Elementary iPads: A Lesson Design
Consumptive vs. Productive

Look at your apps on your iPad

- Find one that is a consumptive app
- Find one that is a productive app
- Open Safari & type in goo.gl/0RPI3D in the address bar (zero and the letter I)
- Make a sticky note for each of your apps
Bloomin’ Apps
iPad edition

Understanding

Creating

Remembering

Applying

Analyzing

Evaluating

ANNOTATING
TWEETING
SUBSCRIBING
BLOGGING
CATALOGING
EXPLAINING
INTERVIEWING
DEMONSTRATING
PRESENTING

MICROMAPPING
MIND MAPPING
TEMPORAL ORGANIZING

ANIMATING
VIDEOCASTING
STORYTELING
PODCASTING
MIXING

RECALLING
BOOKMARKING
SEARCHING

WORD PROCESSING

CONFERENCING
COLLABORATING
POSTING
CRITIQUIQING

ORGANIZING
OUTLINING
STRUCTURING
DECONSTRUCTING
SURVEYING
MASHING

NETWORKING

The Padagogy Wheel V2.0

Developed by Allan Carrington
Designing Outcomes

Standing on the Shoulders of Giants

This Taxonomy wheel, without the apps, was first discovered on the website of Paul Hopkin's educational consultancy website mmxweb.org.uk. That wheel was produced by Sharon Artley and was an adaption of Katwol and Anderson's (2001) adaption of Bloom (1956). The idea to further adapt it for the pedagogy possibilities with mobile devices, in particular the iPad, I have to acknowledge the creative work of Kathy Schrock on her website Bloom's Apps.

The Padagogy Wheel by Allan Carrington is licensed under a Creative Commons Attribution 3.0 Unported License. Based on a work at http://tinyurl.com/bloomsbloc.
SAMR Model & Discussion

• What is SAMR?
• A model that allows teachers to evaluate how technology enhances or transforms the learning experience.
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

http://www.youtube.com/watch?v=0E3UEsRRnXM
A classroom product you could have done with pen and paper is created with technology.

No Technology
Write a report

Technology
Type a report

Substitution
Tech acts just like the old tool
A classroom product you could have done with pen and paper is created with technology, AND using technology is a functional improvement over doing it by hand.

No Technology

Write a report

Technology

Word processor’s Spell Check, Grammar Check, & Electronic Dictionary

Augmentation

Tech acts like the old tool but with some improvement
Technology allows the assignment to be redesigned.
A lot of work is done using technology.

No Technology
Write a report

Technology
Newsletter using digital images

Modification
Tech redesigned the task significantly
Redefinition
Tech creates new content that was not previously possible

Technology transforms the assignment. It allows students to create products that were previously inconceivable.

No Technology
Write a report

Technology
Create an animation, or Write, film, and publish a cartoon

Martin Luther King, Jr. & Rosa Parks, created by Kindergarteners using Toontastic iPad app.

Which assignment will students remember most?
Why does this matter?

Why have all this technology if we are doing what we've always done?

"A good quarterback throws where the receiver is going to be, not where he was." Kevin Honeycutt
Examples of SAMR

**Elementary Reading/Language Arts Examples**

**Substitution**
Use a word processing program to type out a story instead of handwriting.

**Augmentation**
Use a tool such as “spell check” to make sure all words are spelled correctly. (Other tools – Thesaurus, Word Count, Clip Art, etc.)

**Modification**
Bring a story to life using an online multimedia application. (Flipboard, Sock Puppets, etc.)

**Redefinition**
Use video conferencing to tell a story. (Google Hangout, Poly Com, Face Time, etc.)
Examples of SAMR

**Elementary Math Examples**

**Substitution**
Student uses a drawing type website or App, like Doodle Buddy, to solve a math problem.

**Augmentation**
Student uses the extra features, like stickers, in the website or App to illustrate the math problem along with solving it.

**Modification**
Student uses a screen casting website or App to illustrate and verbally explain how they solved the problem.

**Redefinition**
Student creates video math problems of their own and posts to a blog, website or App for other students to solve. Student monitors and provides feedback for those solving their problems.
Examples of SAMR

**Elementary Social Studies Examples**

1. **Substitution**
   - Use an Internet browser to find images of an event for a timeline.

2. **Augmentation**
   - Use a timeline tool to add pictures and video to help explain events.

3. **Modification**
   - Using a mapping tool (such as Google Maps) to plot the location of events in your timeline. Embed pictures and video.

4. **Redefinition**
   - Make your timeline interactive by creating a movie of your historical figure and/or events. (iMovie)
Example of SAMR

**Elementary Science Example:**
**Habitats**

**Substitution**
Create a basic presentation about habitats. Include text and pictures.

**Augmentation**
Create a presentation about habitats which includes text, pictures, animations and transitions.

**Modification**
Create a Travel Guide video which explores a habitat. Share it with the class for feedback.

**Redefinition**
Create and publish an online video Public Service Announcement which explains the habitat and encourages ways to “take care” of the habitat. Allow for viewer feedback.
Apps in Education Poster

Apps classified by SAMR Model

Redefinition
Tech allows for the creation of new tasks, previously inconceivable
- iMovie
- Book Creator
- ShowMe
- Screen Chomp
- Toontastic
- Edu-creations
- Voicethread
- Book Puppets
- Puppet Pals
- Nearpod

Modification
Tech allows for significant task redesign
- Flipboard
- Skitch
- Comic Strip
- Chrome
- Photosync
- Dual Browser
- Keynote
- QR Code Reader
- Dragon Dictation
- PDF Expert

Augmentation
Tech acts as a direct substitute, with some functional improvement
- Pages
- Google Search
- Haiku Deck
- Wikinotes
- Grammer Jammers
- The Elements
- Virtual Histories
- Qwiki
- Articles
- Draw on Screen

Substitution
Tech acts as a direct substitute, with no functional improvement
- Pages
- iBooks
- Symbaloo
- Popplet
- Simplemind
- Collage Creator
- Bamboo Paper
- Jumbo Calculator
- The Holy Bible
- Dictionary
Intended Impact on Student Learning

- Increased independent learning
- Increased student engagement
- Improved collaboration abilities
- Increased ability for the teacher to differentiate instruction
<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Examples</th>
<th>Rank – Include the following: Lesson Idea, Where it Ranks and Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitution</td>
<td>Involves doing the <strong>same thing as you would do without the technology</strong> and without modification of the task.</td>
<td>Student uses a drawing type website or App, like Doodle Buddy, to solve a math problem.</td>
<td>Use a word processing program to type out a story instead of handwriting.</td>
</tr>
<tr>
<td>Augmentation</td>
<td>Involves some <strong>functional improvement</strong> but is still a direct tool substitute. Again the task is not changed, but perhaps use of features of the technology are incorporated.</td>
<td>Student uses the extra features, like stickers, in the website or App to illustrate the math problem along with solving it.</td>
<td>Use a tool such as Spell Check to make sure all words are spelled correctly. (Other tools – Thesaurus, Word Count, Clip Art, etc.)</td>
</tr>
<tr>
<td>Modification</td>
<td><strong>The outcome</strong> is still the same but has been enhanced****, the product has changed. Involves giving a different kind of assignment. For example using multimedia, adding sound, video, etc. The question to be asked is does the media enhance the message?</td>
<td>Student uses a screen casting website or App to illustrate and verbally explain how they solved the problem.</td>
<td>Bring a story to life using an online multimedia application. (Flipboard, Sock Puppets, etc.)</td>
</tr>
<tr>
<td>Redefinition</td>
<td><strong>Is doing something that is inconceivable without technology</strong> Gives students a stage. For example posting on the web so that the audience is the world and there is a feedback loop.</td>
<td>Student creates video math problems of their own and posts to a blog, website or App for other students to solve. Student monitors and provides feedback for those solving their problems.</td>
<td>Use video conferencing to tell a story. (Google Hangout, Poly Com, Face Time, etc.)</td>
</tr>
</tbody>
</table>
Where do these Apps fall on the SAMR Model?
Goal 1

• Students design a product to share new knowledge on a topic/concept related to a specific content area.
Assessment: How do you grade technology products?

<table>
<thead>
<tr>
<th>Technology Rubric for Integrated Products</th>
<th>1 – Does Not Meet Expectations on Grade Level Standards</th>
<th>2 – Partially Meets Expectations on Grade Level Standards</th>
<th>3 – Meets Expectations on Grade Level Standards</th>
<th>4 – Exceeds Expectations on Grade Level Standards</th>
<th>Points: Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Project contains incorrect or incomplete information.</td>
<td>Project is missing important information.</td>
<td>Project is mostly complete and correctly explains the topic.</td>
<td>Project is complete and correctly explains topic.</td>
<td>Project is mostly complete and correctly explains the topic.</td>
</tr>
<tr>
<td>Presentation of Content</td>
<td>Poor font style. Many spelling and grammatical errors.</td>
<td>Good font and font size. More than 3 words misspelled or grammatical errors.</td>
<td>Good font and font size. 1-2 words misspelled or grammatical errors.</td>
<td>Good font and font size. No words misspelled or grammatical errors.</td>
<td>Good font and font size. No words misspelled or grammatical errors.</td>
</tr>
<tr>
<td>Technology</td>
<td>Student used a single application to complete the project.</td>
<td>Student used one application with multiple features to complete the project.</td>
<td>Student used two applications to complete the project.</td>
<td>Student used more than two applications to design and publish project.</td>
<td>Student used more than two applications to design and publish project.</td>
</tr>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Final Thoughts...

Differentiation

• iPads allow students to use different apps to complete the same task.