

Contextualizing SAMR

Ruben R. Puentedura, Ph.D.

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

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

Enhancement

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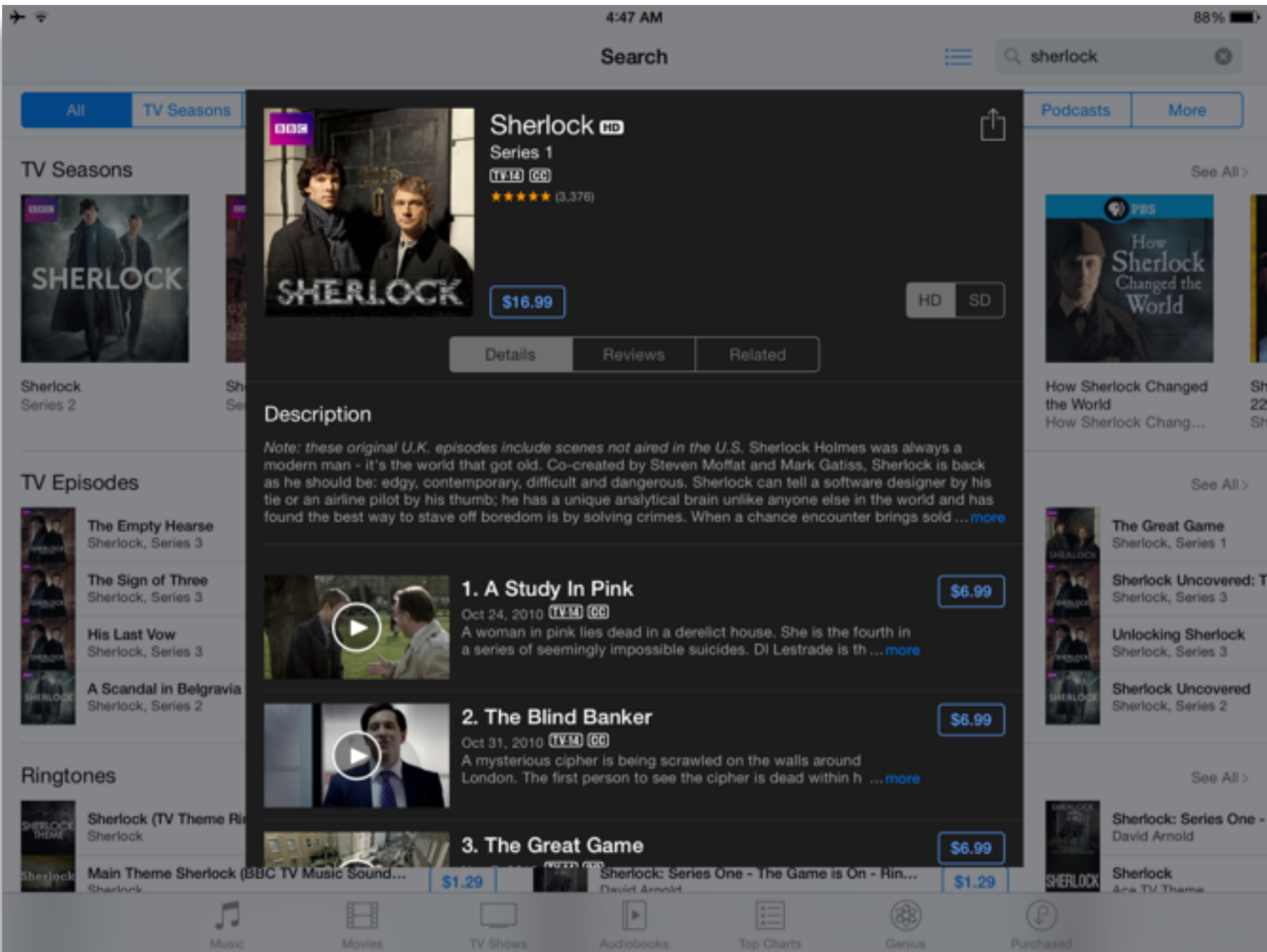
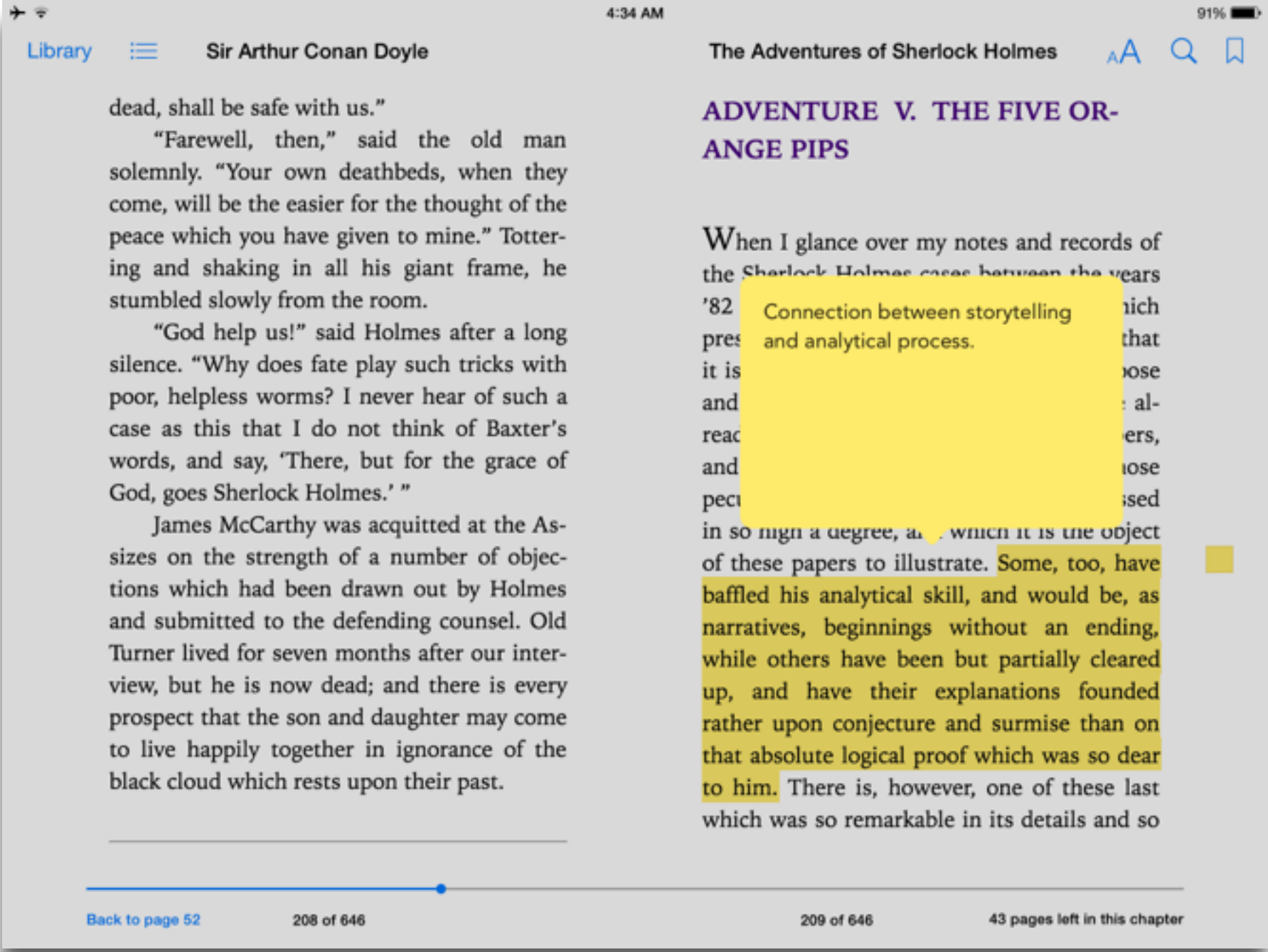
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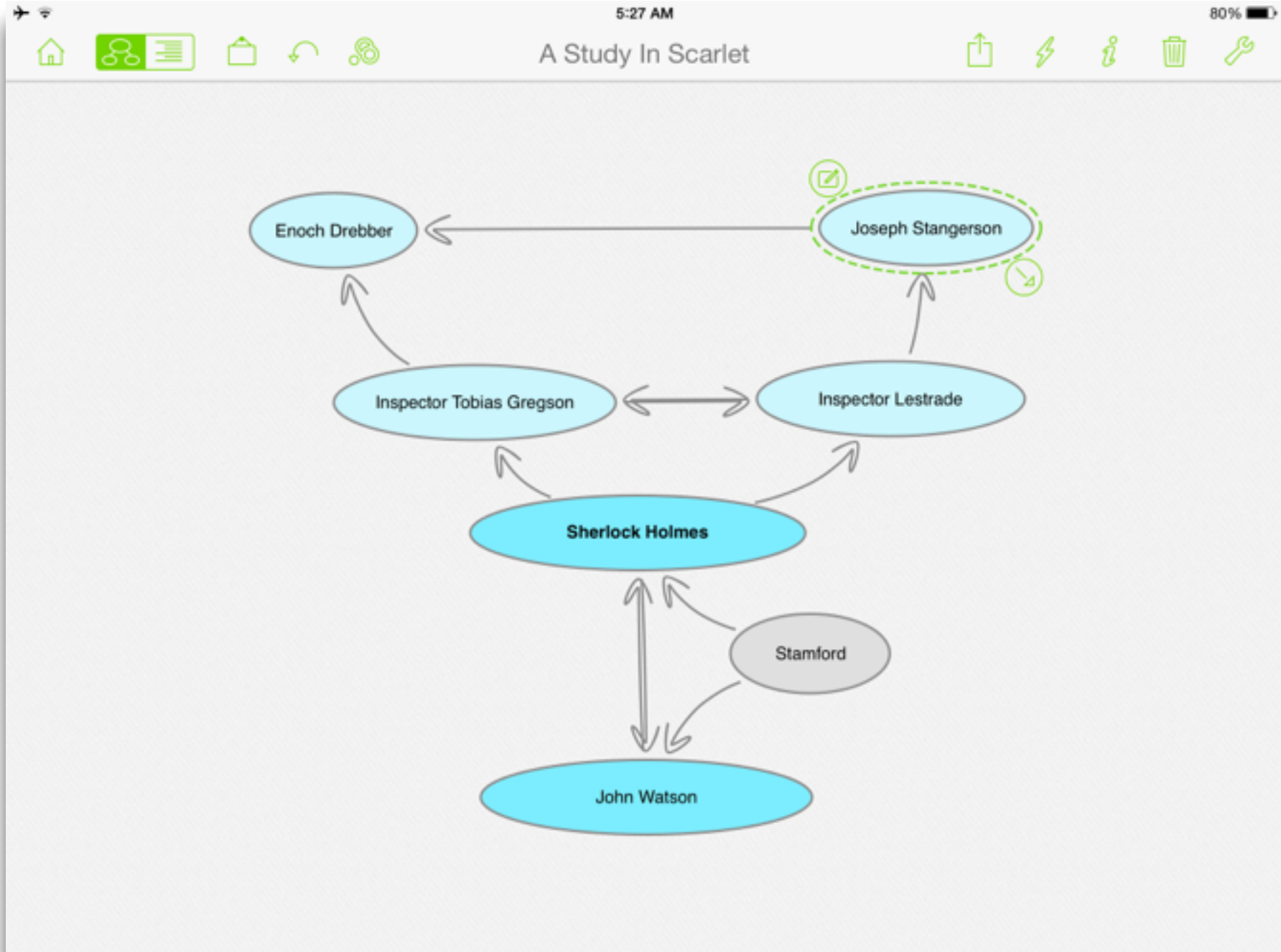
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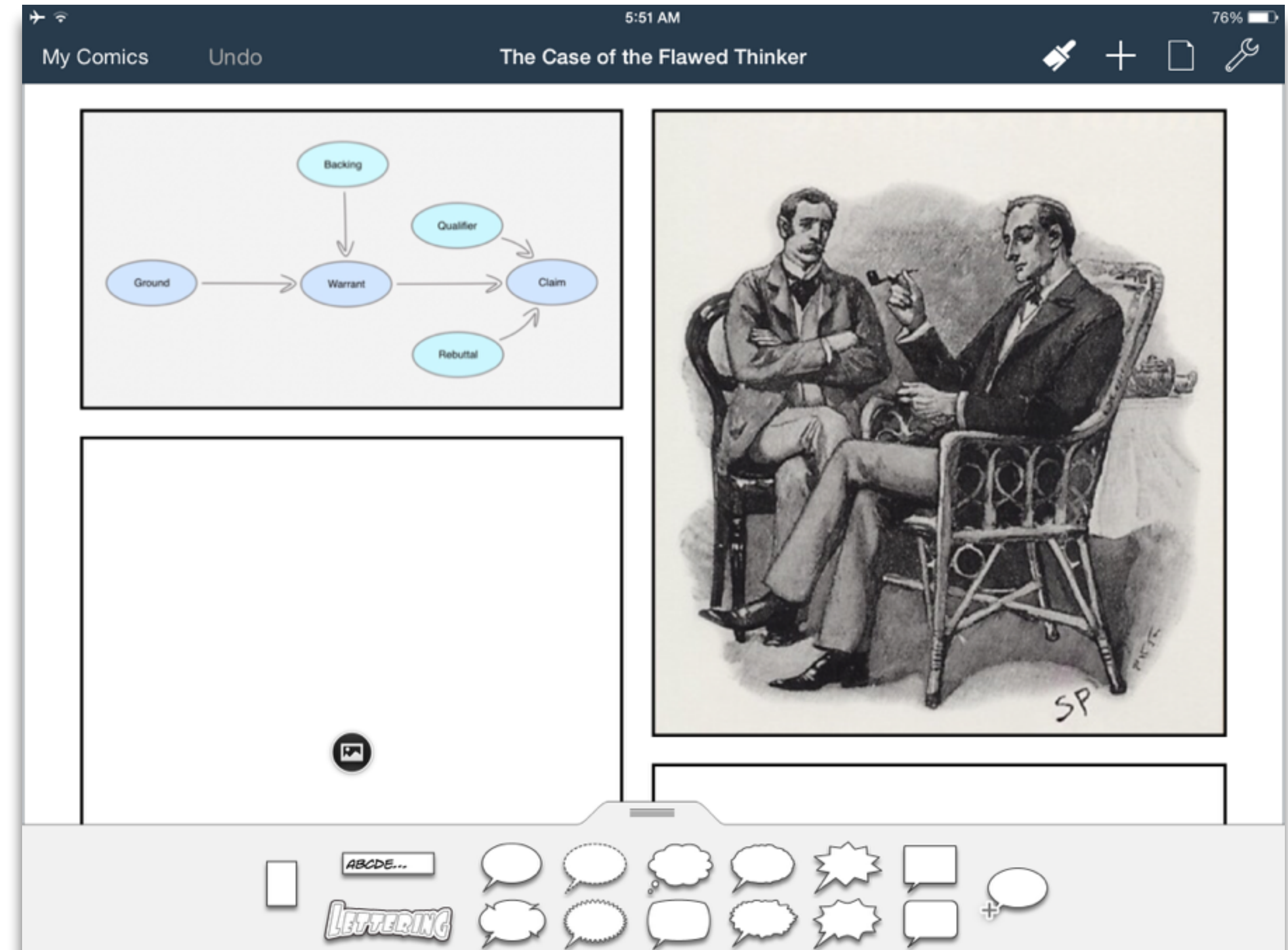
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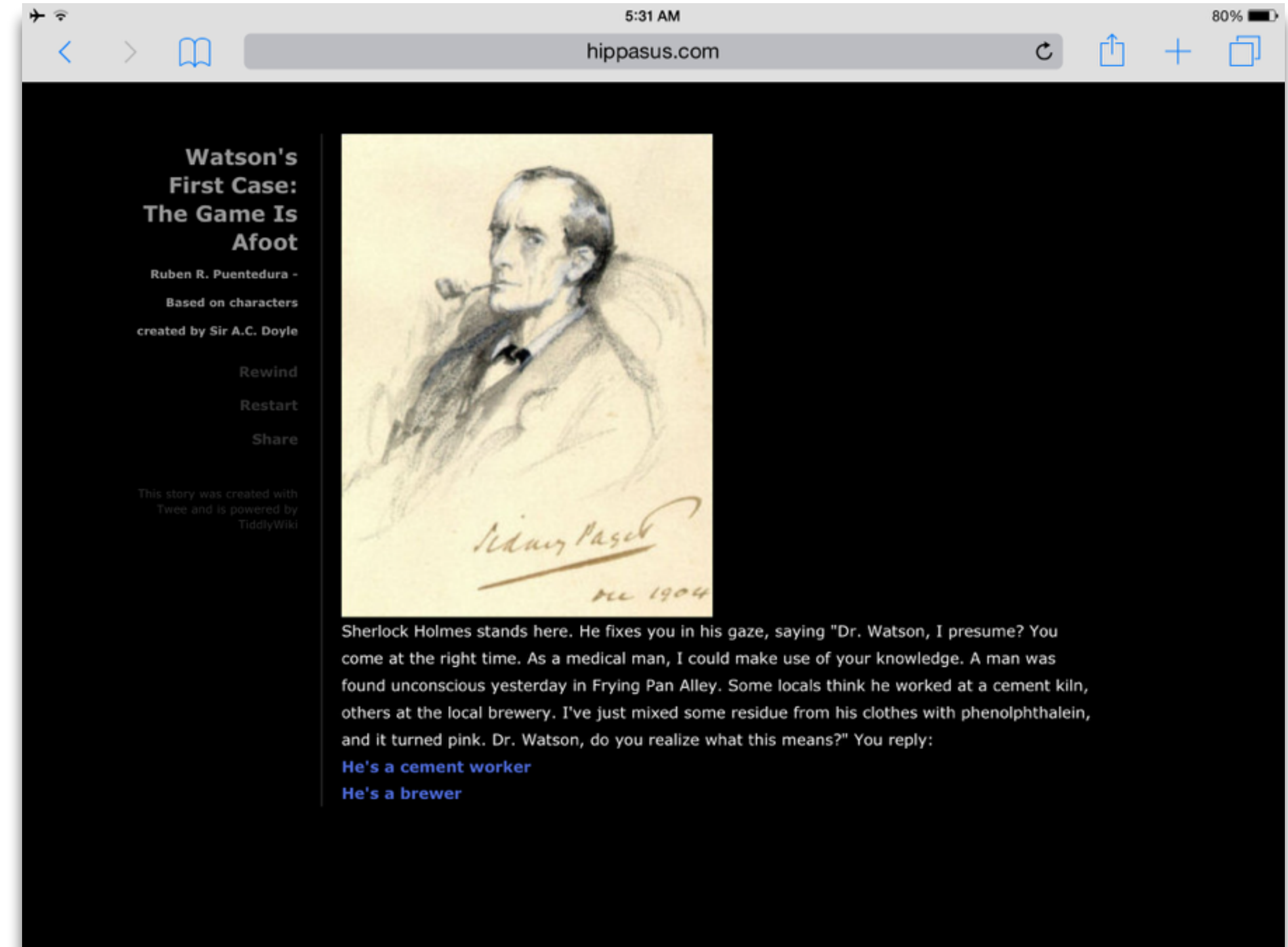
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Social	Mobility	Visualization	Storytelling	Gaming
200,000 years	70,000 years	40,000 years	17,000 years	8,000 years
				

The EdTech Quintet – Associated Practices

Social	Communication, Collaboration, Sharing
Mobility	Anytime, Anyplace Learning and Creation
Visualization	Making Abstract Concepts Tangible
Storytelling	Knowledge Integration and Transmission
Gaming	Feedback Loops and Formative Assessment

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The screenshot shows the MIT OpenCourseWare website interface. At the top, there's a navigation bar with 'MIT OPEN COURSEWARE' and 'MASSACHUSETTS INSTITUTE OF TECHNOLOGY'. Below this is a search bar and a 'Donate Now' button. The main content area is titled 'System Dynamics Self Study'. It includes a sidebar with links to 'COURSE HOME', 'SYLLABUS', 'READINGS', 'ASSIGNMENTS', and 'DOWNLOAD COURSE MATERIALS'. The main content features a graph showing 'Heroin stock', 'Price', 'Number of drug busts', and 'Revenue-raising crime' over time. To the right of the graph, there's a section for 'Instructor(s)' (Prof. Jay Forrester), 'MIT Course Number' (15.988), 'As Taught In' (Fall 1998 - Spring 1999), and 'Level' (Undergraduate / Graduate). There's also a 'CITE THIS COURSE' button. On the far right, there's a 'Discover, Learn, Support OCW' section with a grid of course thumbnails and a 'Find out how' button.

The screenshot shows a video player interface. The video content is a diagram of the carbon cycle and chemical equations. The diagram is titled '4.1 The Unperturbed Carbon Cycle: Stocks and Flows'. It shows the flow of carbon between the atmosphere, land, and ocean. Key components include: 'Atmosphere (8,300)', 'Photosynthesis' (120+3), 'Plant respiration' (60), 'Plant biomass (550)', 'Net terrestrial uptake 3', 'Soil carbon', 'Microbial respiration and decomposition', and 'Soil (2,300)'. To the right of the diagram, there are two chemical equations: 'Photosynthesis: Solar Energy + CO₂ + H₂O + nutrients → CH₂O + O₂' and 'Respiration & Decay: CH₂O + O₂ → Energy + CO₂ + H₂O + nutrients'. The video player has a progress bar at the bottom, showing 3:15 out of 10:12.

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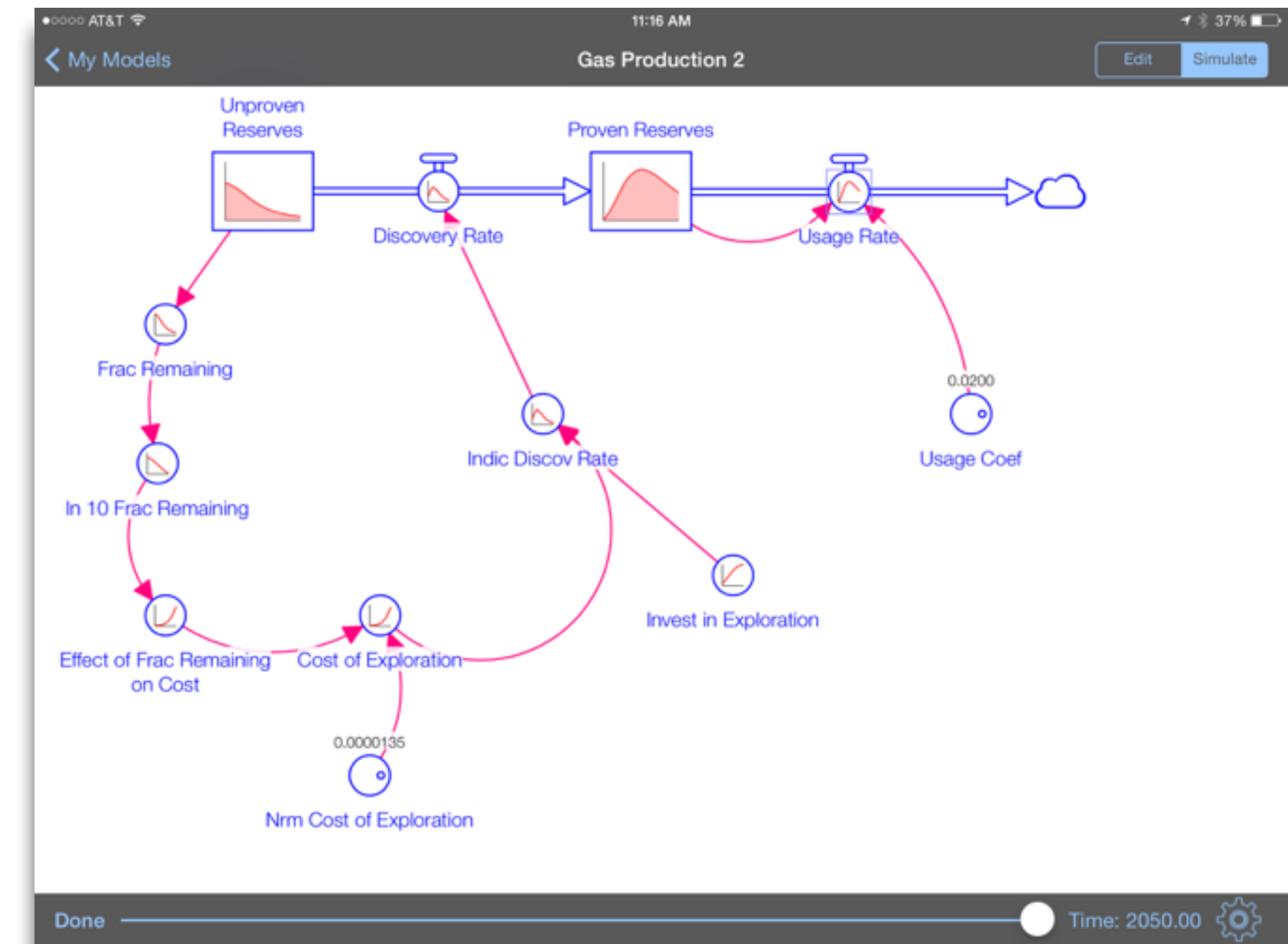
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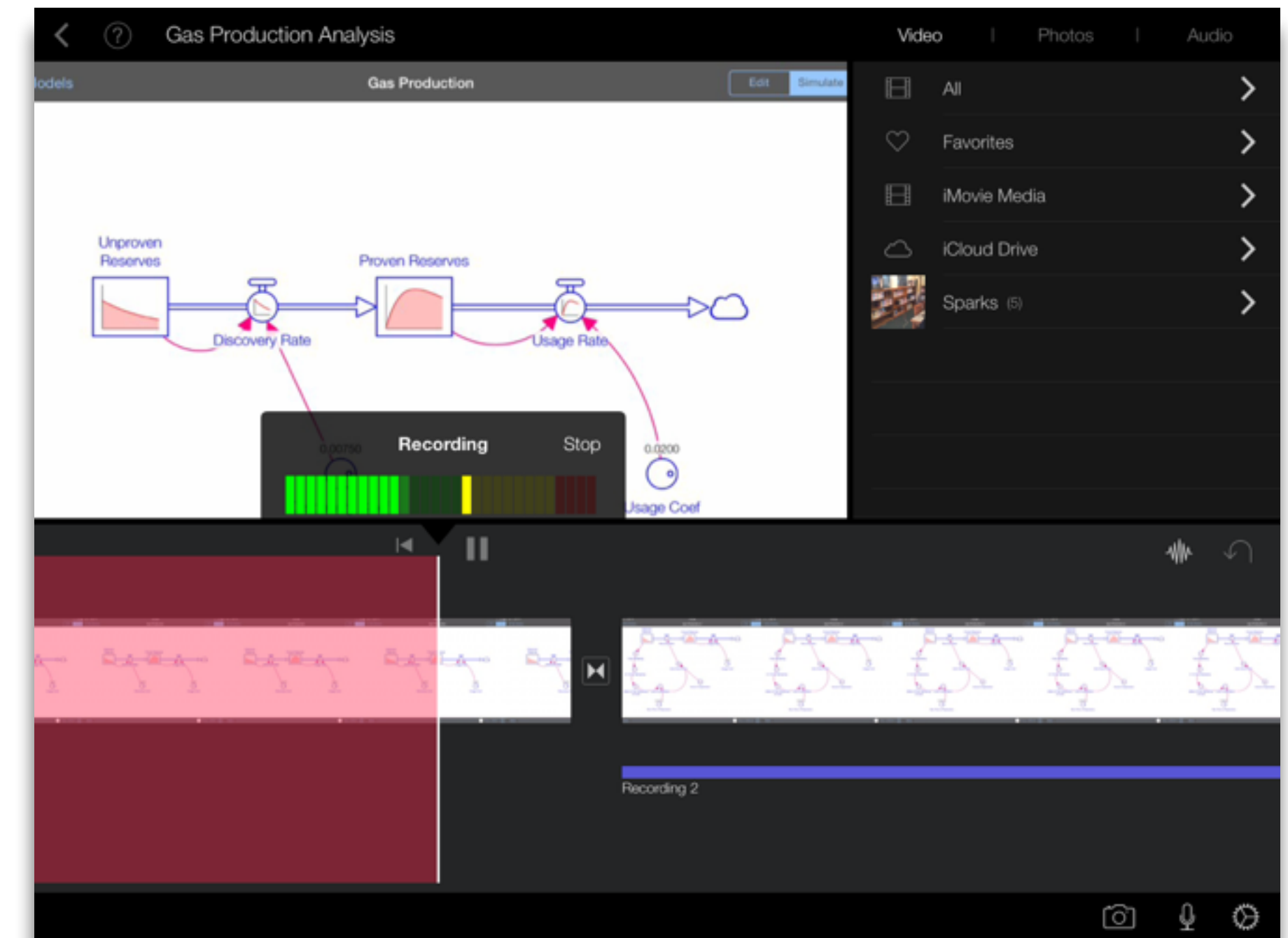
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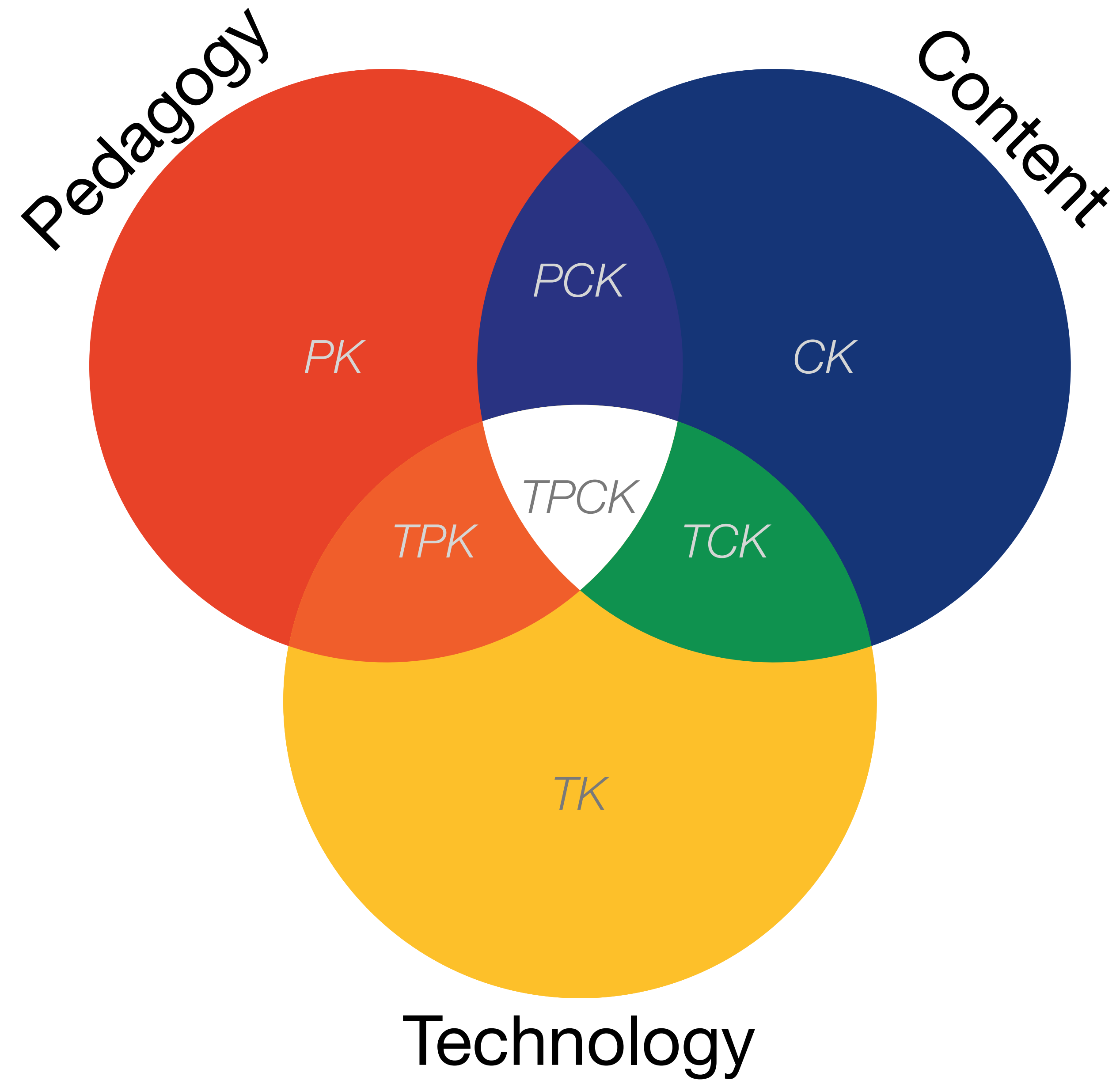
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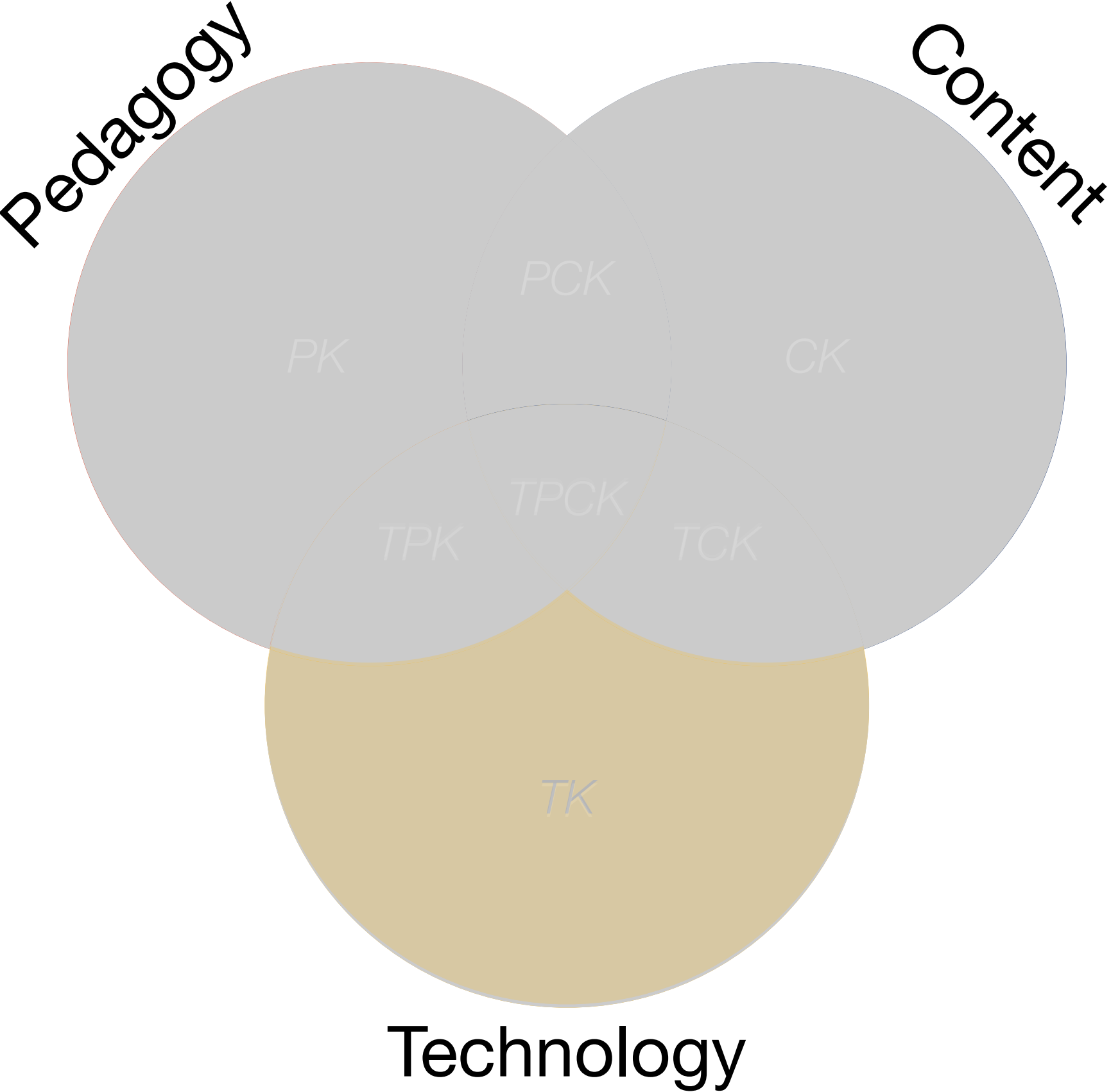


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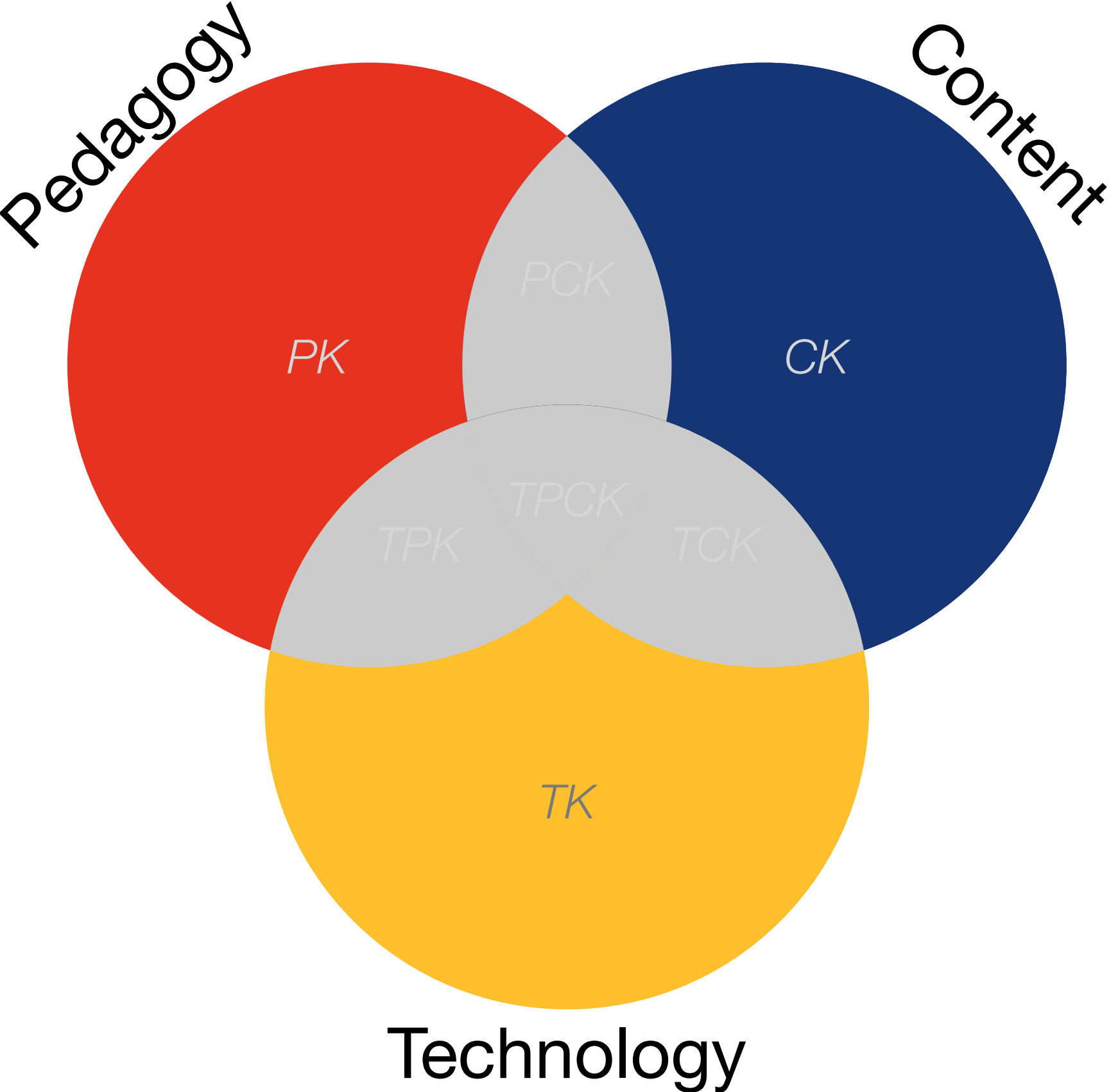


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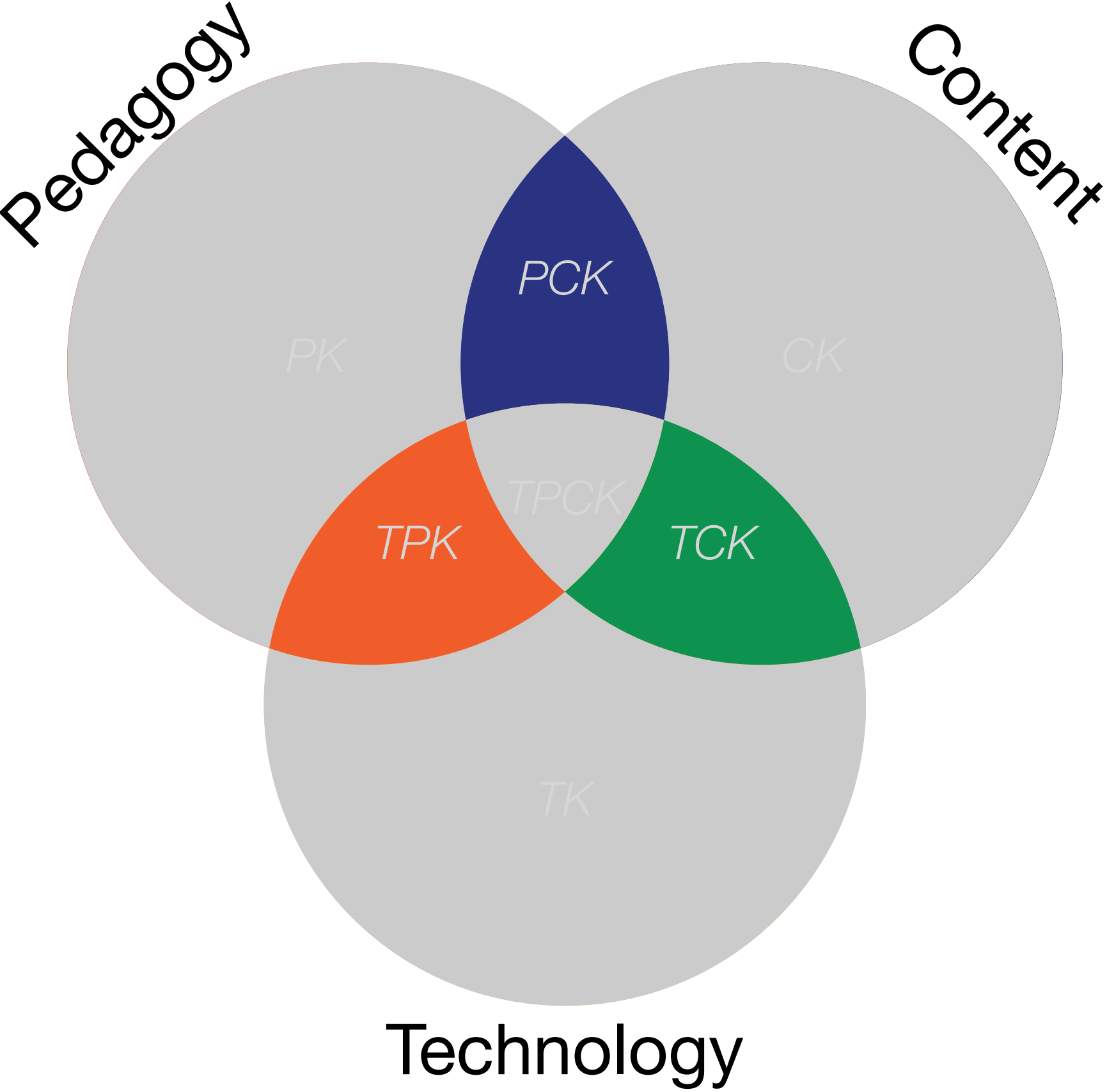


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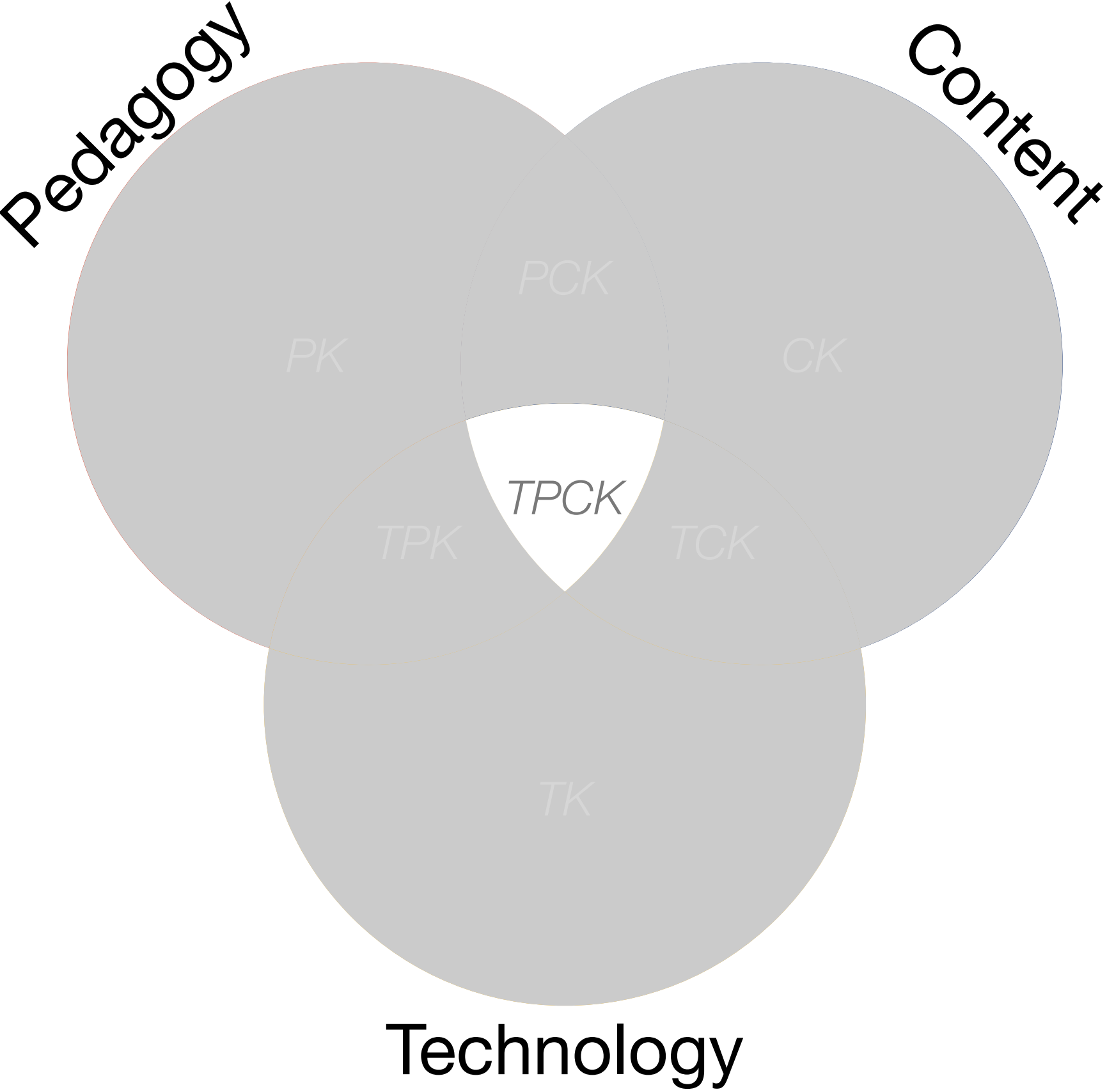


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The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking



Pam A. Mueller¹ and Daniel M. Oppenheimer²

¹Princeton University and ²University of California, Los Angeles

Abstract

Taking notes on laptops rather than in longhand is increasingly common. Many researchers have suggested that laptop note taking is less effective than longhand note taking for learning. Prior studies have primarily focused on students' capacity for multitasking and distraction when using laptops. The present research suggests that even when laptops are used solely to take notes, they may still be impairing learning because their use results in shallower processing. In three studies, we found that students who took notes on laptops performed worse on conceptual questions than students who took notes longhand. We show that whereas taking more notes can be beneficial, laptop note takers' tendency to transcribe lectures verbatim rather than processing information and reframing it in their own words is detrimental to learning.

Psychological Science

1–10

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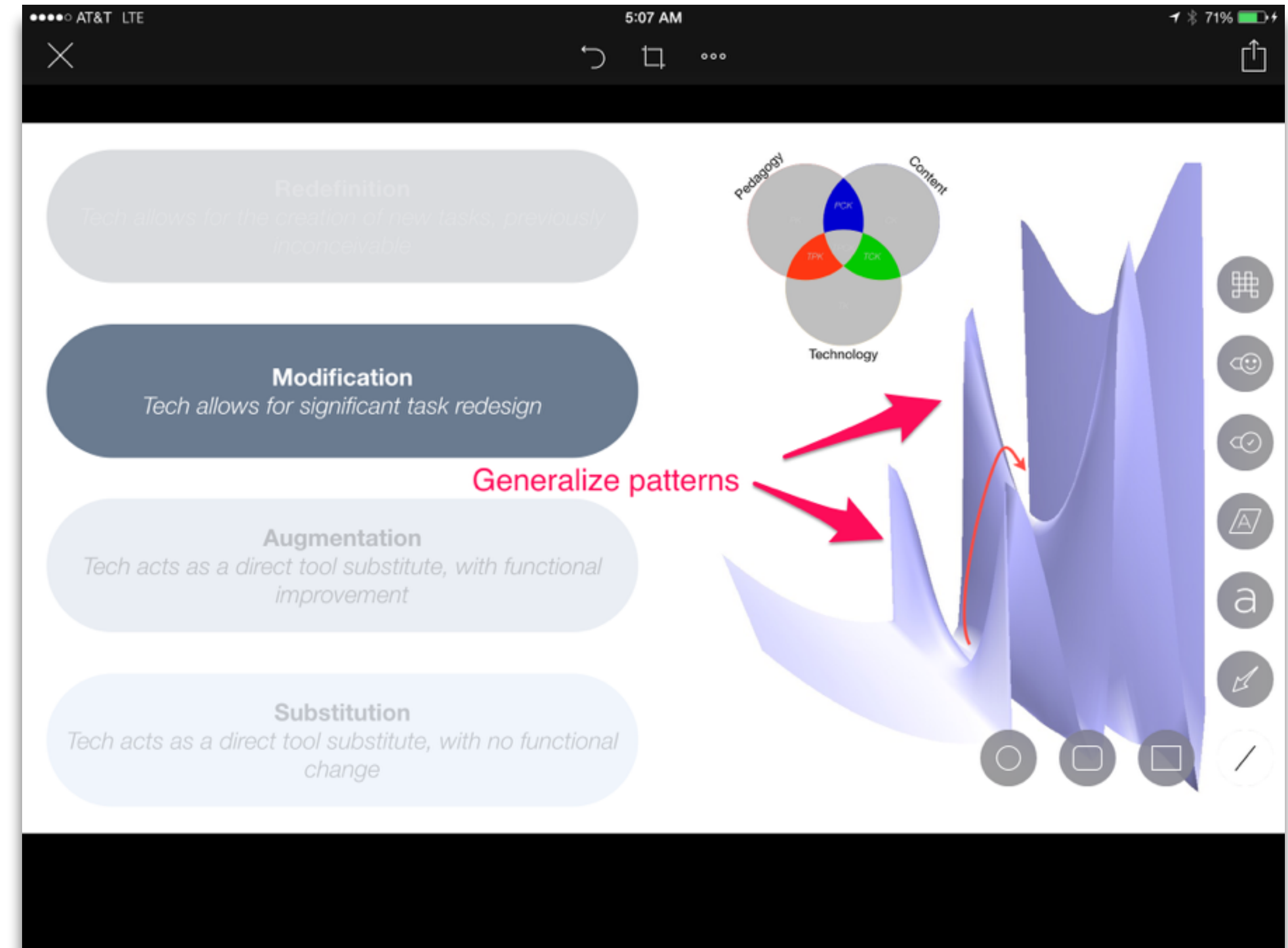
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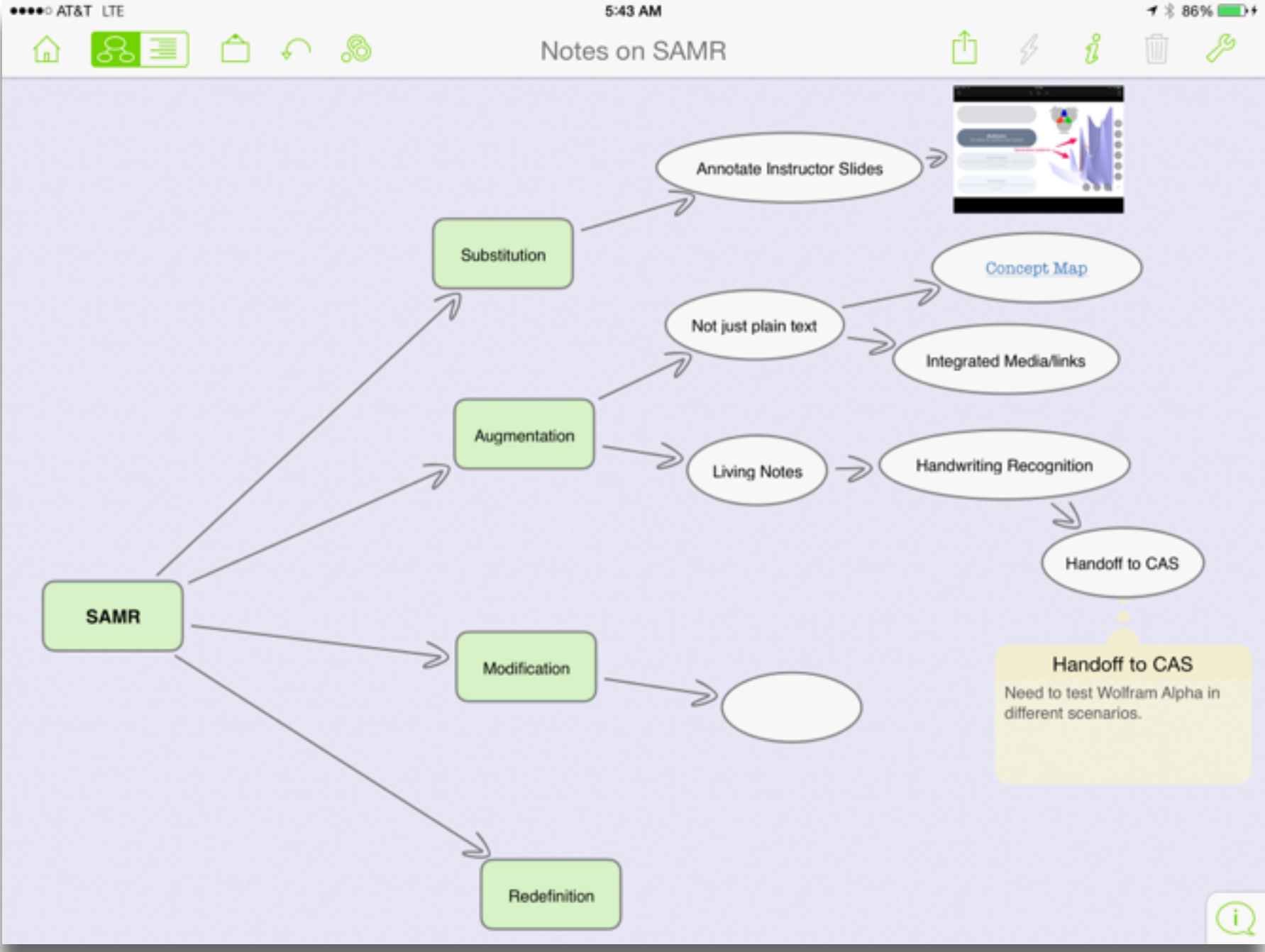


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Thoughts on SAMR
Jun 20, 2014, 5:45 AM

Substitution: the valley where we were
Augmentation: the next valley over - could see, not reach

Concept Maps - Google Scholar

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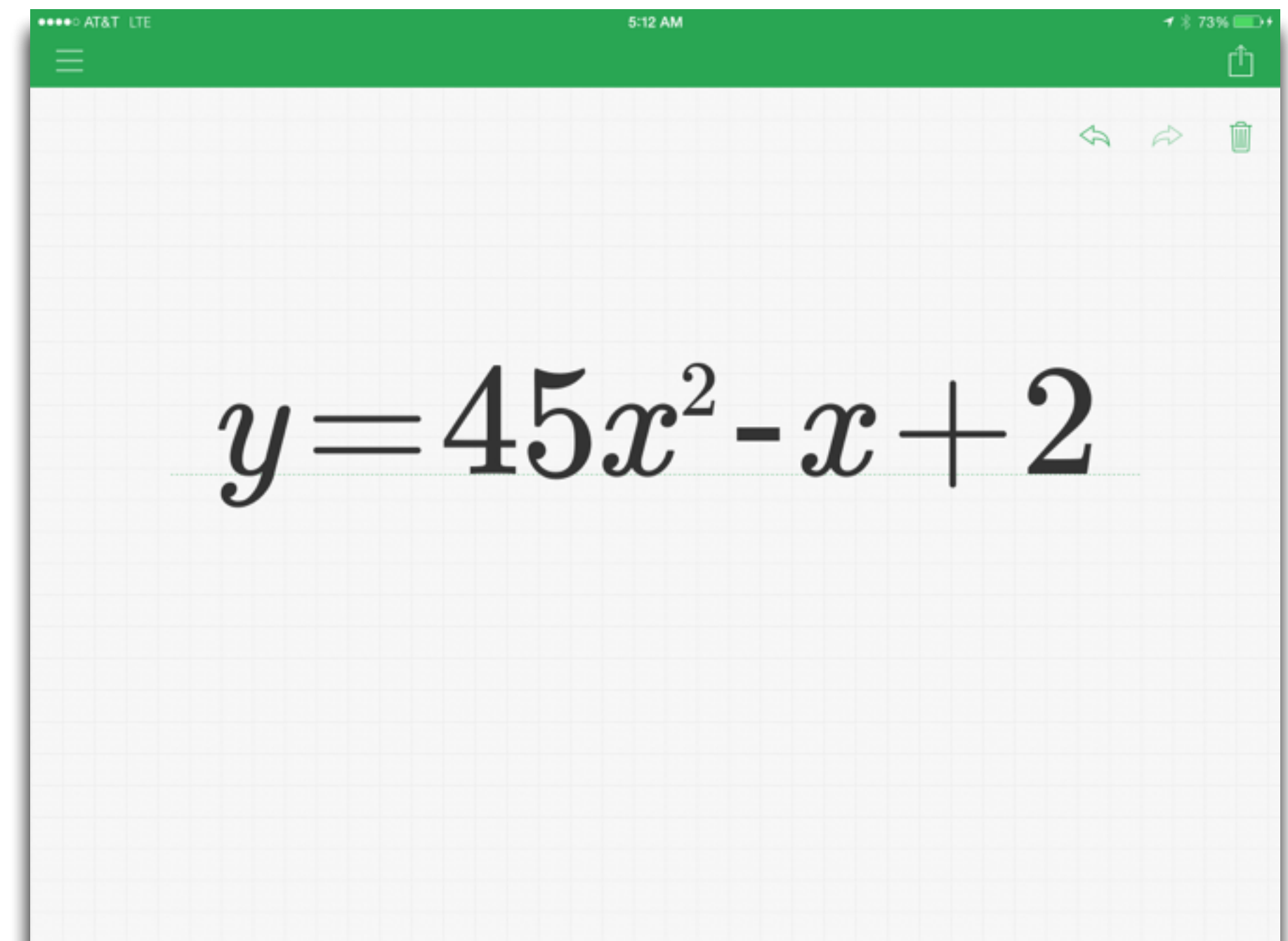
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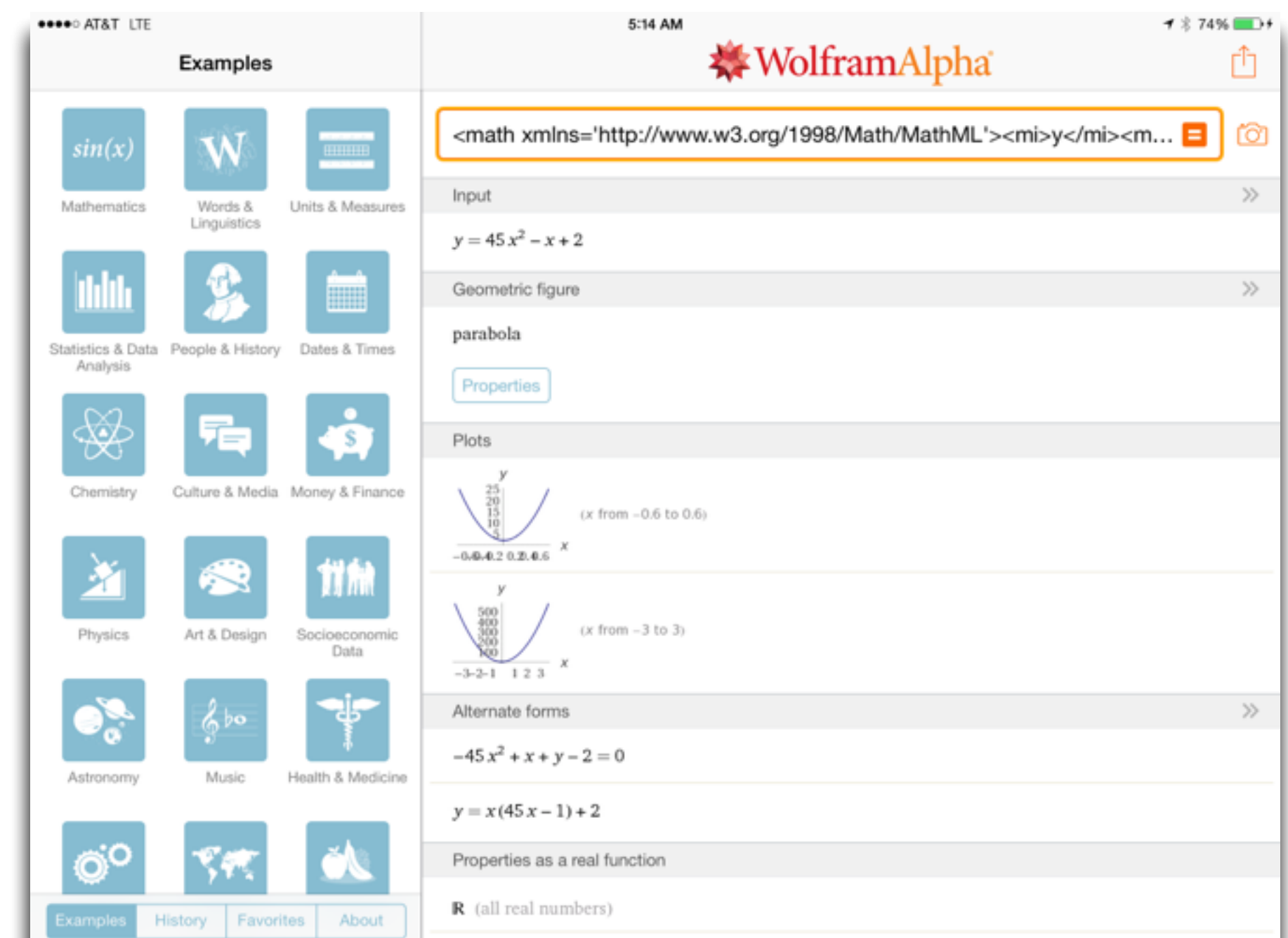
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A screenshot of a mobile application interface. At the top, a green status bar shows "AT&T LTE", "5:12 AM", and "73%". Below the status bar is a green header with a menu icon and a share icon. The main area is a white grid with the equation $y = 45x^2 - x + 2$ centered in a large, black, serif font.



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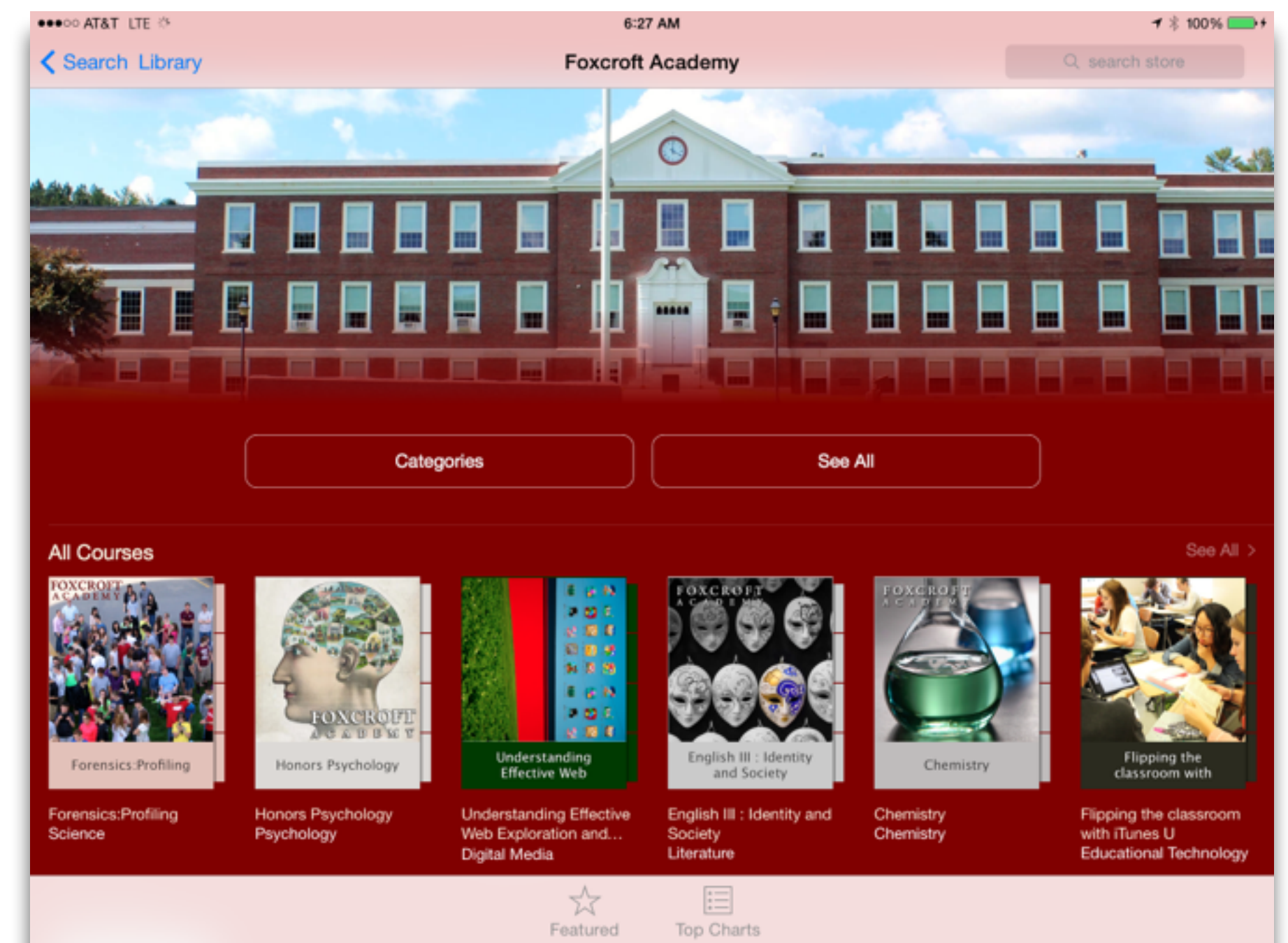
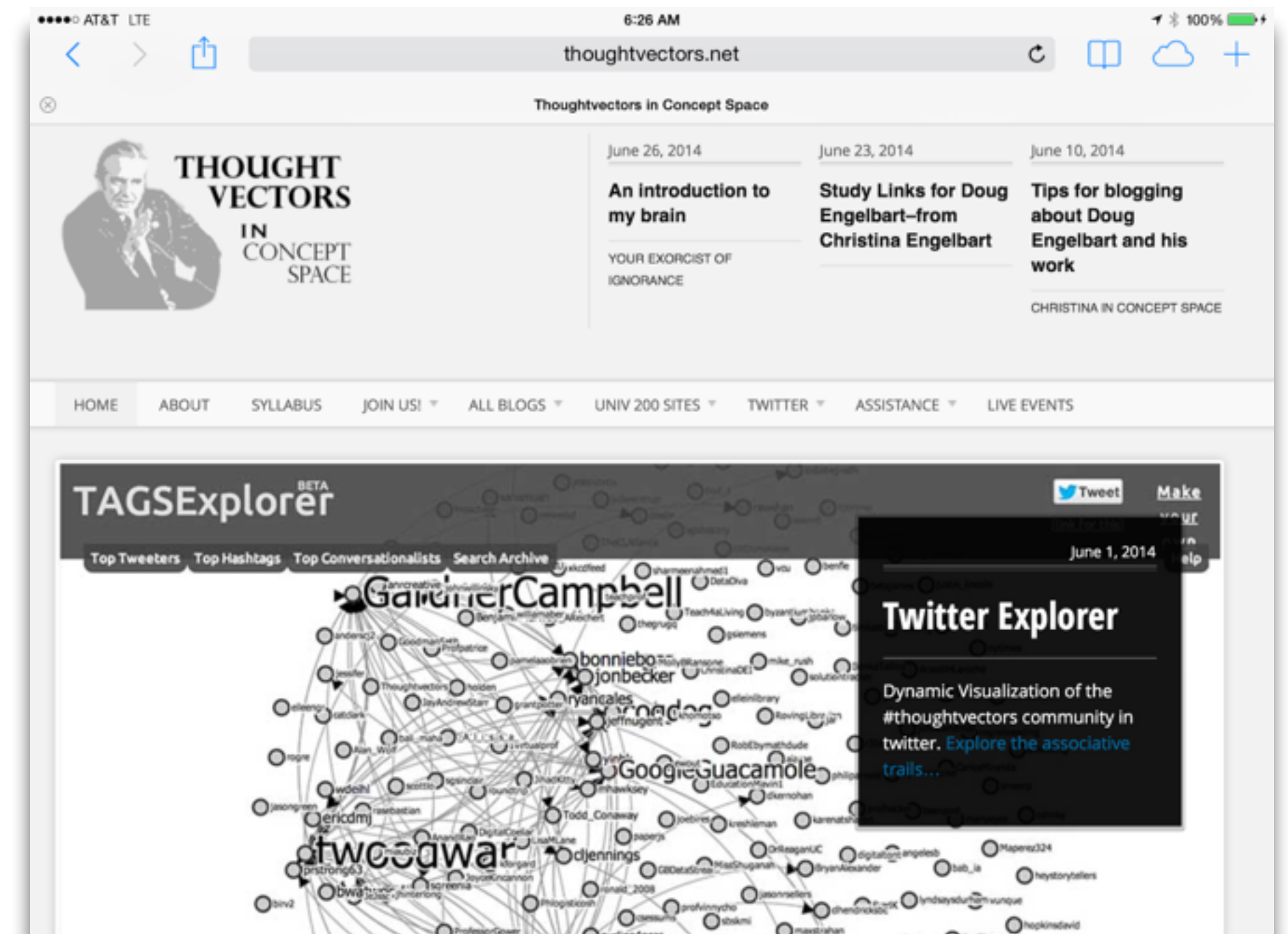
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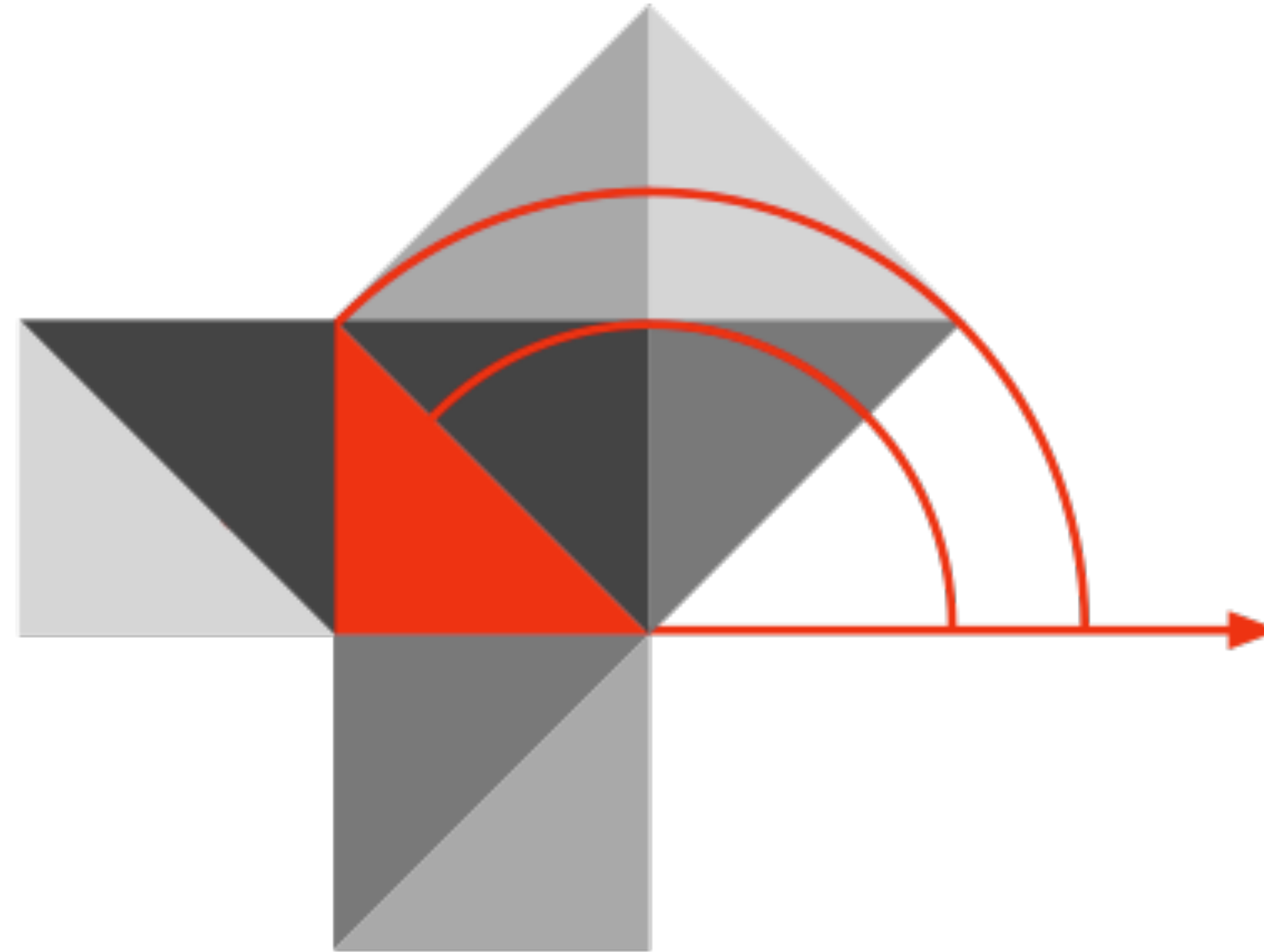
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Three Challenges

1. S/A: Use hashtagify.me and [Bottlenose Sonar Solo](https://bottlenose.com/sonar) to either:
 - find out more about a current event, or
 - find a network of resources related to a topic of interest
2. A/M: Create an account on WordPress.com, and share with others what you found out in 1. by creating a series of posts that embed some of the materials you found (e.g. tweets) to tell a story.
 - Try to keep the amount of additional explanatory text to a minimum - let the embedded materials tell the story.
 - WordPress will take care of the embedding for you if you use HTML mode, and post the URL of e.g. the tweet on a line by itself: <https://en.support.wordpress.com/twitter/twitter-embeds/>
 - After you're done, let others know what you've created by posting a tweet with the hashtag #eLearnONT
3. M/R: Scan other tweets tagged with #eLearnONT to find three fellow educators with related interests. Set up a one-hour Google Hangout with them to create as a team a draft version of a SAMR ladder that would use what you found and created in 1. and 2. in the classroom.
 - Share your SAMR ladder with other educators by jointly authoring a new WordPress blog to describe the SAMR ladder, and let them know about it by posting a tweet with the hashtag #eLearnONT

Hippasus



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

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