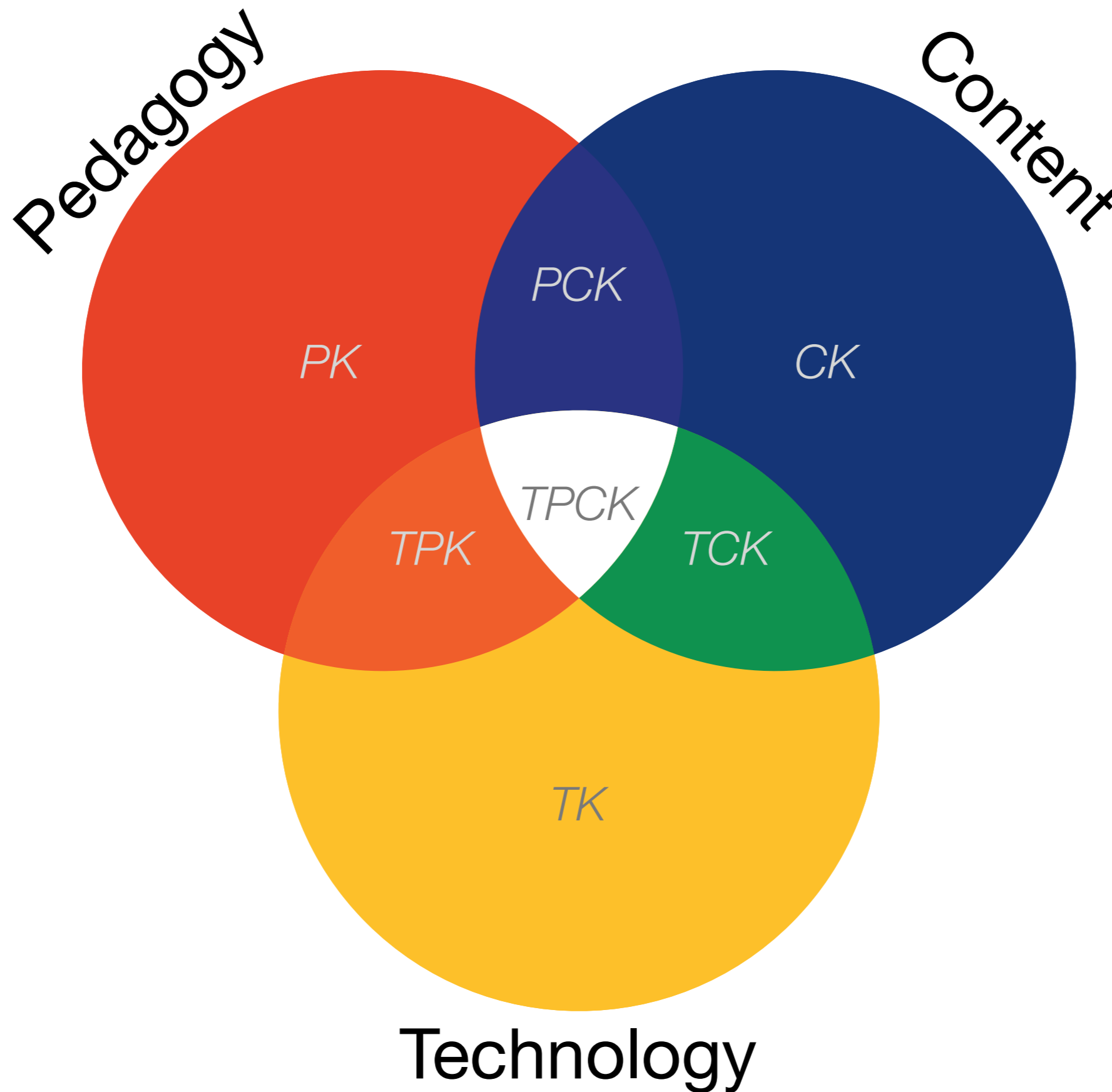


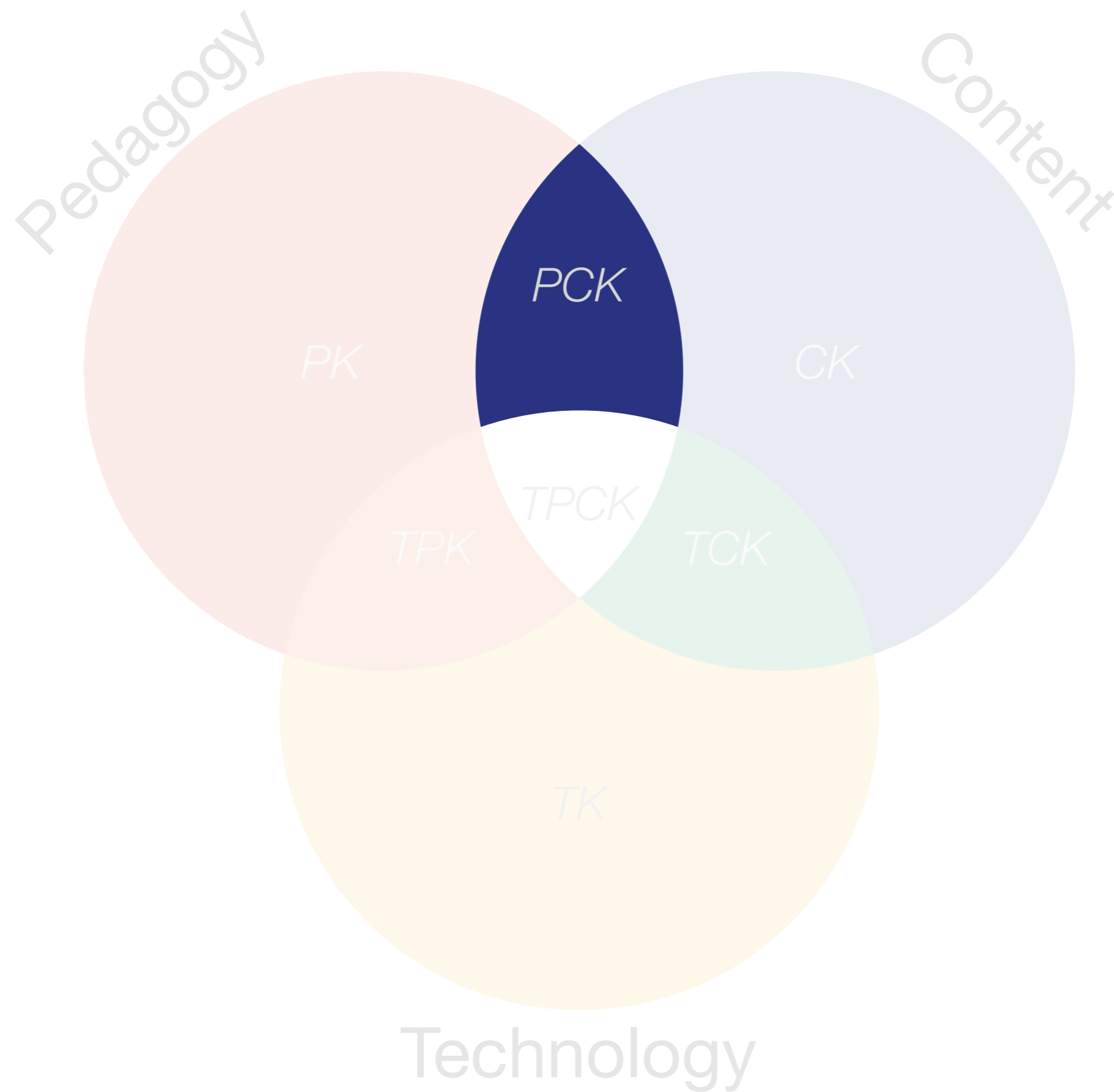
Follow the River: Designing Robust iPad Flows

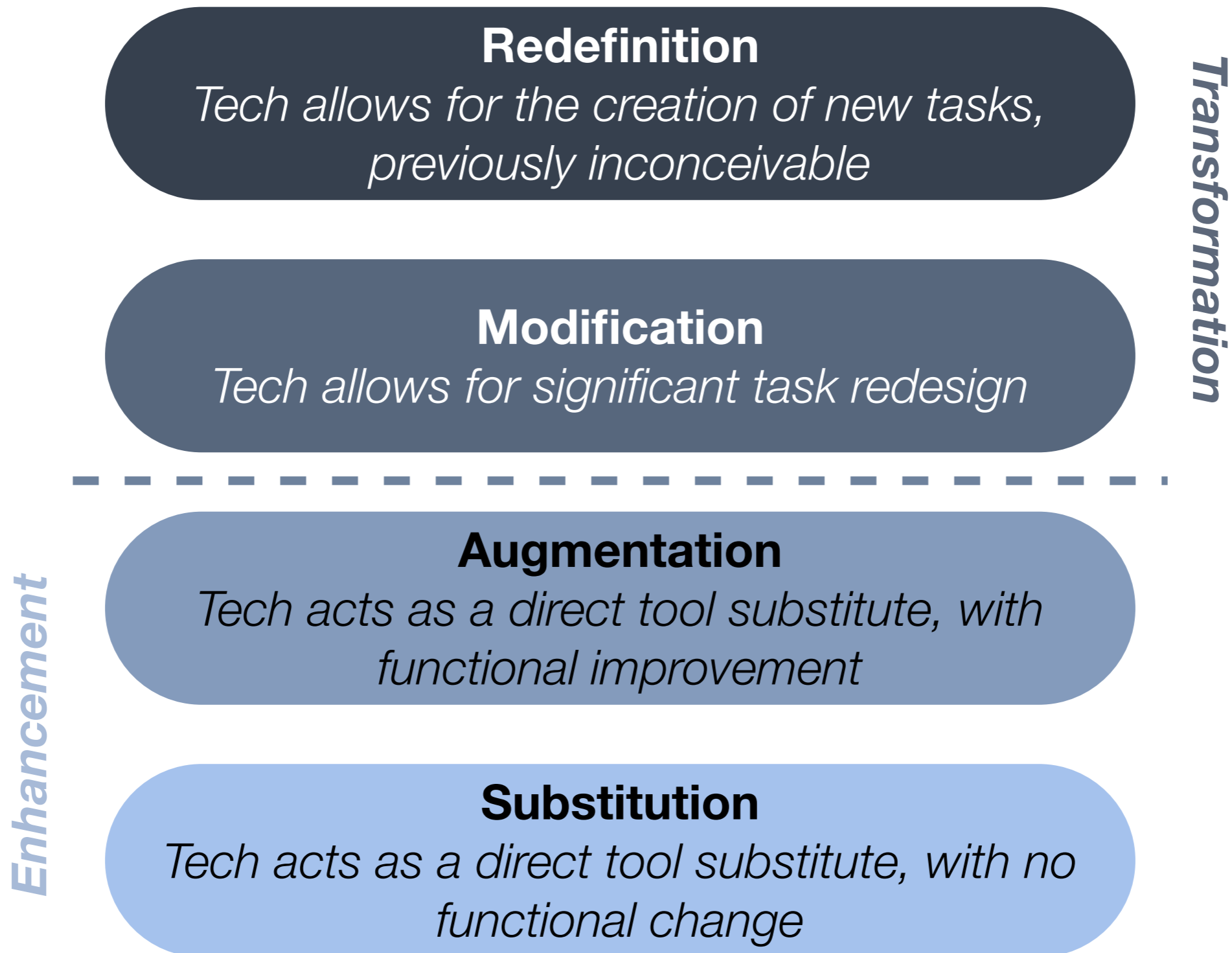
Ruben R. Puentedura, Ph.D.



**LL2012 - Leveraging
Learning: the iPad in
Primary Grades
November 14 - 16, 2012
Auburn, Maine**

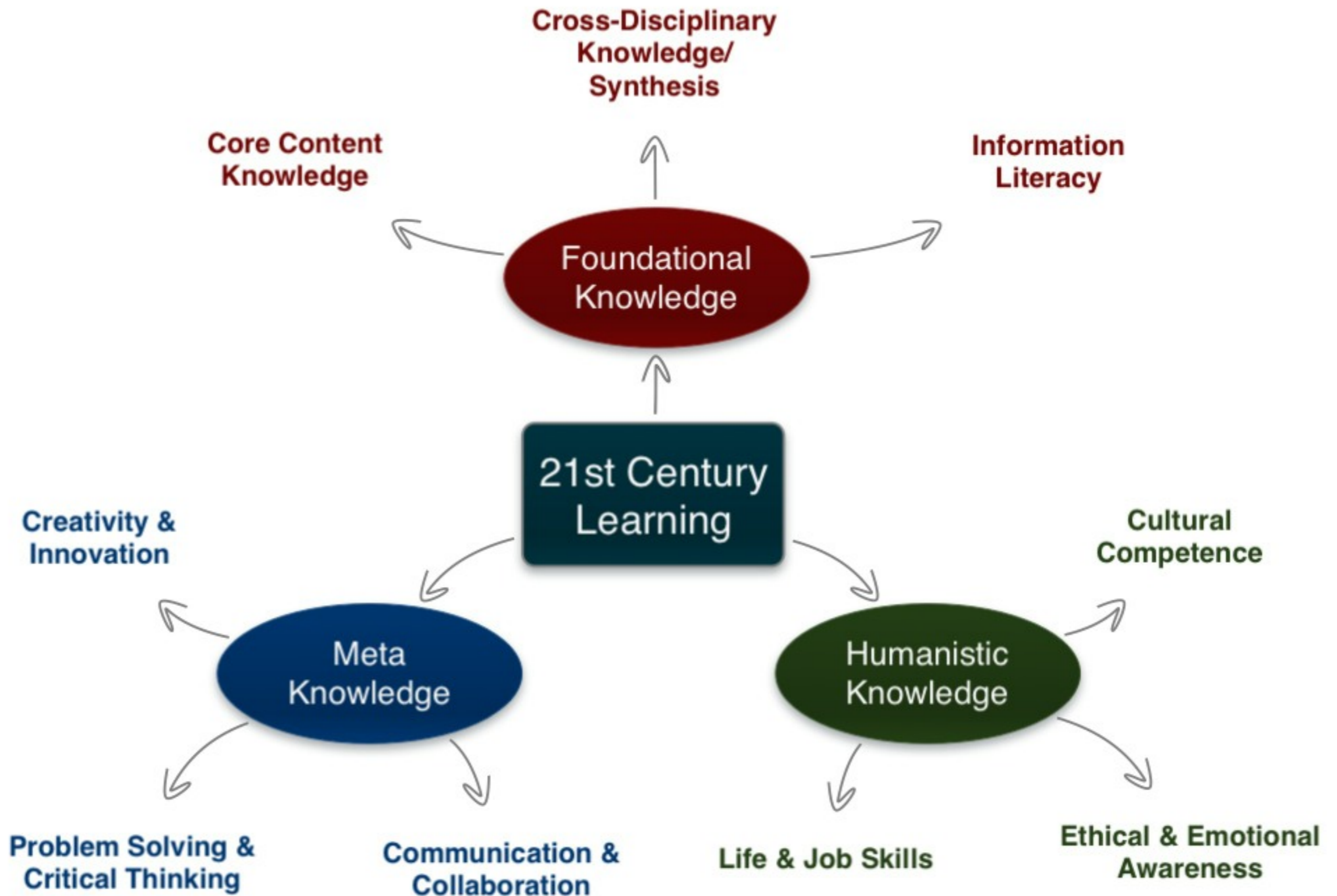






Bloom's Taxonomy: Cognitive Processes

Anderson & Krathwohl (2001)	Characteristic Processes	
Remember	<ul style="list-style-type: none"> • Recalling memorized knowledge • Recognizing correspondences between memorized knowledge and new material 	
Understand	<ul style="list-style-type: none"> • Paraphrasing materials • Exemplifying concepts, principles • Classifying items • Summarizing materials 	<ul style="list-style-type: none"> • Extrapolating principles • Comparing items
Apply	<ul style="list-style-type: none"> • Applying a procedure to a familiar task • Using a procedure to solve an unfamiliar, but typed task 	
Analyze	<ul style="list-style-type: none"> • Distinguishing relevant/irrelevant or important/unimportant portions of material • Integrating heterogeneous elements into a structure • Attributing intent in materials 	
Evaluate	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Generating multiple hypotheses based on given criteria • Designing a procedure to accomplish an untyped task • Inventing a product to accomplish an untyped task 	



P. Mishra and K. Kereluik. "What is 21st Century Learning? A review and synthesis." Paper submitted to the SITE2011 Conference. (2011)

P. Mishra and K. Kereluik. "What is 21st Century Learning? A review and synthesis." SITE2011 Conference Presentation. (2011)

Example #1: History

Lesh: Teaching History – Concepts and Criteria

- **Core Concepts:**

- Causality
- Chronology
- Multiple Perspectives
- Contingency
- Empathy
- Change and Continuity Over Time
- Influence/Significance/Impact
- Contrasting Interpretations
- Intent/Motivation

- **Guiding Criteria:**

- Does the question represent an important issue to historical and contemporary times?
- Is the question debatable?
- Does the question represent a reasonable amount of content?
- Will the question hold the interest of middle or high school students?
- Is the question appropriate given the materials available?
- Is the question challenging for the students you are teaching?
- What organizing historical concepts will be emphasized?

Redefinition

Tech allows for the creation of new tasks, previously inconceivable

Modification

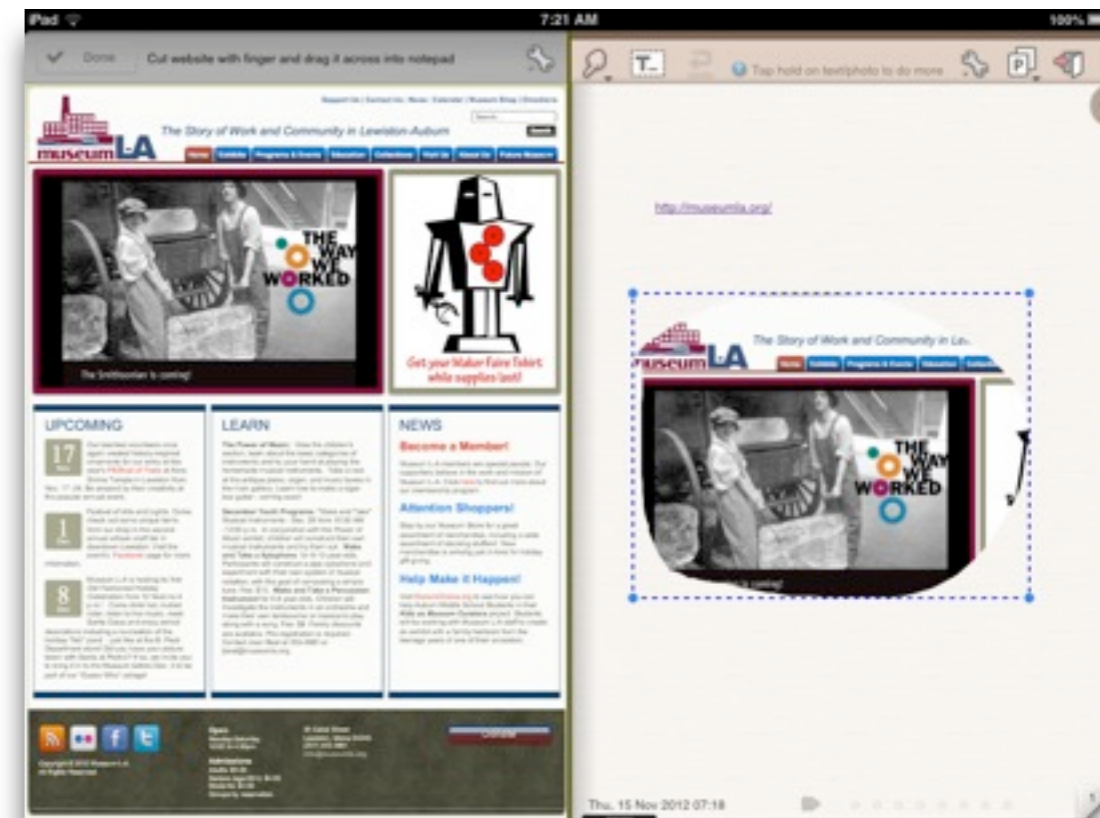
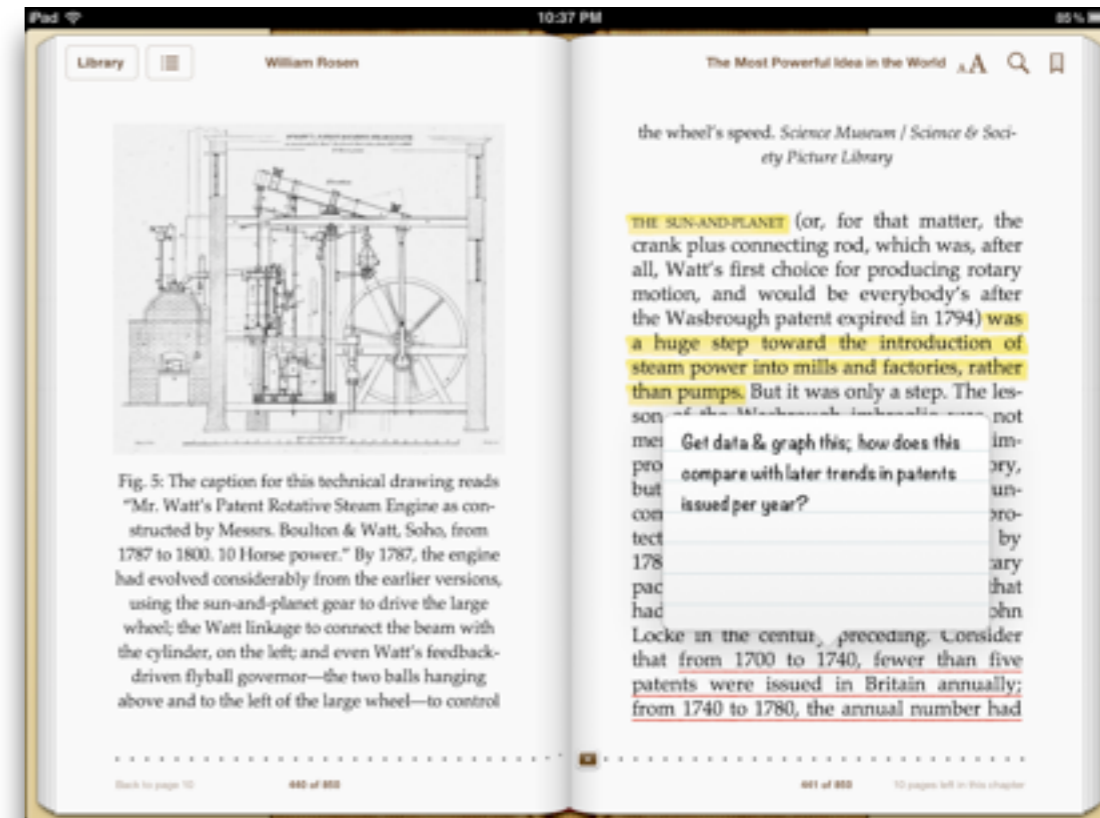
Tech allows for significant task redesign

Augmentation

Tech acts as a direct tool substitute, with functional improvement

Substitution

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



Redefinition

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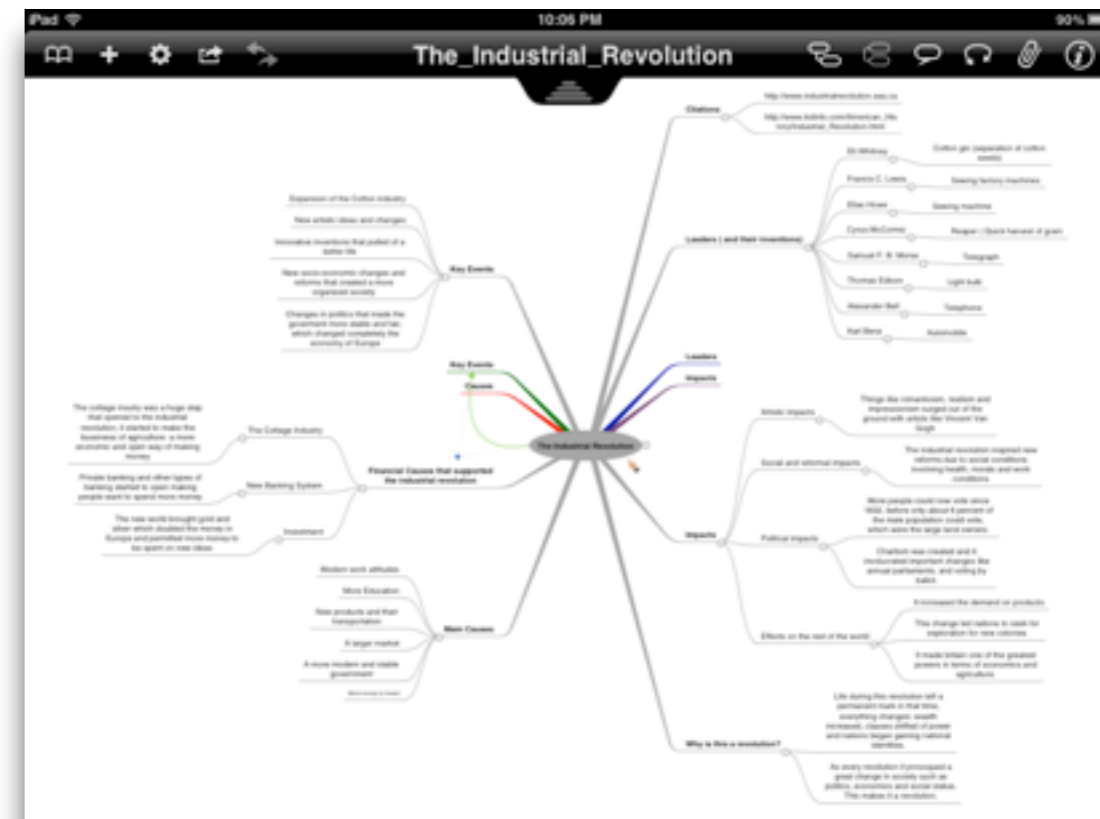
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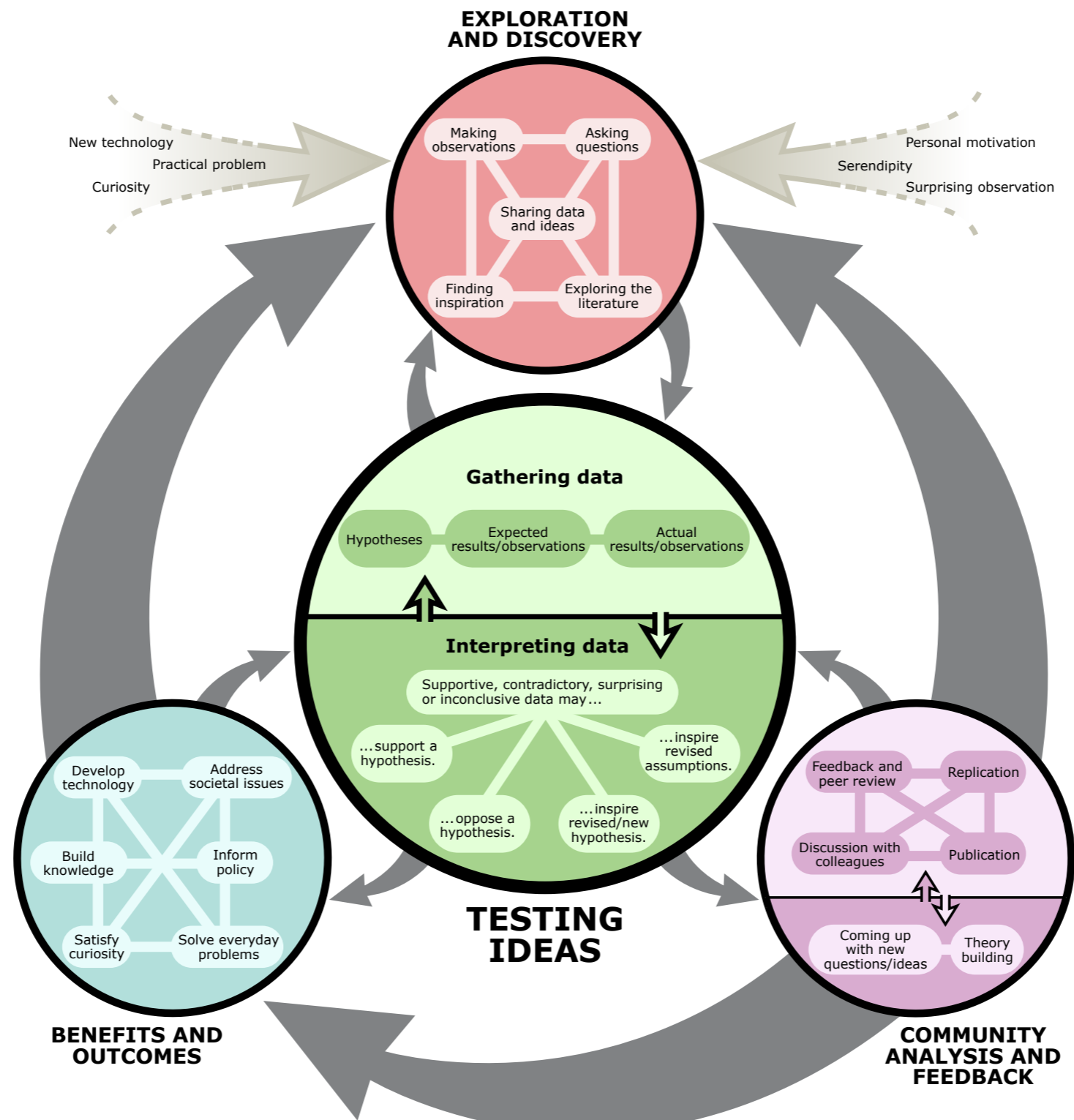
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Example #2: Science

Understanding Science: How Science Works



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The screenshot shows a digital learning interface titled "Aquatic Biomes". It features a text passage about aquatic biomes, a definition of "biome", and an interactive map titled "Worldwide Photosynthetic Activity".

Aquatic Biomes
Aquatic biomes cover 75 percent of the surface of the Earth. The aquatic and terrestrial biomes are similar in some ways.

bi·ome | 'bi,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

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 lumpen's 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

Some aquatic organisms are adapted to both conditions for parts of their lives, such as salmon and some eels, but it

Interactive The latitudes of peak photosynthesis change with the seasons.

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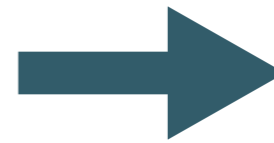
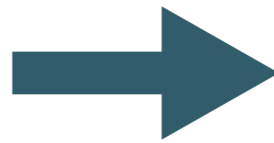
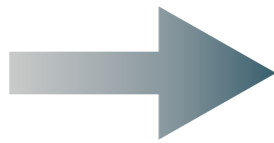
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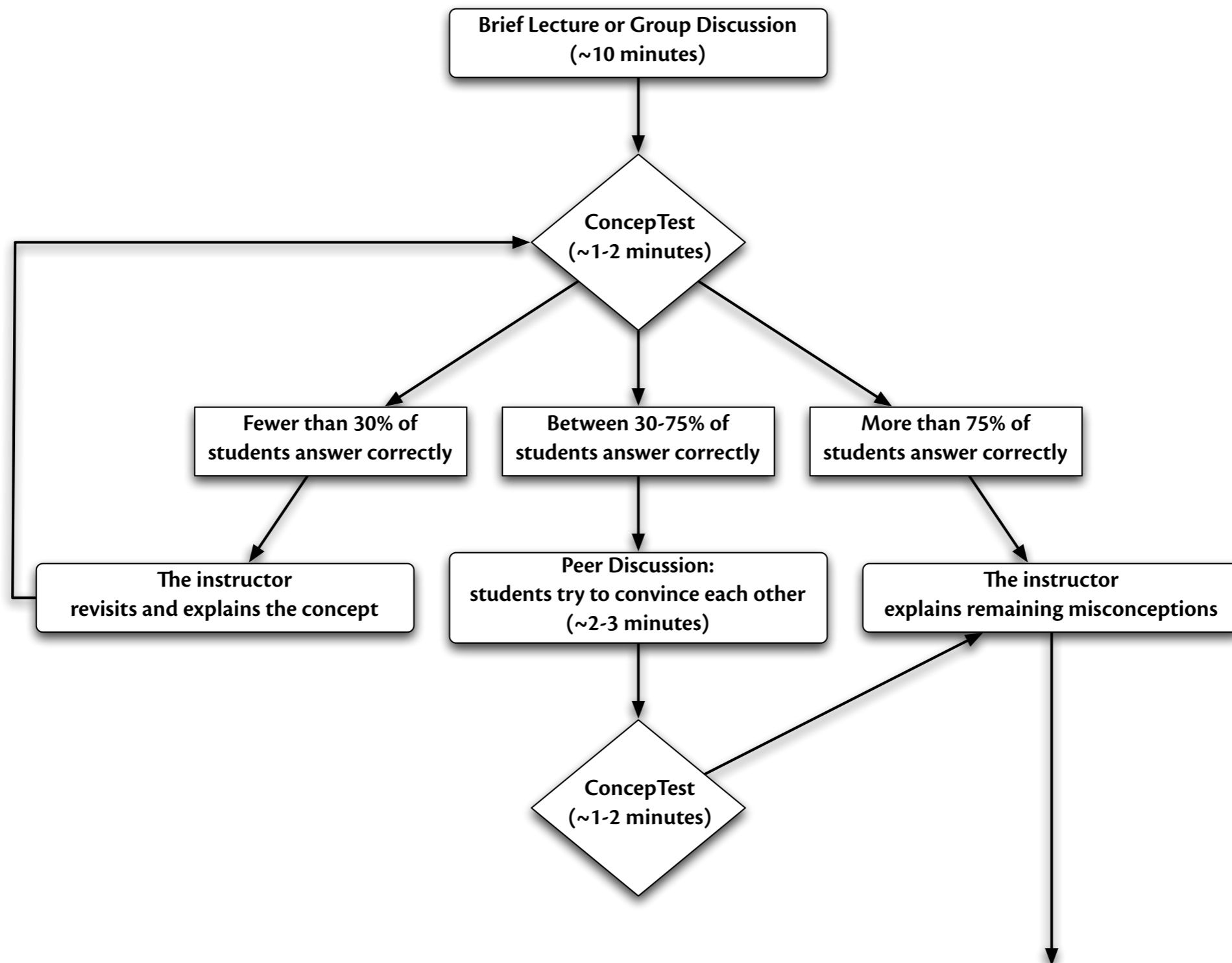
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Example #3: ELA

Flipping the Classroom: ConcepTests



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Modification

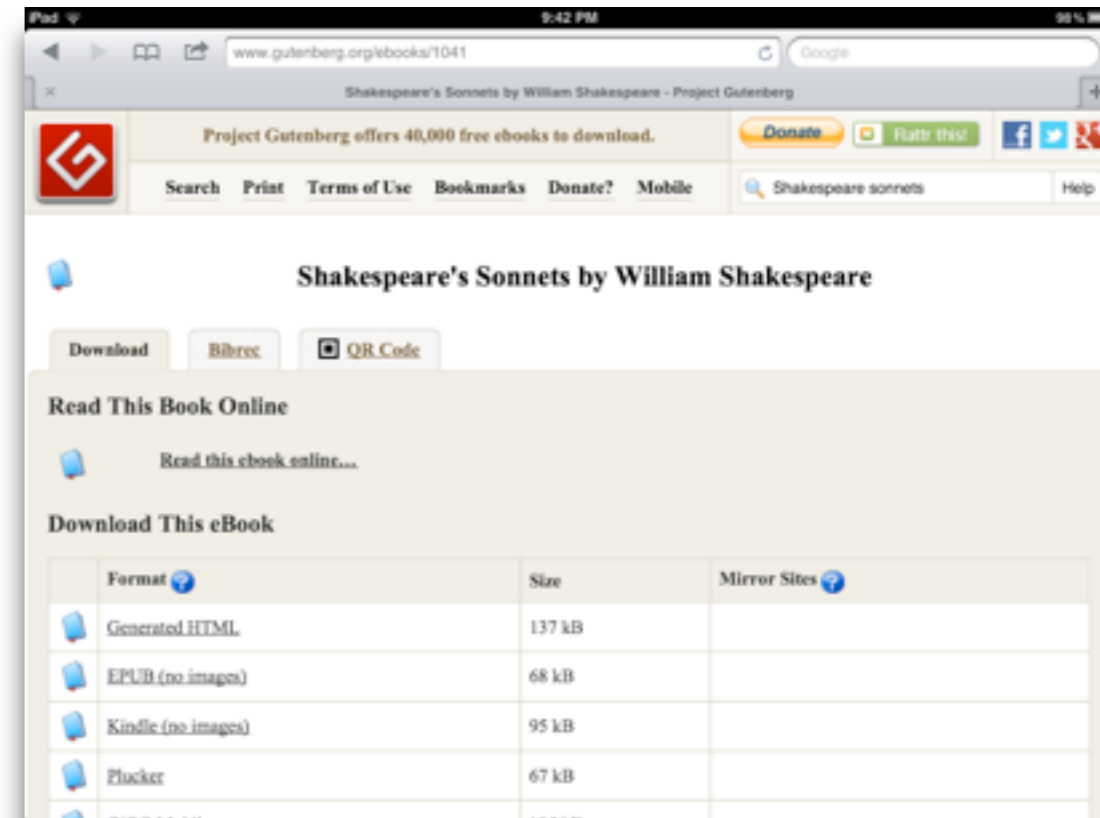
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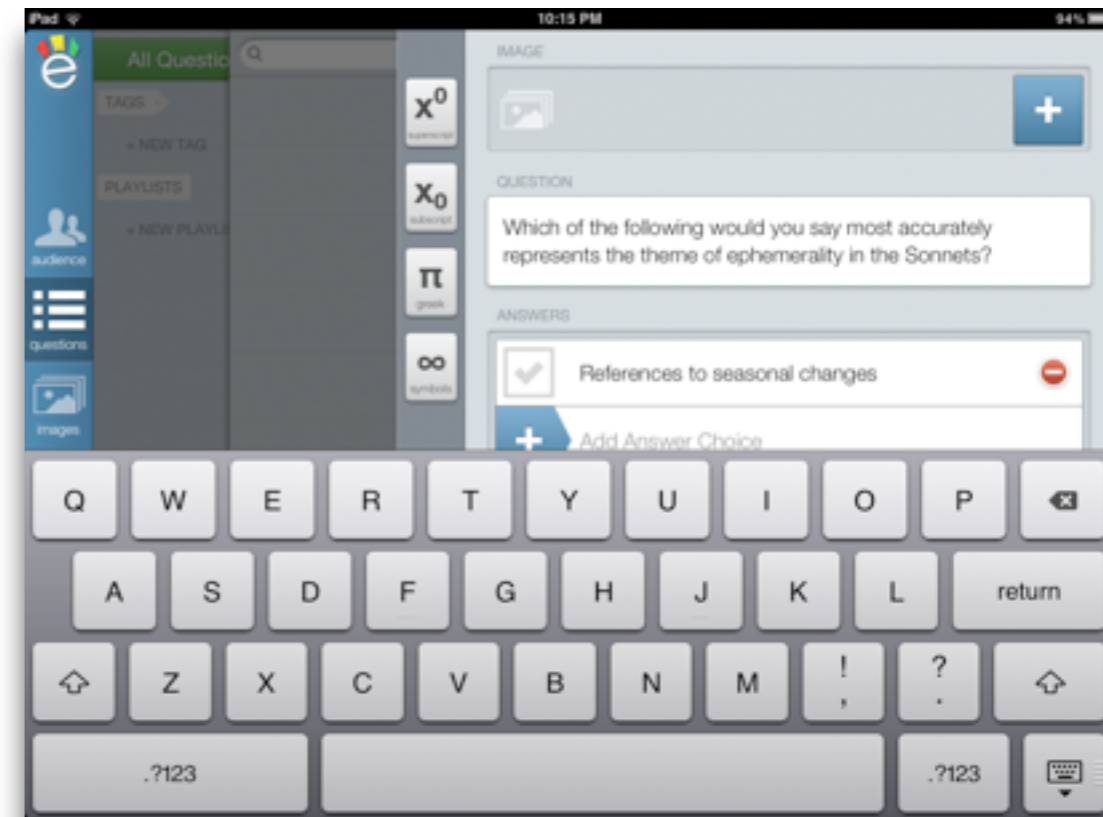
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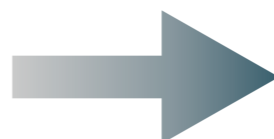
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Example #4: An Apps Flow Set

DS On The Go



5-Card Nancy



Five Card Flickr



FlickStackr



iPhoto



Diptic



PhotoStudioHD



Pixl



SketchBook



Strip Design



VideoGrade



TiltShift Video



Movie Looks



iMovie



Avid Studio

Example #5: iBooks Author

amet bibendum nullam.

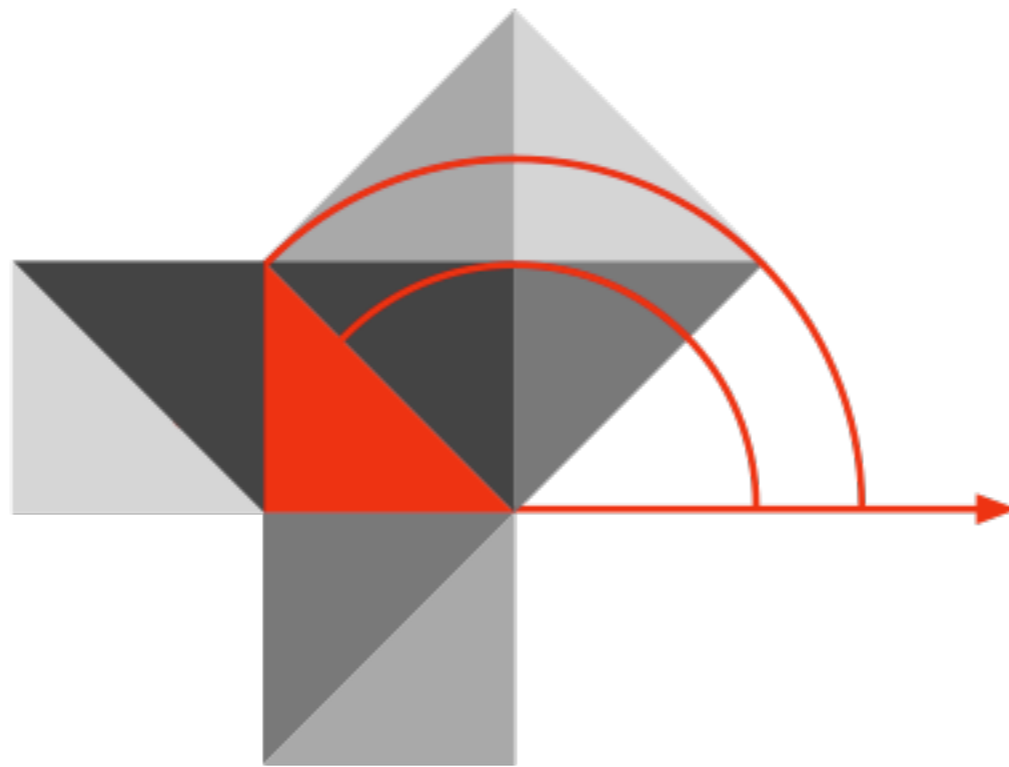


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mauris quam
quia tellus
rhoncus diam
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tie, amet sus-
morbi, amet
maecenas
proin nisl mol-
nec nec ligula
nulla, in lo-
suere ut quis
tus eget pri-
velit hasellus
lum orci laoreet

Hippasus



Blog: <http://hippasus.com/rrpweblog/>

Email: rubenrp@hippasus.com

Twitter: @rubenrp

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