

Quadrant II Newsletter

Research shows that the difference between leaders who derail in their career and those that soar to great heights is social skills. Social skills appear in the second quadrant of Stephen R. Covey's Importance-Urgency matrix: social skills are important to a career but not urgent (Covey is author of the top-selling business book *The 7 Habits of Highly Effective People*). Quadrant II provides an opportunity for business and technical professionals to learn and try out new social skills based in science.

29Oct2015, author: Valerie Patrick, PhD, *Secret to Designing Better Presentations*

Quotable (*Key Message*)

People learn more from a graphic with spoken text than from a graphic with written text.

Quantify (*The Science*)

Dr. Richard E. Mayer, Professor of Psychology at University of California Santa Barbara, developed a set of design principles for multimedia learning based on the sciences of learning and teaching (Mayer, R.E., "Applying the Science of Learning: Evidence-Based Principles for the Design of Multimedia Instruction," *American Psychologist*, p. 760-769, November 2008). Mayer explains three key principles from the cognitive theory of learning. The first principle is that the human brain has separate channels that cannot be played simultaneously for processing visual and auditory content. The second principle is that each channel in the human brain has a limit in terms of how much information can be processed in a given amount of time. The third principle is that learning with understanding depends on the type of cognitive processing that the learner experiences while being exposed to new content. Mayer describes the

cognitive theory of learning in steps that are in concert with these three principles. First, the learner is exposed to images and sounds in a webinar or other on-line learning experience. Next, sounds accessed by the ears are represented briefly in auditory sensory memory and images accessed by the eyes are represented briefly in visual sensory memory. Next, using one side of working memory, the learner selects sounds for further processing in the audio channel of the brain and some images for further processing in the visual channel of the brain. Then, using the other side of working memory, the learner organizes some of the sounds into a verbal model and some of the pictures into a visual model. Finally, in long-term memory, the learner accesses prior knowledge to integrate with the verbal and visual models in working memory. The new integrated knowledge can then be stored in long-term memory. Mayer goes on to explain that the science of teaching is about presenting content in a way that triggers cognitive processing by the student to help them learn with understanding.

Mayer explains that when content has a number of different elements and interactions, then the capacity of the audio and visual channels in the brain can be exceeded. Therefore, it is important to minimize any un-needed processing by the brain. One way to do this is to move words from the visual channel to the audio channel. For example, if words are included with a graphic in visual form, then the words are adding to the processing in the visual channel. Removing the words from the graphic and speaking them instead reduces the load on the visual channel and moves the load to the audio channel of the brain.

Qualify (*Put into Practice*)

A great reference for building an effective presentation that eliminates most, if not all, words from slides is the book *Presentation Zen* by Garr Reynolds.

Garr not only provides several examples of effective presentation slides in the book, but he also gives a step-by-step process for how to design an effective presentation. If you don't have enough time to read Garr's book, then you can pick up some great presentation tips from watching Garr in action giving a TEDx Talk in Tokyo titled "Story, Imagery, and the Art of 21st Century Presentation" here: <https://www.youtube.com/watch?v=zQpGf1gPY7M>.

Quip (*Fun*)



Writing what you are going to say next to the graphic on your PowerPoint slide is not only boring, but is an ineffective way to convey your message - especially if you are Sheldon Cooper from the Big Bang Theory.

Using slides for images and text for speaking provides a better way for your audience to learn and understand.

Quest (*Resources*)

Dr. Dr. Valerie Patrick, Founder and President of Fulcrum Connection LLC, gives keynotes on collaboration, creativity, innovation, and thriving on a steep learning curve. Contact Dr. Patrick (valerie.patrick@fulcrumconnection.com or text 412-742-9675) to set up an exploratory call.

Read about the learning-creativity-innovation continuum on the Competent Collaborator Blog here: <http://fulcrumconnection.com/blog/the-learning-creativity-innovation-continuum/>.

About Fulcrum Connection LLC

Fulcrum Connection specializes in instructional design, training, speaking, facilitation and consulting to develop skills in leadership, innovation, sustainability, troubleshooting teamwork, and managing technical professionals.