

Using Colors to Meet Special Needs

Improving Attention

PROBLEM A lack of sustained attention (ADD).

SUGGESTION Most vivid complimentary colors to aid stimulation.

Recommended: Magenta and green. Red and yellow.

PROBLEM A lack of sustained attention (ADD).

SUGGESTION Select secondary colors that contain yellow, for more intensity.

Recommended: Goldenrod or yellow-green background.

PROBLEM Confuse similar words.

SUGGESTION Try various colors.

Recommended: Rose (light red) or red background.

PROBLEM Uneven arousal state (tend to "drift").

SUGGESTION Stimulate with bright colors to focus attention.

Recommended: Bright yellow background.

Behavioral and Developmental Problems

PROBLEM Autism / PPD

SUGGESTION Try various colors.

Recommended: Light blue or green background.

PROBLEM Behavioral problems

SUGGESTION Try various colors.

Recommended: Dark colored backgrounds.

PROBLEM Developmental delays

SUGGESTION Try various colors.

Recommended: Red background. Users usually prefer red on screen (either text or background).

Learning Disabled

PROBLEM Dyslexia (perceive letter omissions, reversals, jumping letters) <

SUGGESTION Dark colors.

Recommended: Black text on dark blue background.

PROBLEM Learning disability

SUGGESTION Select preferred colors.

Often selected: Blues and greens.

PROBLEM Learning disability with attention deficit

SUGGESTION Colored light stimulation.

Recommended: Green and red.

Color Perception

PROBLEM Some retina-based visual impairments

SUGGESTION Sharp contrast with vibrant colors. Choice depends on individual color perception and type of retinal damage.

*Recommended: Yellow text on red background with bright blue cursor.
Yellow text on blue background with red cursor.*

Light Sensitivity / Low Vision

PROBLEM Inadequate background accommodation. (White background overpowers text and letters lose distinctive shapes.)

SUGGESTION Inverted text (light text on dark background) or monochromatic color scheme

Recommended: Pale yellow text on dark blue background. Light blue text on dark blue background. Light grey text on dark grey background.

PROBLEM Low vision.

SUGGESTION High contrast, with restful background color. Bright cursor for locating ease.

Recommended: Black text on light blue background with red cursor. Navy text on peach or soft yellow background with cobalt cursor.

PROBLEM Low vision, bothered by glare or brightness.

SUGGESTION Inverted text (light text on dark background), with bright cursor for locating ease.

Recommended: Soft yellow text on black or navy background with bright blue cursor. Peach text on dark blue-green background with bright yellow cursor.

PROBLEM Low vision, bothered by glare or brightness, but prefer dark text on light background

SUGGESTION Tone down background brightness with pale colors; use dark text.

Recommended: Black or navy text on peach, light blue, or soft yellow background, with red cursor.

PROBLEM Sensory defensive (sensitive to brightness, glare, high contrast, or fluorescent lighting).

SUGGESTION Low contrast, soft colors, monochromatic scheme.

Recommended: Medium blue text on navy or dark blue background with blue-green cursor. Blue-green text on dark blue-grey background with grey cursor. Light or medium grey text on dark grey background with dark blue-gray cursor.

General Strategies for Choosing Color and Other Text Options

Here are some guidelines for choosing screen colors:

1. Can you easily see black print when the page is white? YES NO
2. Is it comfortable to read on a white screen or white page? YES NO

Change Screen Color

If you answer **No** to either question, you need to change the color of the screen and/or print. First, try different colored backgrounds. Look at the box and ask yourself the following questions each time you change the color of the background until you find the color that is the best. Try all the different colors with black print. Do not forget to also try black background with white letters.

- Is this color comfortable to look at? How do my head and eyes feel?
- Is the print easy to see? Does it stand out from the background?
- Is the print clear and stable?

Change Text Color

Next pick the text color. Some people see better and more comfortably with text that is low contrast or a similar color family to the background, others prefer high contrast resulting from a totally different color text, others prefer white text, and some prefer black text. Try colors, black and white print until you find the combination that:

- Is comfortable to look at
- The print is clear, sharp, and stable
- Text is easy to see because it stands out from the background.

Change Text Size

Some people find it easier to see when the text is larger. Change the size of the font until the text is easy to see.

Change Font Style

Most people find that reading simple, unstylized block text is easier than cursive or handwriting-style text. Do you know what text style is best for you?

Other Helpful Hints

- **Bold Print.** See if making the print bold makes it easier to see.

- **Extra Spacing.** Do you feel like the lines of print are crowded together? Increase the size of the spacing between lines of print and even add extra space after each paragraph.
- **Paragraph Alignment.** Standard left alignment is easiest to read. Avoid using justified paragraphs or forced justified alignment (when both left and right edges are aligned) because it changes the spacing between the words, which may make it harder to read.
- **Glare Guard Screen.** Some people find that this helps reduce the glare from the computer screen and provides additional comfort.
- **Room Lighting.** Do you like a lot of light, dim lighting, indirect lighting, incandescent lighting? You may want to change the room lighting to make it more comfortable for you when using the computer. You may want more lighting, less lighting, or a different type of lighting to make it comfortable and the screen easier to see. If you cannot change the lighting but are bothered by bright lighting or fluorescent lighting, you may find that wearing a visor or brimmed hat helps.
- **Adjust the Brightness Level of the Screen.** Did you need the screen to be brighter or dimmer?
- **Printing Material from the Computer.** Use paper color that is the same color as your favorite screen color. Some people find that it is easier to read the material when printed rather than on the screen. The color of the paper may make reading the material more accessible.
- **Copying.** Place material to be copied on a bookstand.

The above color selection process, "General Strategies for Choosing Color," was provided by the Irlen Institute, creators of the process that uses color to improve comfort and clarity of printed material. If you find that changing the color of the screen and/or print is helpful and you wish that all the material you have to read could be more comfortable and easier to see, read about the Irlen Method and Irlen Lenses. The Irlen Method uses individually created colored glasses that reduce stress, strain, fatigue, and even headaches for individuals when reading and using the computer. The color is also helpful for problems such as poor depth perception, clumsiness, uncoordination, night driving, and reduces sensitivity to sunlight, fluorescent lights, bright lights, and headlights at night. For more information about the Irlen Method, you can get *Reading By The Colors* by Helen Irlen, Avery Publishing, which is available in book or audio cassette, or visit the internet website www.Irlen.com.