



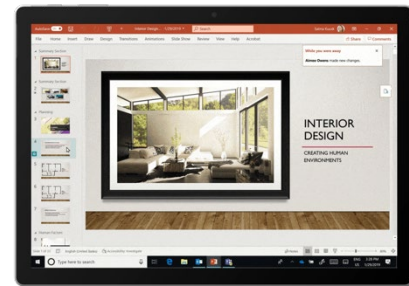
Considering Cognitive Load in Power Point Design

Have you passed by darkened rooms with blue light glowing from the projector, or wanted the flow of information to stop so you could process the information? If yes, you have experienced the painfulness of attending a poorly designed Power Point presentation. The [model of working memory](#) (Baddeley & Hitch, 1974) offers a framework for Power Point design that we can use to consider how much information students can process without cognitive overload. It may serve as an informative guide when we review and/or prepare our slides for the spring semester.

Let's consider some recommendations for Power Point design that take cognitive load into account:

Dividing the information between visual and auditory modes.

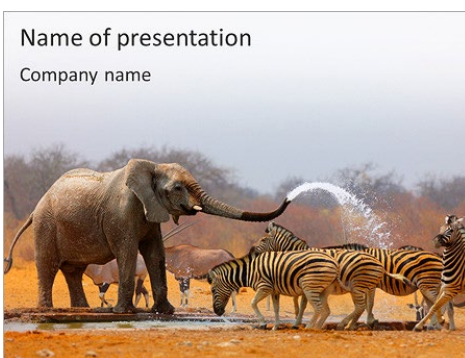
Allocating information between verbal and graphic helps to leverage the working memory of the individual student. When we separate information by visual and spoken modes, we reduce the likelihood of one system being overloaded. For example, supporting visuals with words helps to reduce the cognitive load as combining an image with narration takes less cognitive effort than combining an image with text.



Minimizing on slide distractions. Slide transitions, music, animations, and background information tend to be distracting to students as they try to process the information. The PowerPoint aims to supplement visually the information we are describing verbally.

Using the text tools to convey important content and making the information easy to follow.

Simple tools and formatting are effective means to direct learners to important points and contexts. Students can better grasp significant information through text size, bolding, italics, or placing content in a highlighted or shaded text box.



Keeping the text in short chunks. When we fill each slide with blocks of text we increase the potential for information overload. The PowerPoint should accentuate the speaker's main points rather than serve as a script.

Applying the KWICK method to our design: *K* stands for *Key Point*: Each slide needs to make a single point. *W* stands for *Words that suggest the visual*: Use the text on each slide to inform your main visual. *I* stands for *In Context*: Consider the context of the topic in relation to the audience. *C* stands for *Crystal Clear*: Make sure that the slides are clear and draw the audience's attention. *K* stands for *Keep Focus*: Make sure your slides are presented logically and keep the audience focused.

What have you found effective when designing PowerPoints? How have you tried to reduce cognitive load? [E-mail](#) your suggestions/practices to VITAL, and we will include, with credit, in the next issue.

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Adapted from: [Making Better PowerPoint Presentations](#) by Laura Edelman and Kathleen Harring
[How to Avoid Annoying PowerPoint Habits: Interview with Dave Paradi, Microsoft MVP](#) (YouTube)
[KWICK Method for Creating Effective Powerpoint](#) by David Pardi - Accessed 01/23/2023