An Intro to SAMR: Building Ladders

Ruben R. Puentedura, Ph.D.
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Augmentation
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Modification
Tech allows for significant task redesign

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

Ruben R. Puentedura, As We May Teach: Educational Technology, From Theory Into Practice. (2009)
<table>
<thead>
<tr>
<th>Competency Concept</th>
<th>Evaluate Historical Accounts</th>
<th>Interpret Primary Sources</th>
<th>Apply Chronological Reasoning</th>
<th>Contextualize</th>
<th>Construct Acceptable Historical Accounts</th>
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<tr>
<td>History as an Interpretive Account</td>
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<td>The Relationship of Past and Present</td>
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<td>Historical Evidence</td>
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<td>Complex Causality</td>
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<td>Significance</td>
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Extended Thinking
Strategic Thinking
Skills and Concepts
Recall and Reproduction

Webb, Norman L. Depth-of-knowledge levels for four content areas. (2002)
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Extended Thinking

Modifying Aspirin: Predicted Effects
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<th>Visualization</th>
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<tr>
<td>200,000 years</td>
<td>70,000 years</td>
<td>40,000 years</td>
<td>17,000 years</td>
<td>8,000 years</td>
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Visualization
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.”
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S to A: The Value of Shared Practices

- Augmented Note Taking and Annotation
- Visualization Methods:
  - 5 Primary Domains: Space, Time, Networks, Text, Number
- Simple Blogging
- Simple Digital Storytelling Video
- Flipped Classroom:
  - Materials Creation
  - Peer Discussion/Instruction Methods
- Simple Interactive Fiction
- LMS Practices
Building a SAMR Ladder

• Four steps:
  • Select a unit of instruction
  • Redesign the intro to the unit (basic knowledge, materials) at the S level
  • Redesign the development of the unit at the A, M levels
  • Redesign/create a student culminating experience for the unit at the R level
Why Build a Ladder?

• Only one of many possible approaches to redesigning a unit of instruction using SAMR

• Particularly well-suited to “first efforts” in technology-based curricular redesign

• Some advantages in this context:
  
  • Proximity to existing practice
  
  • Sustainability of effort
  
  • Option for gradual implementation
Three Questions (and Followups)

• Which unit of instruction would you like to redesign?
  • Why?

• What did you do before in this unit that worked?
  • Why did you do it?

• What would you like to change or replace?
  • Why?
The Two-Pass Ladder – Pass 1

• Redesign at the S/A levels, using **one** of Technology, Pedagogy, or Content as your driver:
  • S: Go for low-hanging fruit, e.g.
    • access to resources
    • coordination of social environments
    • basic approaches to information management
  • A: Go for enhancing what you chose in S, e.g.
    • curation of resources
    • organization of peer discussion/instruction experiences
    • information analysis and visualization
The Two-Pass Ladder – Pass 2

• Now, redesign at the M/R levels for a **different** driver (from Technology, Pedagogy, or Content), but **in light of** the first pass driver:

  • M: Go for defining extended experiences in student exploration/creation that leverage the choices made for A

  • R: Go for student agency, allowing them to build their own exploration/creation using the experiences developed at M
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Driver: C
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?