

Using SAMR to Guide Teaching with Technology

Faculty interested in being more reflective and effective with their technology use need to look no further than the SAMR model. It stands for Substitution, Augmentation, Modification, Redefinition. Developed by Ruben Puentedura, an educational technologist, the SAMR model guides faculty in their design, implementation and evaluation of technology use in their classes. Faculty can use SAMR to reflect upon how they are integrating technology: is it an act of Substitution? Augmentation? Modification? Or Redefinition?

Substitution – Technology acts as a direct tool substitute, with no functional change. This is the most inconsequential use of technology, since its role is optional. In other words, a substitutive use of technology involves doing the same thing as you would without the technology. An example would be composing an essay using Microsoft Word, as opposed to handwriting with paper and pencil.

Augmentation – Technology acts as a direct tool substitute, with functional improvement. While a slight improvement from substitution, an augmentative approach to technology offers some benefits because it leverages the features afforded by the technology. An example would be using Microsoft Word to compose an essay and employing the footnote, spell-check, word count and other built-in features.

Modification – Technology allows for significant task redesign. This approach to technology moves from enhancement to transformation. An example would be adding videos, sounds, images and hyperlinks within a Microsoft Word document, fundamentally changing a static text into a multimedia document.

Redefinition – Technology allows for the creation of new tasks, previously inconceivable. This ultimate use of technology results in a new product and process that was not possible before. An example would be using Google Docs, as opposed to Microsoft Word, for collaborative writing projects, whereby multiple users can work on one document synchronously or asynchronously — a process that is not possible without technology.

Resources

[Ruben R. Puentedura's Blog](#)

[Introduction to the SAMR Model video](#) (4:22)

[Kathy Schrock's Guide to SAMR Model](#)

Submitted by:

Mike Truong, Ph.D.

Executive Director, Office of Innovative Teaching and Technology

Center for Teaching, Learning, and Assessment

Azusa Pacific University

mtruong@apu.edu

<http://www.apu.edu/itt>