ETR Virtual Vitality
PowerPoint Savvy in a Virtual World

Going virtual? If yes, then you are probably using PowerPoint (PPT) slides, right? Your PPT slides can beautifully support a powerful learning experience, OR they can effectively block learning by contributing to cognitive overload, confusion, and downright boredom.

Consider what science says about memory and learning:

The brain pays attention to what is relevant and meaningful, and to images and novelty.[1] The learning brain shuts down when it encounters too much content, too many words, long periods of passive listening, and incongruent messages.[2] Knowing this, let's use science as our guide to think about how to be PPT savvy in a virtual world.

What is relevant/meaningful	Images	Novelty

Before we share our tips, note how we are using the following terms:

Text: the written words used on the slide

Images: photos, illustrations, graphs, charts

Tips for Virtual PPT Design
Intent/Relevance

+ ALWAYS be clear about your desired outcome when designing a learning process. Start with the end in mind to ensure clarity of purpose. Design your slides to support and align with your desired outcome(s).

+ Match your slide content (i.e., images and text) to your intent/purpose for each slide (e.g., illustrate a concept, evoke emotion, show a process).

+ Employ appropriate steps to ensure equity and inclusivity:

• Make sure ALL learners have appropriate access to the learning platform and/or tools and have appropriate instructions for easy access.

• Use images and language that are inclusive and honor diversity.

• Design for diverse learning styles.

• Follow your organization's guidance for meeting Section 508 compliance requirements as you build your slides.

Look and Feel

+ Use images, photos, graphs, charts, illustrations to convey your message! The brain is wired to respond more readily to images than to words. Consider doing the following:
  - Use illustrations (drawings) or high-resolution photos (not pixelated or blurry) rather than "clip-art," which tends to look less polished.
  - Use images that reflect and honor diversity.
  - Avoid crowding too many images on one slide; often one image works best.
  - Avoid using overly complex images, having too much going on is distracting.
  - Fill the page with the image – make it BIG! Small graphics become a distraction.
  - If using a logo, place it on the first slide only, not every slide, as that creates clutter and is distracting.
  - Provide key words to clarify your point if an image is not self-explanatory.

+ The brain loves novelty. Images, sound, videos, animations, and color are attention grabbers. Warning: Use animations and sound effects purposefully and sparingly. These "extras" can quickly become more of a distraction if overused.

+ The brain loves white space—it gives the brain "space" to read and engage. With ample white space, the brain is less likely to shut down from content overload.

+ Use sans serif fonts (e.g., Arial, Gilroy, Calibri, Helvetica, Geneva). This type of font is simpler and much easier on the eyes.

+ Be intentional with font color:
  - Use colors to emphasize key points.
  - Use light colors on dark backgrounds and dark colors on light backgrounds.
  - Red is hard on the eyes so use sparingly!
  - Limit the number of colors used on one slide – too many colors can create confusion.

+ Use a font size of at least 16 point for the text in the body of your slide. Use a larger font size for titles.

+ Consider reviewing your slides on your personal computer to ensure that all slides are readable.

Managing Cognitive Load (aka Avoiding Brain Drain)

+ Simplify your message: Present one key concept or key point per slide. Note that you may need more than one slide to fully address a single key concept/point.

+ For extensive or complex content and/or data sets, supplement your presentation with a handout. Your slide can then be used to engage your learners and create a bridge to the content/data. For example, use brief bullet points (bridging to content) or a picture with one compelling data point (bridging to data).

+ Use brief, bulleted phrases, not sentences or paragraphs. Limit the number of bullet points and the number of words you use on each slide. Brief bullet points will resonate with learners while lots of words or blocks of text will tire the brain.

+ Ensure every element on your slide (i.e., text, images) directly supports the content and intent of the slide...otherwise, remove it.

+ Use simple animation (e.g. appear, fade) to break up the content instead of showing all the content at once. For example, share items on a list one at a time; pose a question and reveal the answer using animation; or place the answer[s] on the next slide.

+ Use visual cues (e.g., arrows, highlights, boxes) to draw your learners' eyes to the important part of the slide.

And now, check these out!

Can you feel the difference? Same information. Different design. See if you can identify the tips that were followed in the second example...

Example 1

Example 2

We hope these tips are helpful!
Let us know if you have questions

ETR will be continuing the Virtual Vitality series to provide support for best practices in designing and delivering virtual learning processes. In addition, we are offering consultation services to assist constituents in learning best practices for virtual design, delivery and follow-up.

If you have questions, suggestions, or just want us to have your contact information for future tips and resources on virtual learning, you can contact Debra Christopher at D4L@etr.org and share your request, your name, and your contact information. We look forward to connecting with you.

References
1. Brown, P., Roediger, H. & McDaniel, M. (2014). *Make it stick: the science of successful learning*. Cambridge, MA: Harvard University Press.
2. Mayer, R.E., and R. Moreno. 2003. *Nine Ways to Reduce Cognitive Load in Multimedia Learning*. Educational Psychologist 38(1): 43-52. http://www.uky.edu/~gmswan3/544/9_ways_to_reduce_CL.pdf