SAMR: A Model for Teaching and Learning – Day 1

Ruben R. PuenteDura, Ph.D.
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

Ruben R. Puentedura, As We May Teach: Educational Technology, From Theory Into Practice. (2009)
Fig. 2. Estimates by 160 gynecologists of the probability that a woman has breast cancer given a positive mammogram, before and after receiving training in how to translate conditional probabilities into natural frequencies.
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Pedagogy

Content

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Choosing the First SAMR Ladder Project: Three Options

• **Your Passion:**
  • If you had to pick one topic from your class that best exemplifies why you became fascinated with the subject you teach, what would it be?

• **Barriers to Your Students’ Progress:**
  • Is there a topic in your class that a significant number of students get stuck on, and fail to progress beyond?

• **What Students Will Do In the Future:**
  • Which topic from your class would, if deeply understood, best serve the interests of your students in future studies or in their lives outside school?
<table>
<thead>
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<th>Social</th>
<th>Mobility</th>
<th>Visualization</th>
<th>Storytelling</th>
<th>Gaming</th>
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Bookmarks

Discussions

Blogging

Telepresence

RSS Feeds

Microblogging

Wikis

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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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.”

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.
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