FUNDAMENTALS

The Color of Learning

Enhance memory and retention with a splash of color.

By Judy Myers

Different colors have different physiological effects on humans. Scientists have found that red makes our adrenaline flow, resulting in an increase in pulse, blood pressure, and energy level. Orange can trigger hunger. Blue relaxes us, causing the brain to secrete tranquilizing hormones, while green gives us a sense of security.

Color also influences the way we see and process information; it can improve our ability to remember both words and pictures. An experiment published in the *Journal of Experimental Psychology* proves this connection.

In the study, participants looked at 48 photographs, half in color and half in black and white. Later, they viewed the same 48 images randomly mixed with 48 new images, and indicated if they had seen each picture or not.

The results? Participants remembered color photographs of natural scenes, colored normally, significantly

better than they remembered black-and-white images. However, those same participants didn't recall color scenes, colored falsely, any better than scenes in black and white. It wasn't just any color that strengthened people's memory, but only the colors inherent to the scenes the photos depicted.

The results of that and other studies suggest that color is a vital factor in retention. As trainers, it's crucial for us to know how to use it to our benefit.

Enhancing memory

All trainers must keep their participants engaged so the learning sticks. New trainers may find that using color to attract attention and reinforce ideas is a useful start.

Here are some basics.

Use visuals. If you want participants to tune in faster, try highlighting your ideas with attention-getting visuals. For example, you could display your objectives on colorful flipchart sheets or PowerPoint slides.

Chunk information. Participants are likely to remember better what you tell them when you organize the information in a meaningful way. One approach is to group ideas by color. For example, suppose that you're training the wait staff of a restaurant to remember the specials for the night. You might present the dishes by color. One group would contain lobster, sliced tomatoes, and cherry cobbler; another would consist of green beans, house salad, and Key lime pie. All brown foods would make up the third group: filet mignon, roasted turkey, and chocolate torte.

To ensure that the servers remember the colors, create an image to link the groups. Once they've learned the green, brown, and red dishes, ask them to visualize a Christmas tree with its green needles, brown trunk, and red ornaments. That image will immediately remind them of the three colors.

Make connections. You can also use color associations to help participants remember. For example, most of us associate the green, yellow, and red of traffic lights with *go, caution*, and *stop*. If you're explaining how to assess the soundness of a company, use green to group the healthy signs, such as new product development. Any signs that cause concern, such as declining sales, designate yellow. And the danger signals, such as lawsuits, mark red.

Interactive color

Take color to the next level; use it in interactive documents and Webpages. These guidelines will help.

Use a balanced design. Create pages with colors that convey dynamic energy without being cluttered and confusing. Strike a balance between all reds, yellows, and oranges and all grays and blues. Use more subdued colors to counterweight strong, bright colors.

Create a clear hierarchy. Arrange elements and colors to emphasize the importance of main ideas. For example, give the most important object, word, or phrase a bright color. Assign the second most important element medium brightness, and give less important ideas subdued colors. To further emphasize an important element, place a contrasting border around it.

Keep it unified. Your readers should be able to see how each screen or slide relates to the whole, even though each has a slightly different look. If your color combination is green, gray, and red, for example, make sure that each screen repeats those colors in some ways.

Dos and don'ts

It's important to consider your audience and purpose when selecting colors. Advertisers know that not all colors are appropriate for every audience. Notice how often banks select blue, gray, and red hues. Fast-food restaurants advertise in orange, the hunger color, and environmental groups opt for green and brown.

Purpose will also dictate your choice of color. If you're trying to awaken and stimulate a group, try red or yellow. If you need to calm them down, reach for something blue or green.

It's imperative not to allow color selection to interfere with learning. Sometimes, color can be so distracting that messages get lost. If you use eight different colors on a flipchart page, you'll overwhelm your audience. And if you display a PowerPoint slide with orange text on red background, participants probably won't be able to read the text.

Remember, not just any color enhances memory. Avoid using falsely colored images of natural scenes, such as purple grass, a green sun, or a red lake.

Be sure to take into account color-blind participants. For example, if you're creating a pie chart with different-colored slices, make each slice a different texture, too. That way, viewers don't have to rely on color alone to interpret the data. If you need to print the charts in black and white, the slices will show more contrast.

So, go ahead! Make your training colorful in all respects. If used properly, colors can capture the attention of learners and help them remember what they learn.

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