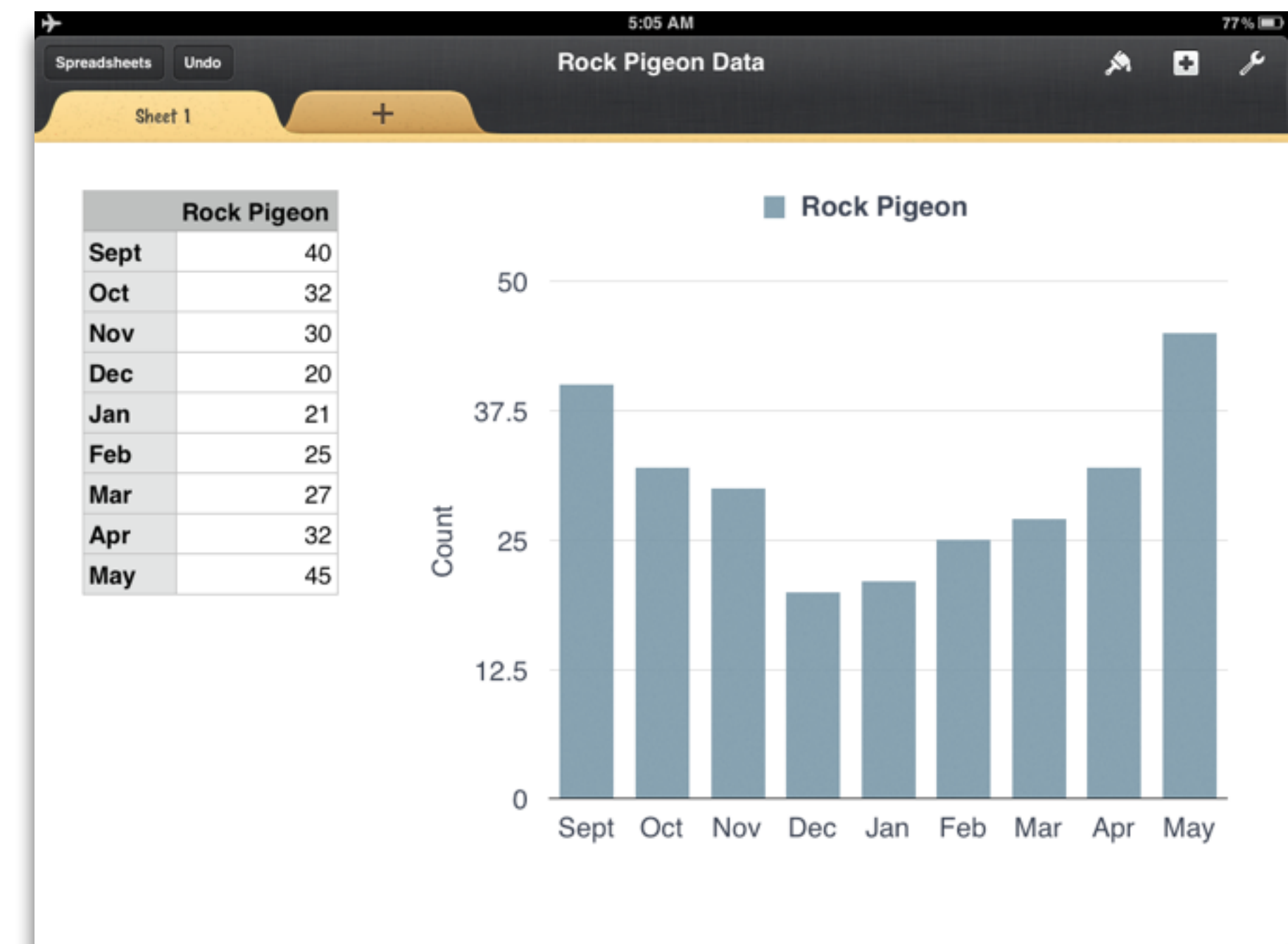
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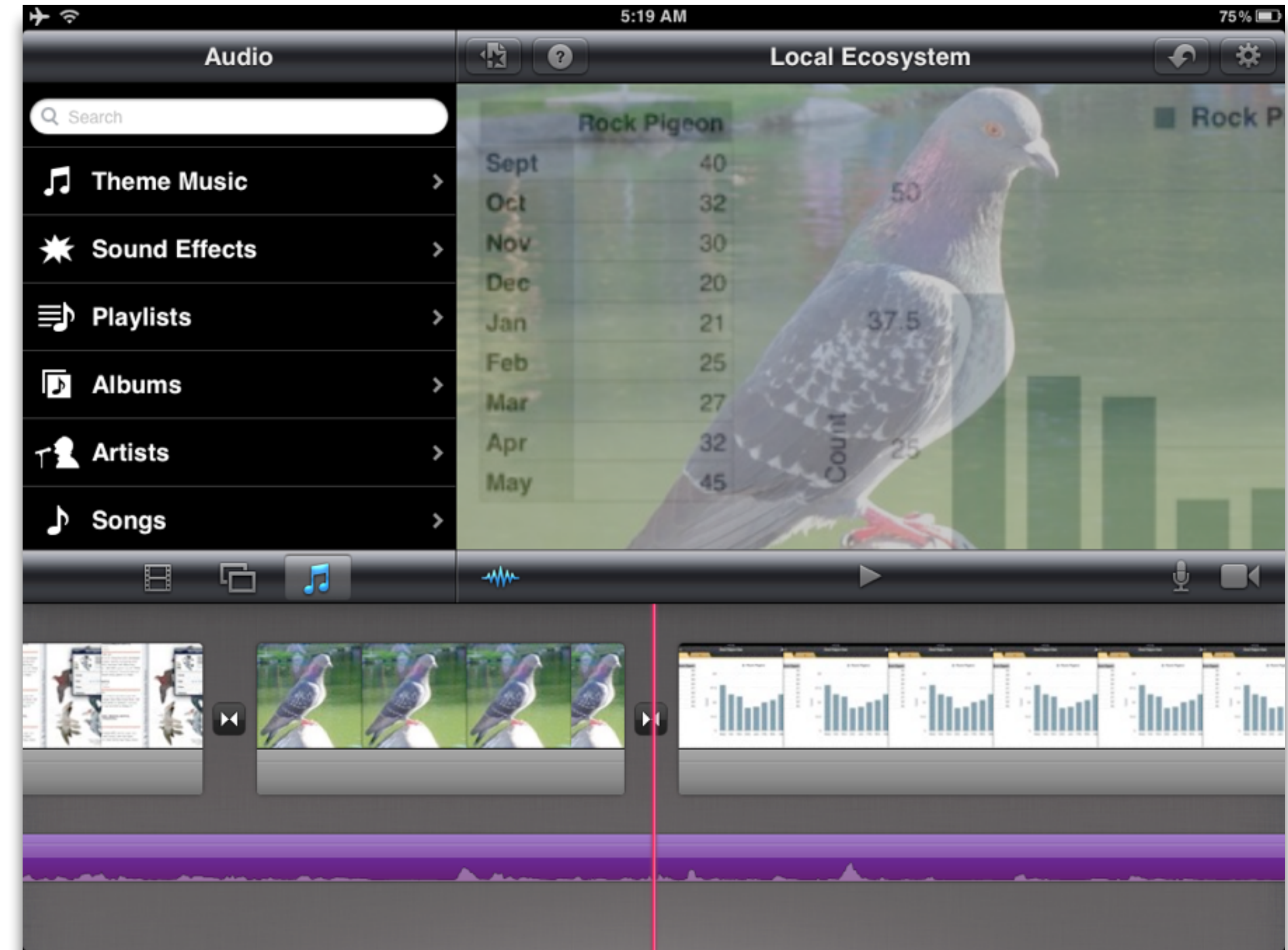
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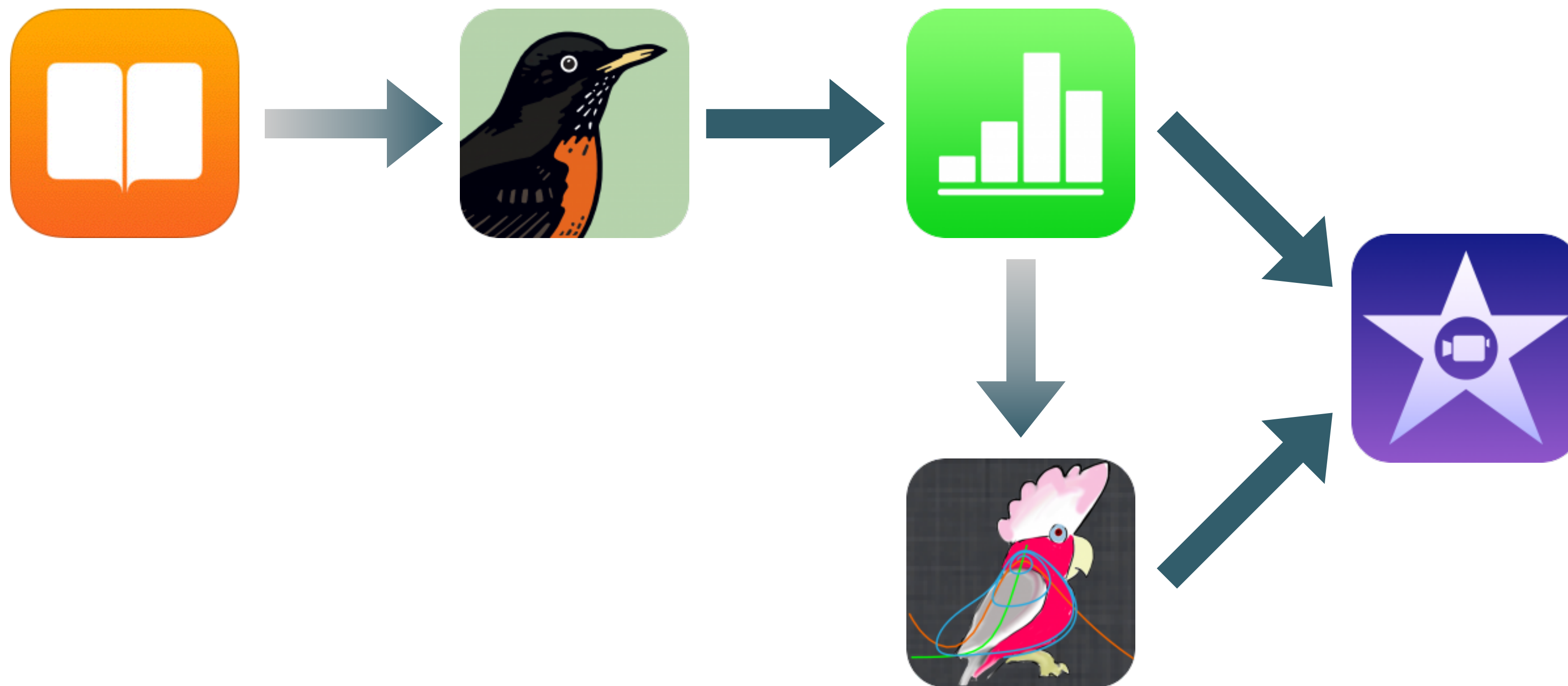
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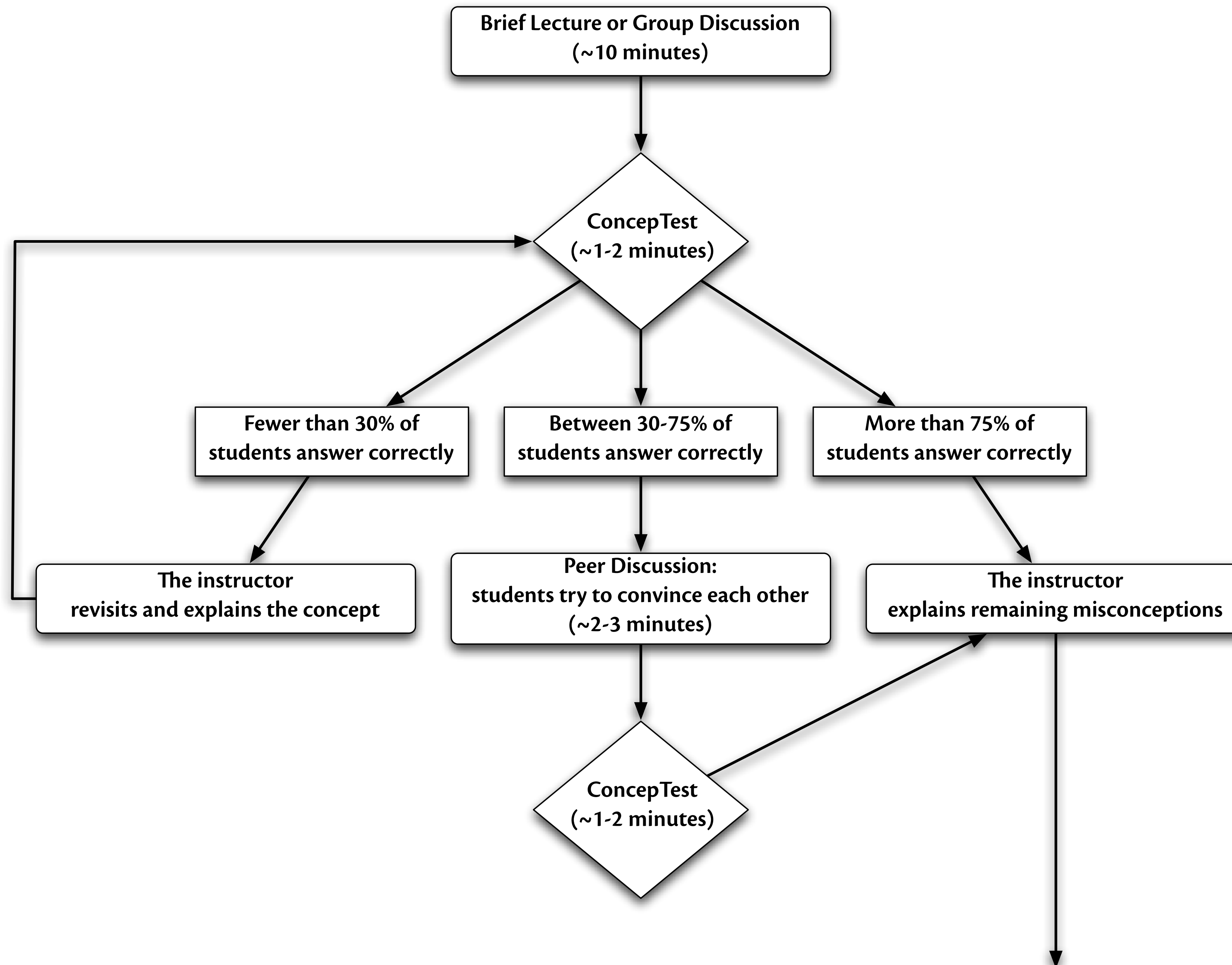
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Example #2: ELA



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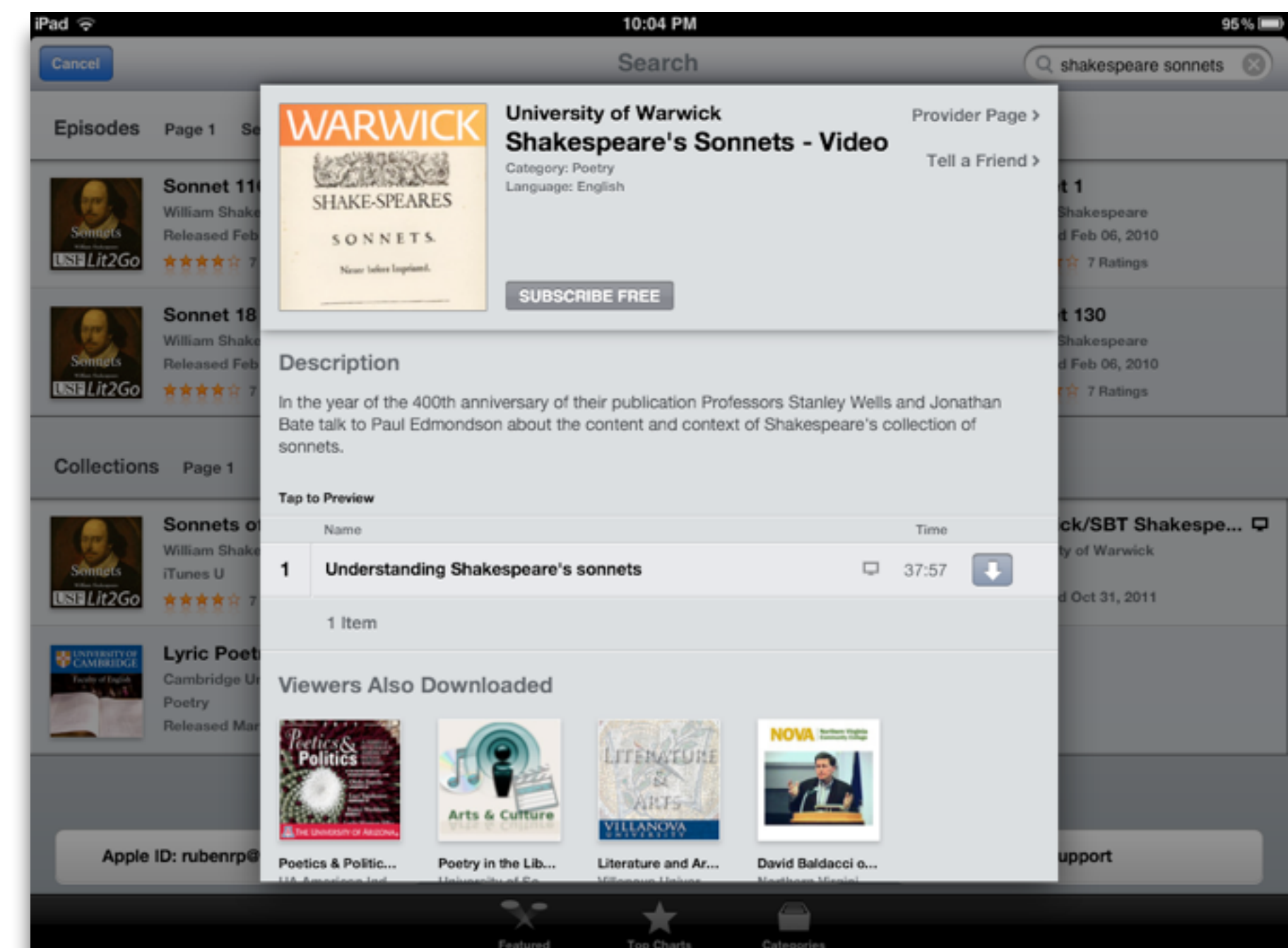
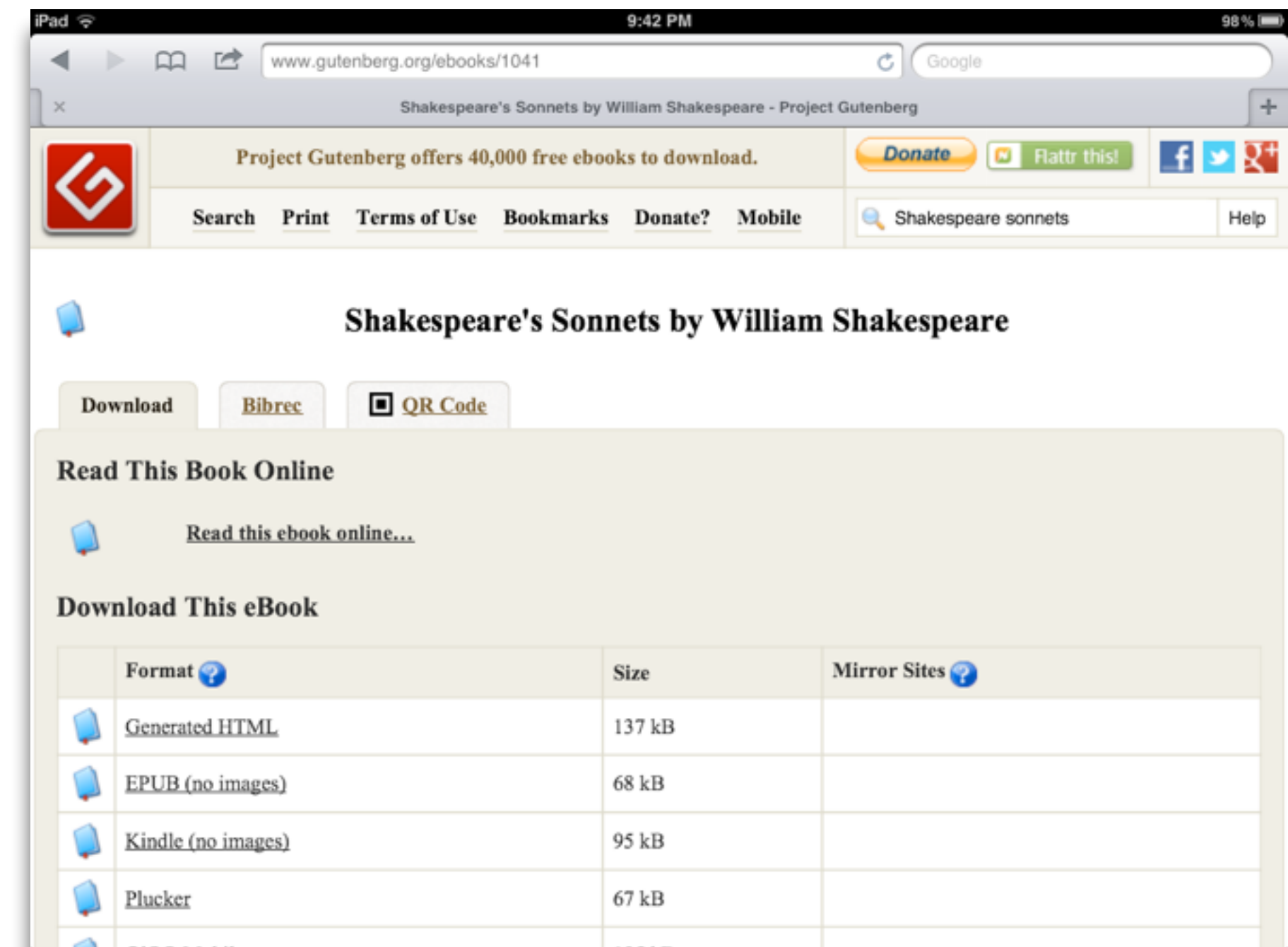
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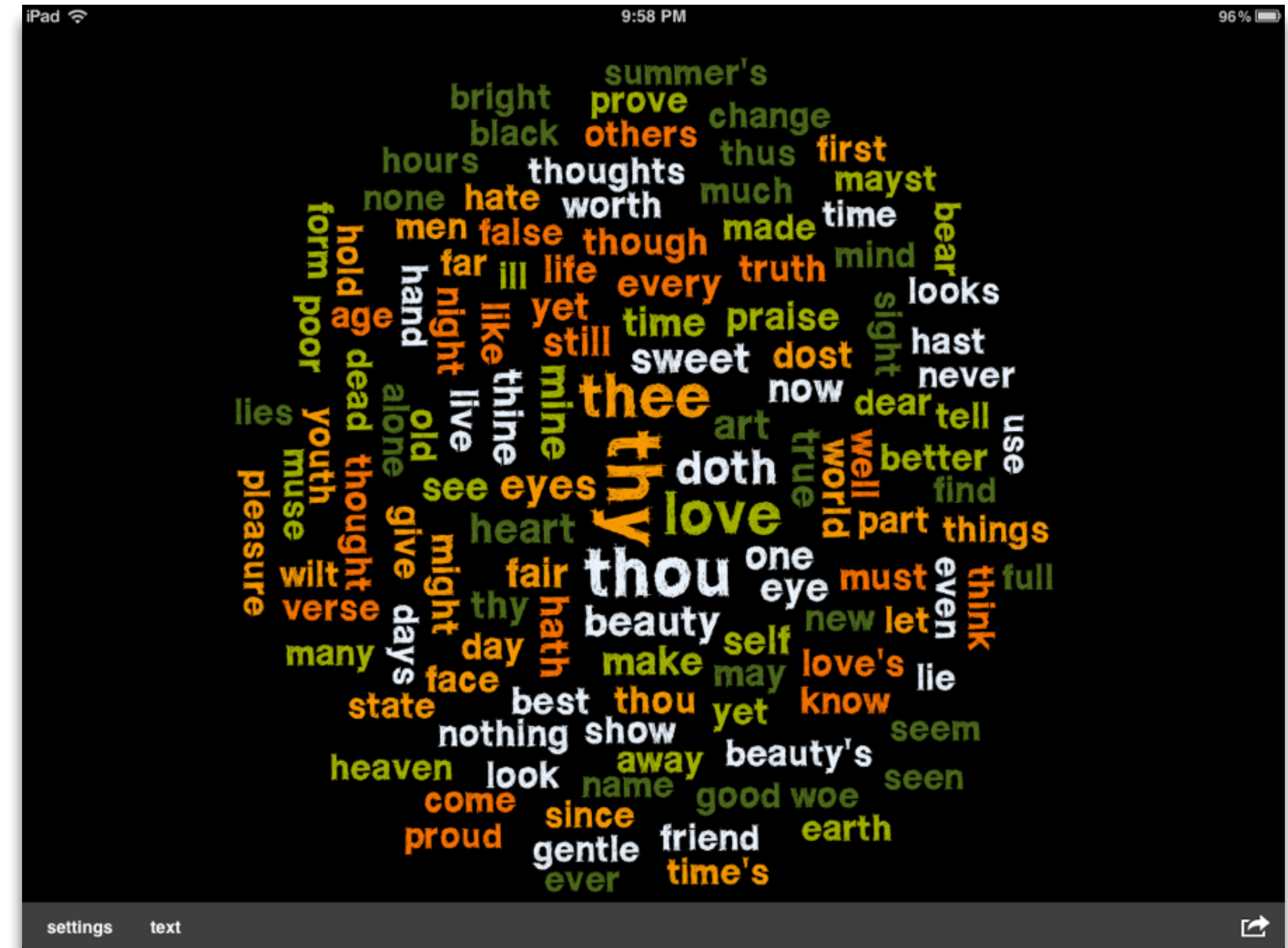
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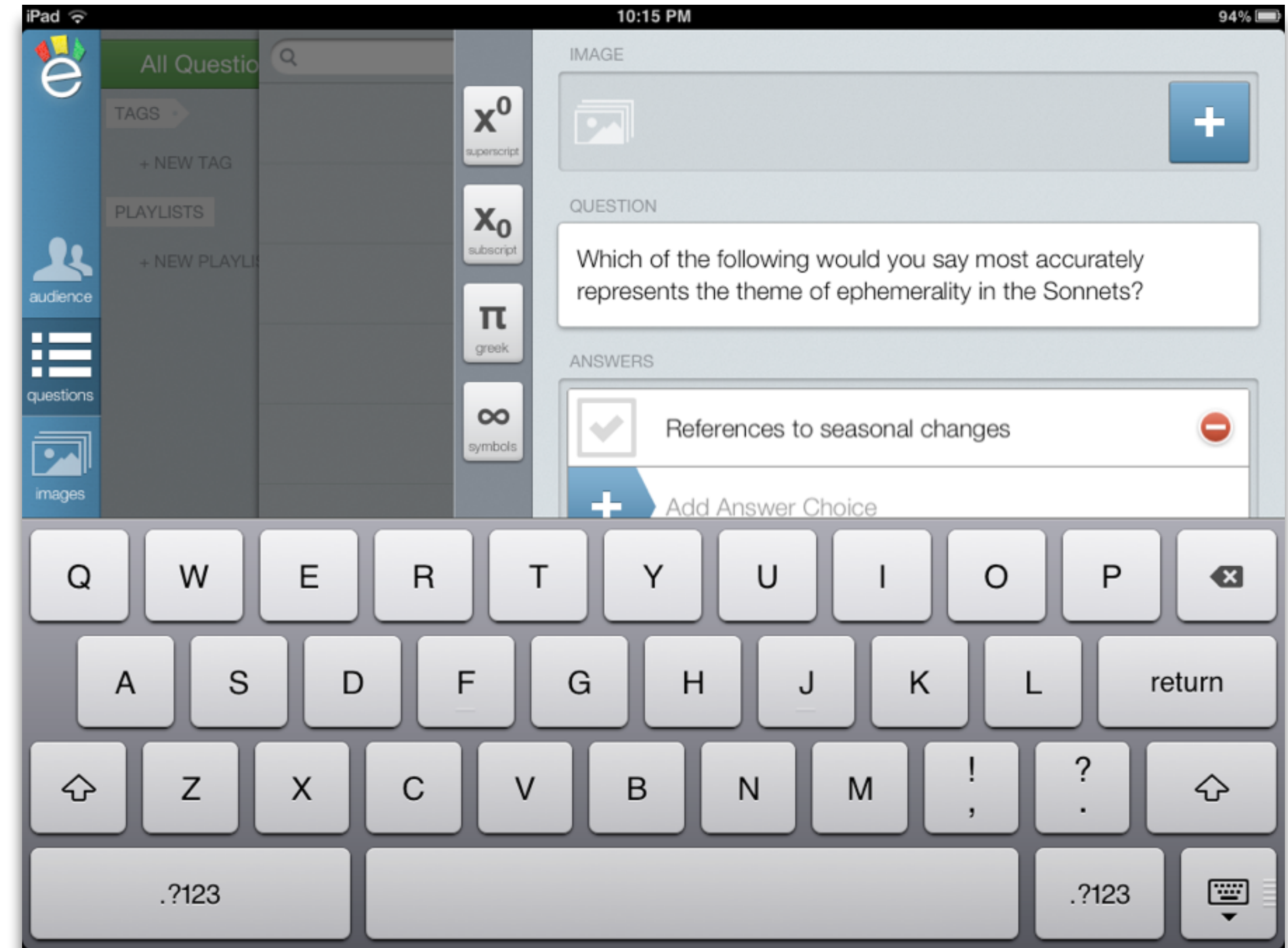
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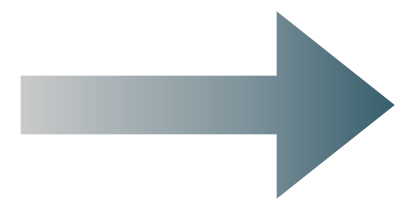
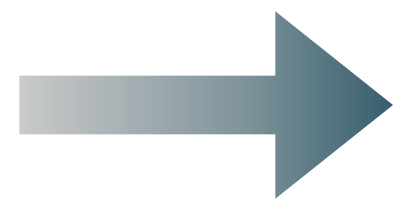
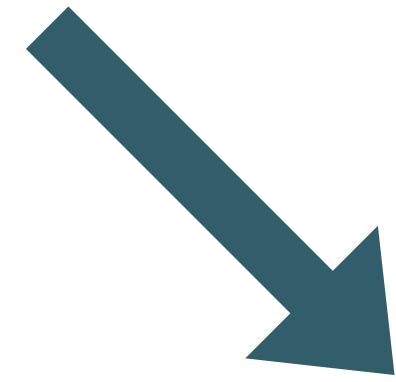
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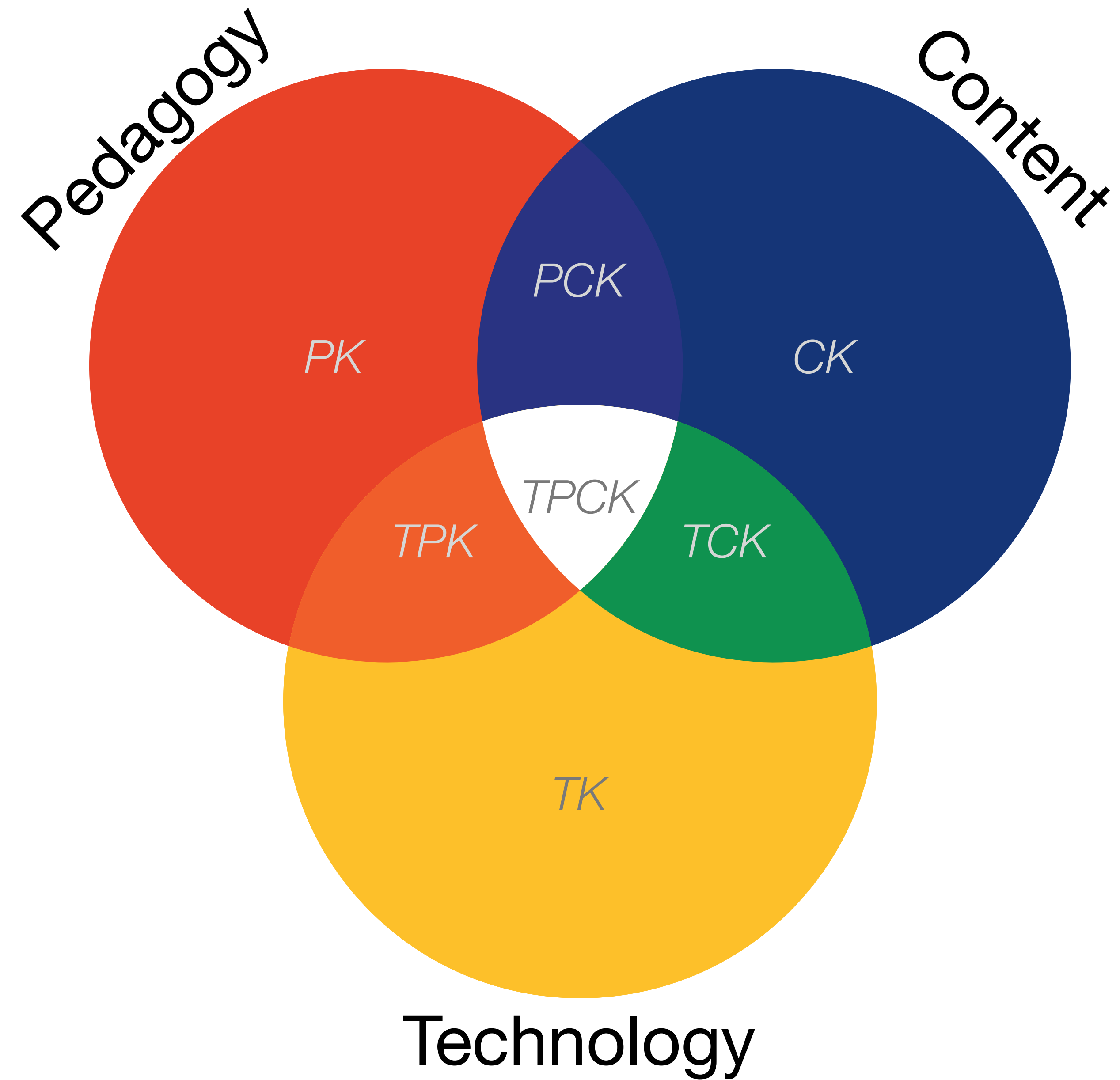
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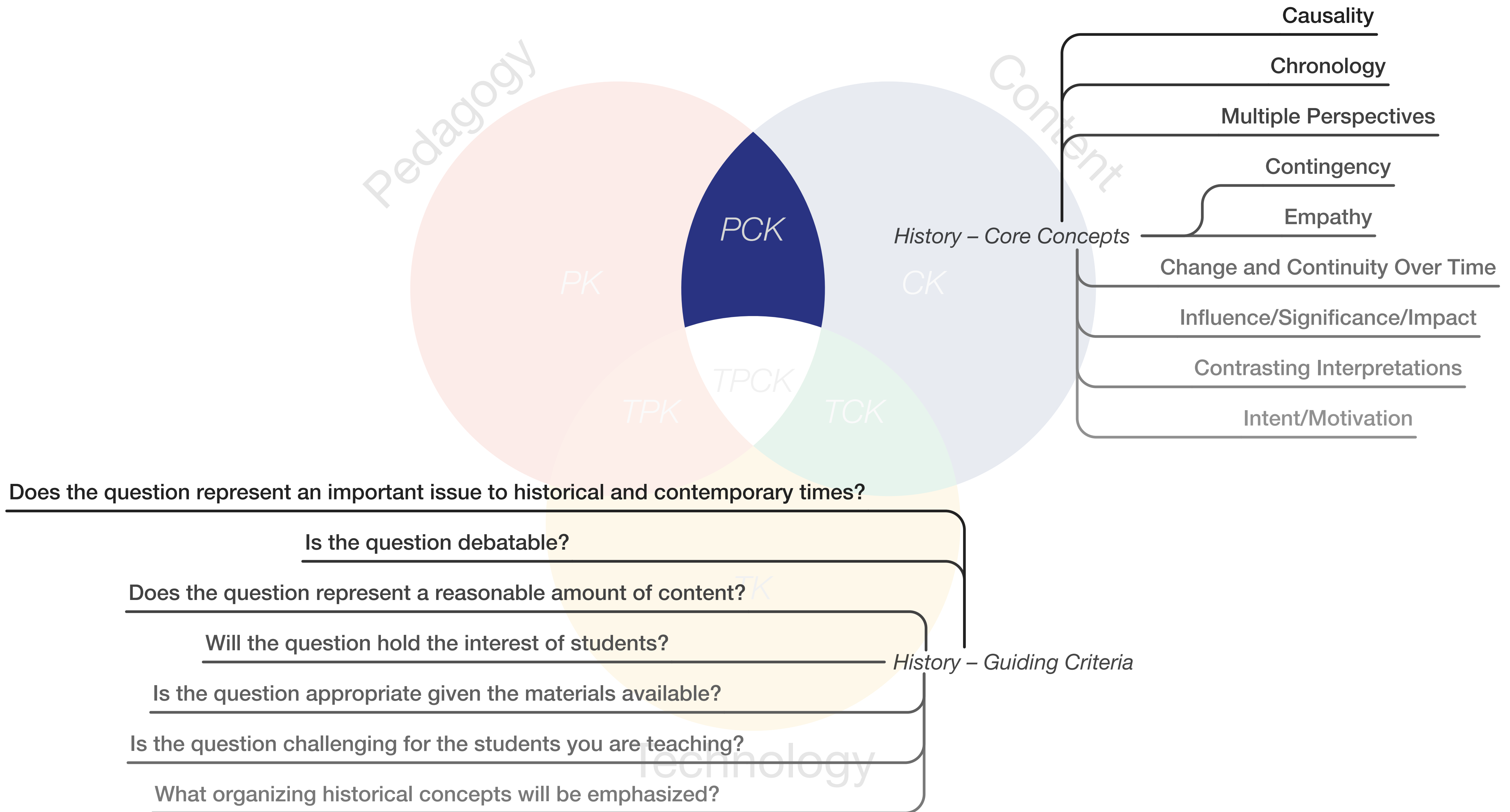
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Example #3: History





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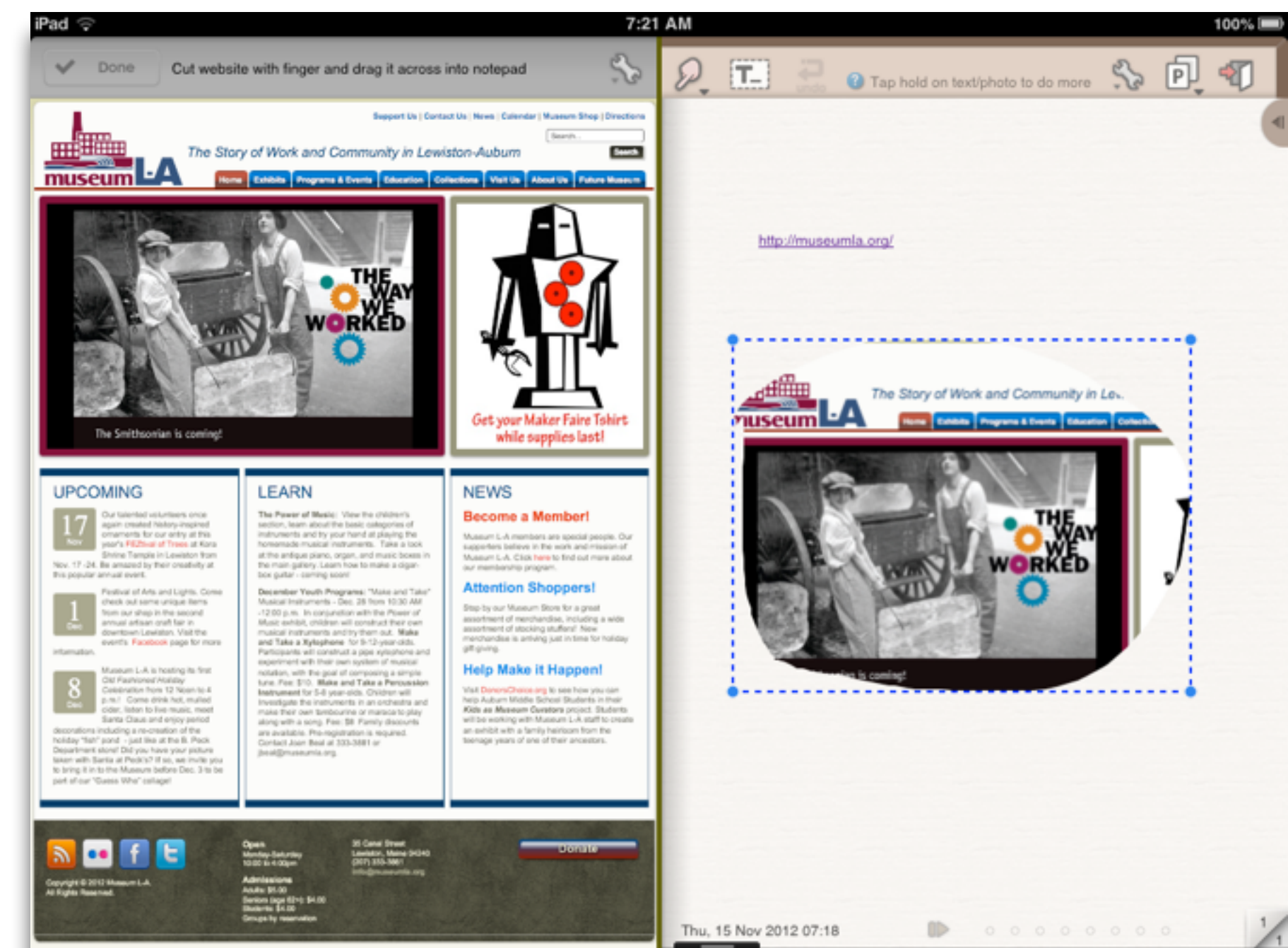
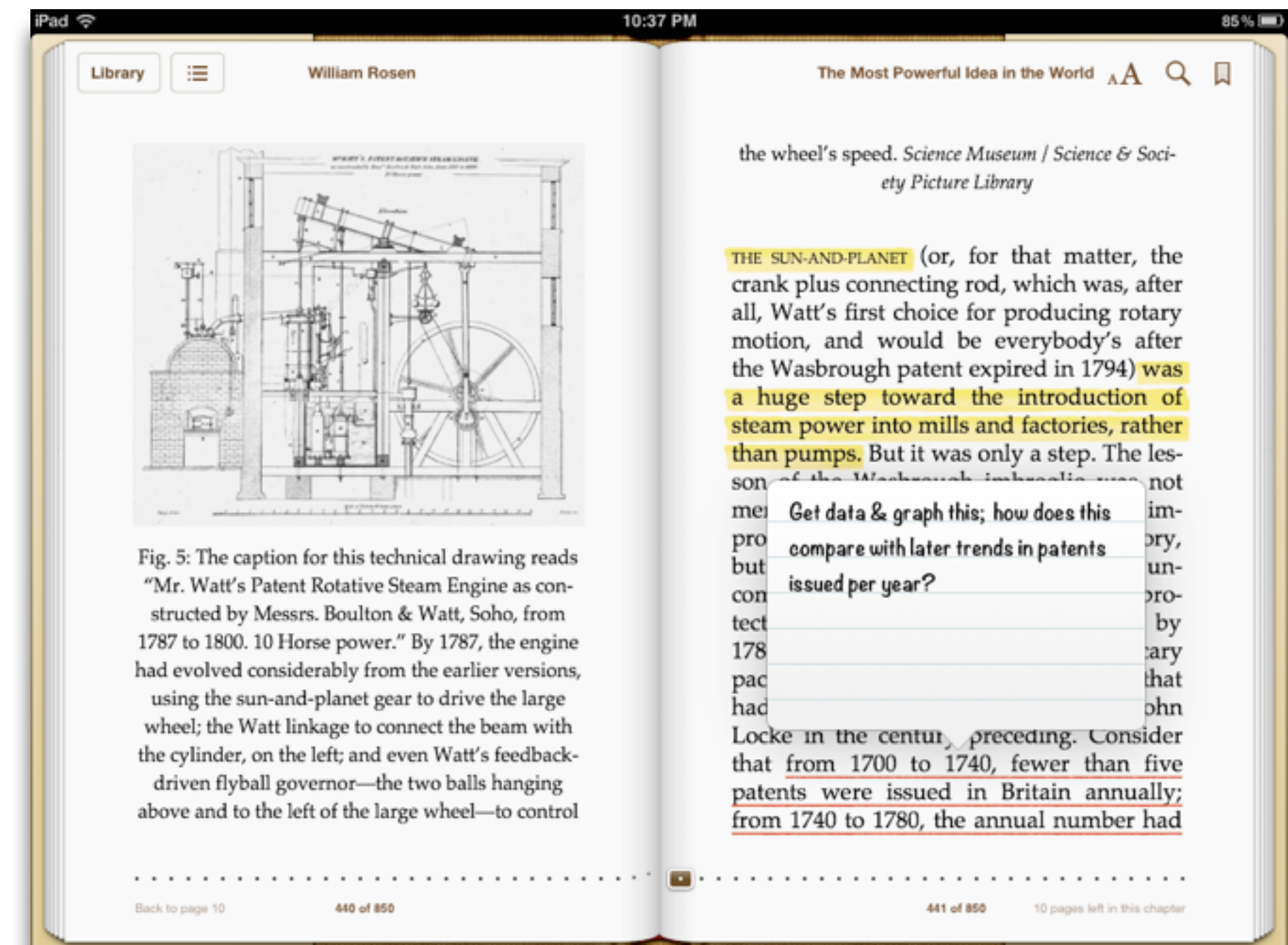
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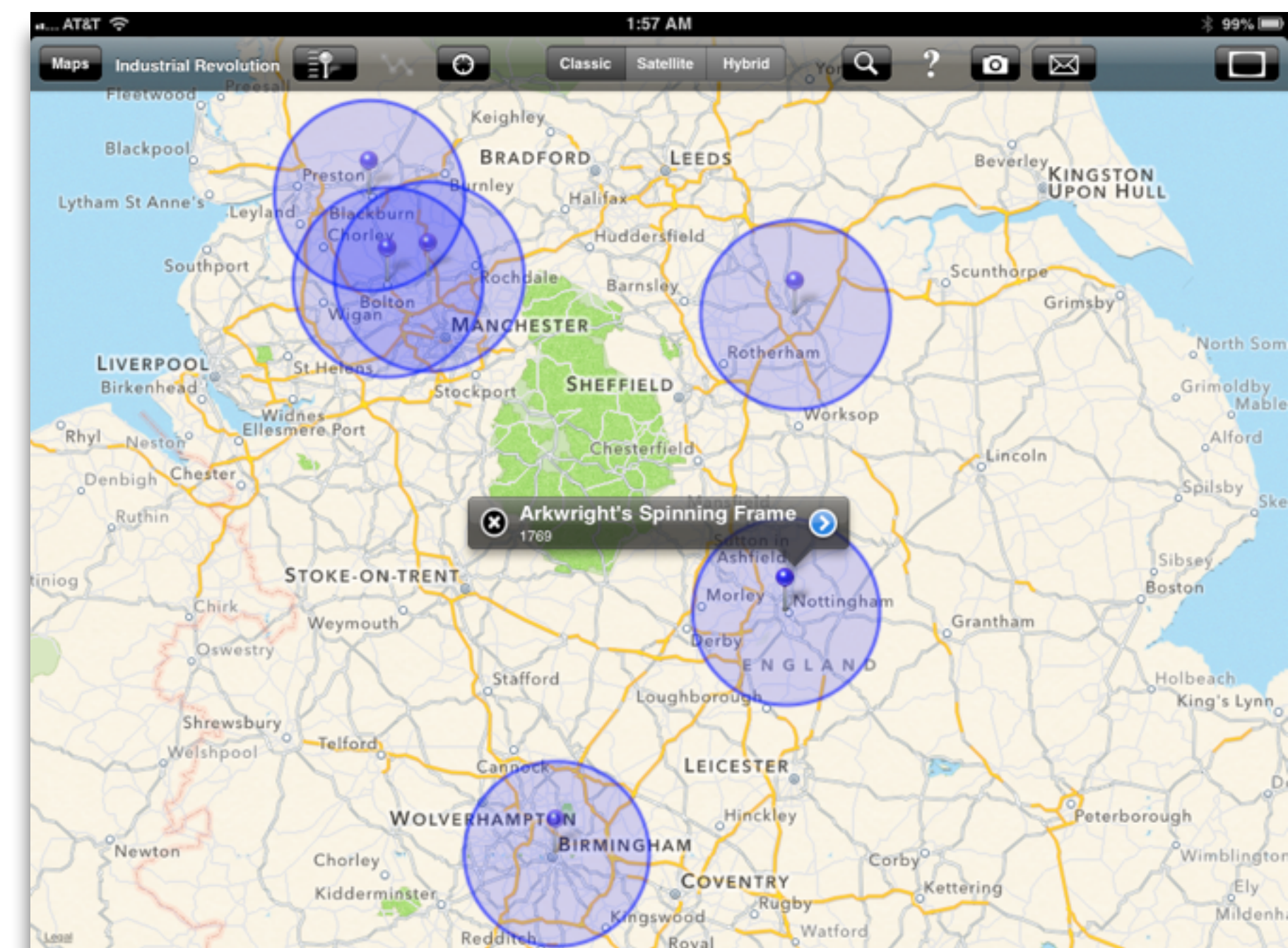
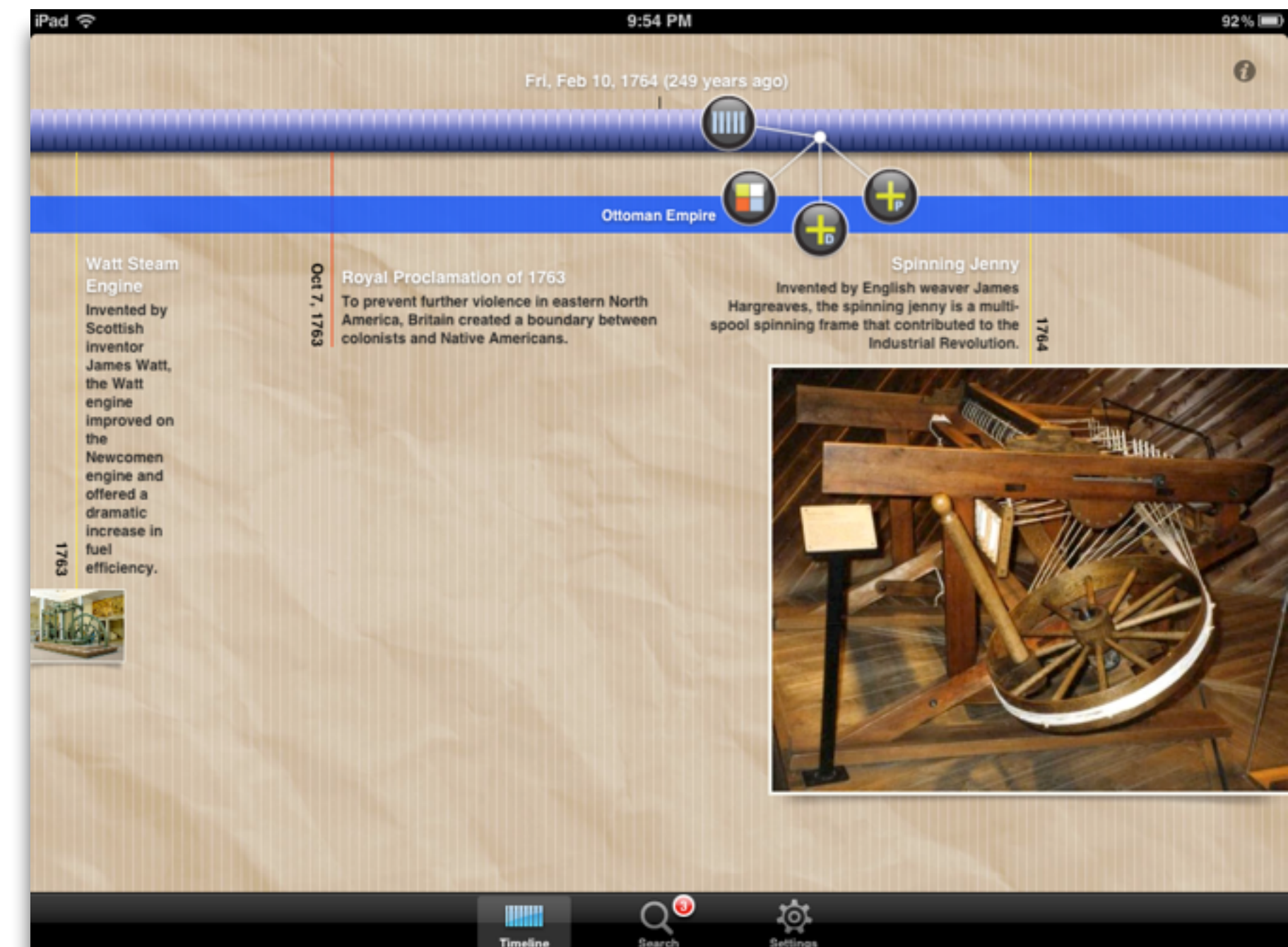
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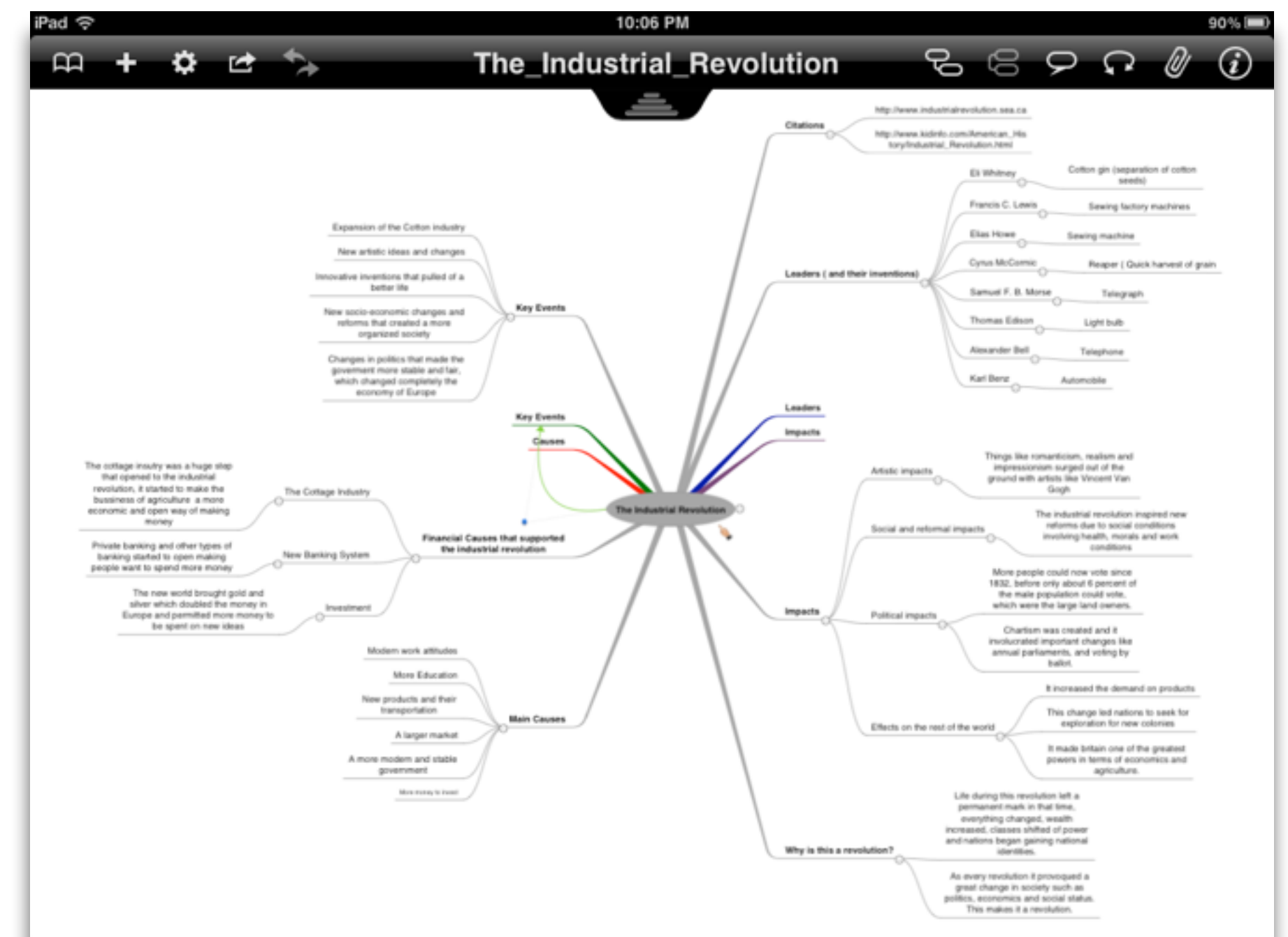
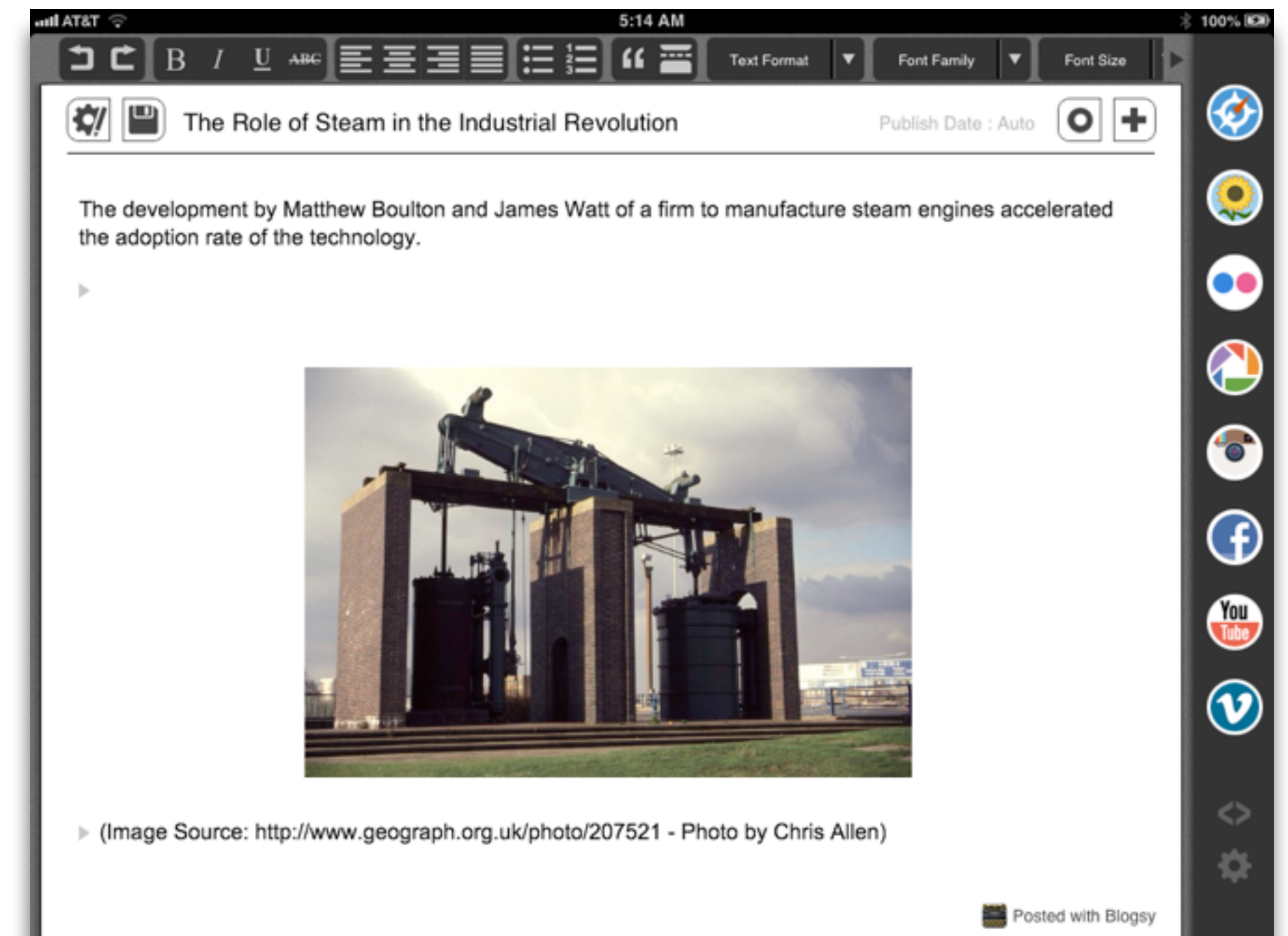
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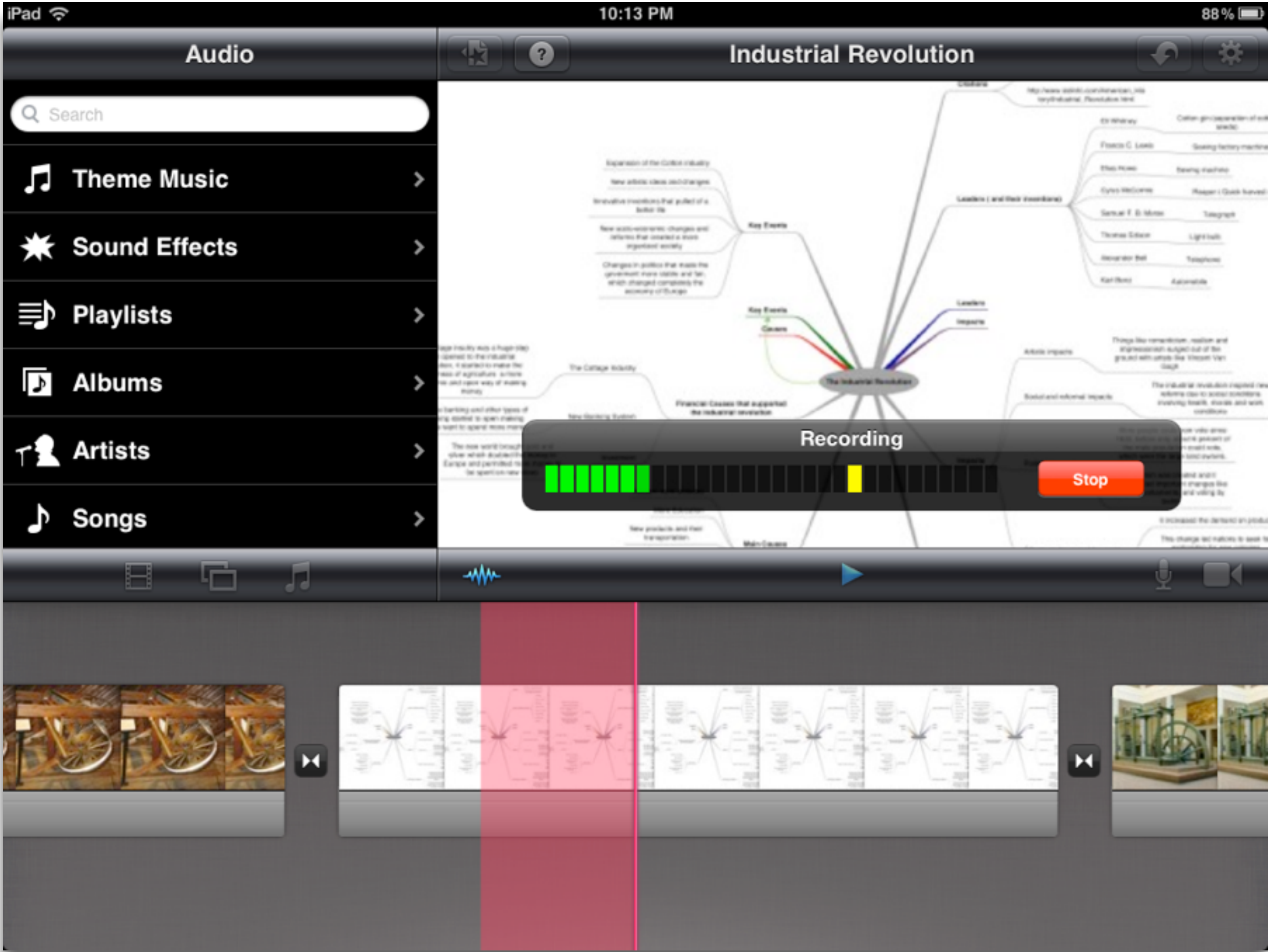
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Hippasus



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