



Visual Design & Psychology for Accessibility in Online Courses



QM Connect 2024

Topics covered today will include...

QM Standards

Standard 6

- SRS 6.1 – Tools Used in Course Design
- SRS 6.2 – Tools Promote Learner Engagement

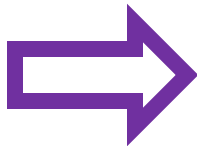
Standard 8

- SRS 8.2 – Course Design Readability
- SRS 8.3 – Accessible Text

Workshop Learning Objectives

- Incorporate color into course design with intended purpose
- Determine how and when to implement proper contrast on course design elements
- Properly utilize different forms of emphasis on text elements within courses
- Determine the readability of and how to utilize different fonts in text elements within courses
- Demonstrate proper usage of heading and paragraph text styles for visual appeal and accessibility

THE COLOR WHEEL



This is what we have been taught in school since kindergarten.

This is PSYCHOLOGY...



The Western Cultural Meanings of Colors



Source: ColorPsychology.org

Red	Anger, lust, passion, danger, blood, power, speed, confidence, charisma, aggression
Pink	Love, nurturing, safety, vulnerability, weakness, innocence, optimism, kindness, femininity
Orange	Happiness, cheerfulness, activity, encouragement, outgoing, communication, warmth
Yellow	Light, joy, cowardice, betrayal, jealousy, untrustworthy, wealth, the Sun, enthusiasm
Green	Nature, relaxation, harmony, tranquility, peace, growth, positivity, sickness, immaturity
Blue	Serenity, order, water, trust, calm, sadness, honesty, loyalty, introvert, masculinity
Purple	Luxury, power, royalty, nobility, wisdom, dignity, grace, magic, mystery, creativity
Brown	Humility, earthy, resilience, basic necessities, wood, confidence, respect, dull. sincerity
Black	Formality, death, pessimism, disappointment, secretive, methodical, cautious, conservative
White	Purity, innocence, integrity, perfection, impartial, energetic, cleanliness, positivity, electricity
Grey	Conformity, neutrality, indecisiveness, mysterious, emotionless, maturity, protection

FOR SCREENS:

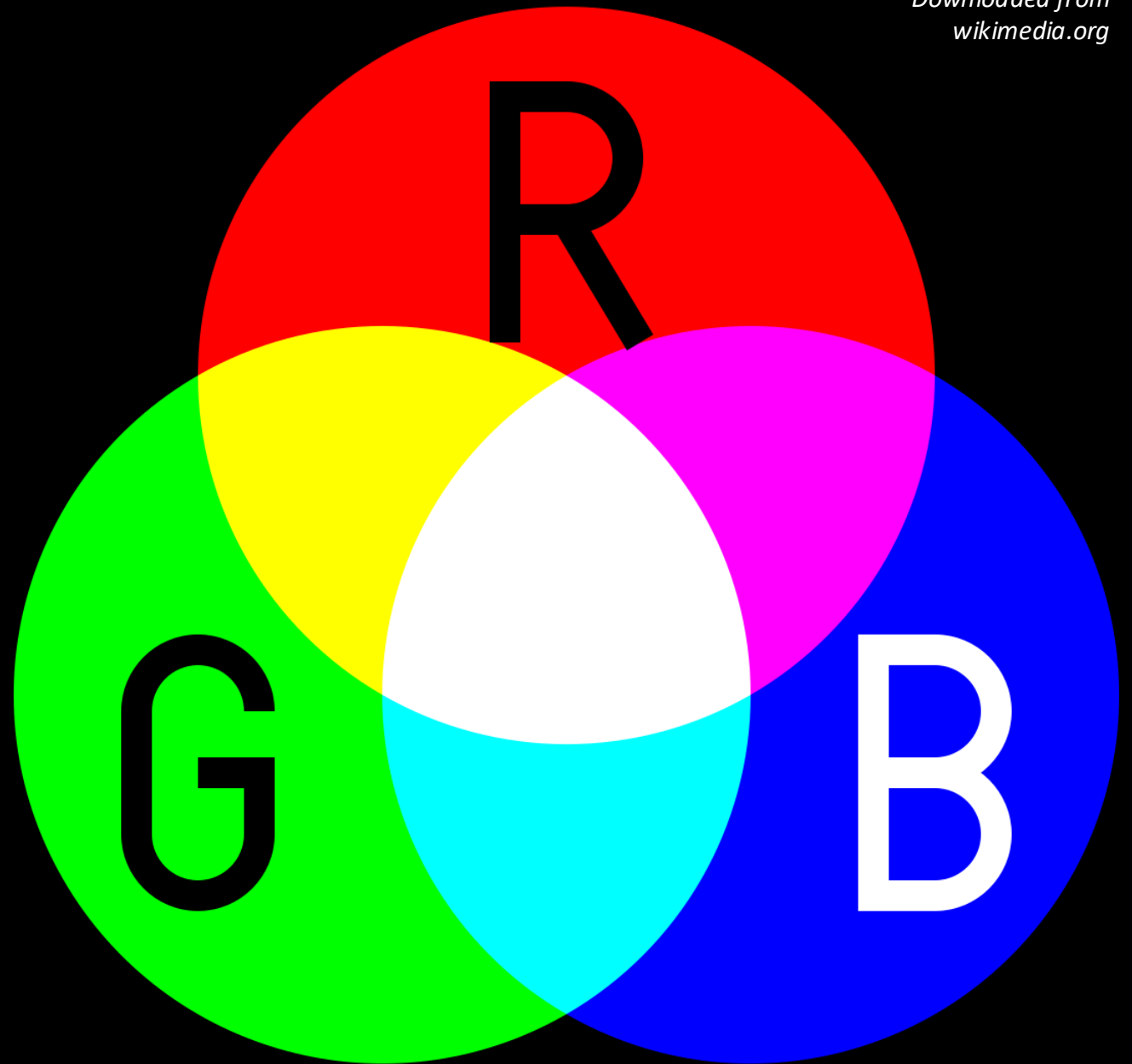
RGB MODEL

This is the color spectrum of VISIBLE LIGHT as provided by the Sun that can be interpreted by our eyes

Visible light can be broken down into 3 wavelengths: **Red**, **Green** and **Blue**

There are 256 increments of each wavelength, and differing amounts of each wavelength will produce up to about 16 million possible colors!

R 255	R 0
+ G 255	+ G 0
+ B 255	+ B 0
= WHITE	= BLACK



FOR PRINT:

CMYK MODEL

- This is the color spectrum of FULL COLOR PROCESS INKS as used on the printing press, inkjet printers, and toner printers and copiers
- Printer inks and toners can be broken down into 4 pigments: **Cyan**, **Magenta**, **Yellow** and **black**
- Each pigment is measured in percentages, resulting in a near-infinite number of colors!

C 100%
+ **M** 100%
+ **Y** 100%
= **BLACK**
*(in theory...
but actually a
muddy brown)*

C 0%
+ **M** 0%
+ **Y** 0%
+ **K** 0%
= **PAPER**
*(or other media printed
on)*

C 100%
+ **M** 100%
+ **Y** 100%
+ **K** 100%
= **RICH BLACK**
*(more intense than
black ink alone)*

Cyan

Magenta

Yellow

Black

ACTIVITY #1

Go to colors.co/color-picker
and search for your favorite color.



What are the RGB, CMYK,
and HEX values for your color?

Take note of your HEX code.
You will need it for Activity #2!

Contrast

Using color on text should be for emphasis only!

- You can bring attention to words by changing **color**, or by **highlighting**.
- **Making an entire block of text a color could end up making that entire block of text harder to read.**
- **Using too much emphasis might defeat the purpose of emphasizing the key word or phrase you want emphasized.**



Contrast Examples

Poor Contrast – Too Much Emphasis

< Page 2 of 5 >

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Good Contrast – Just Enough Emphasis

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ACTIVITY #2



Go to webaim.org/resources/contrastchecker/
and enter the HEX value from Activity #1.

What is your contrast ratio on a white background?

Did you pass all the contrast tests?

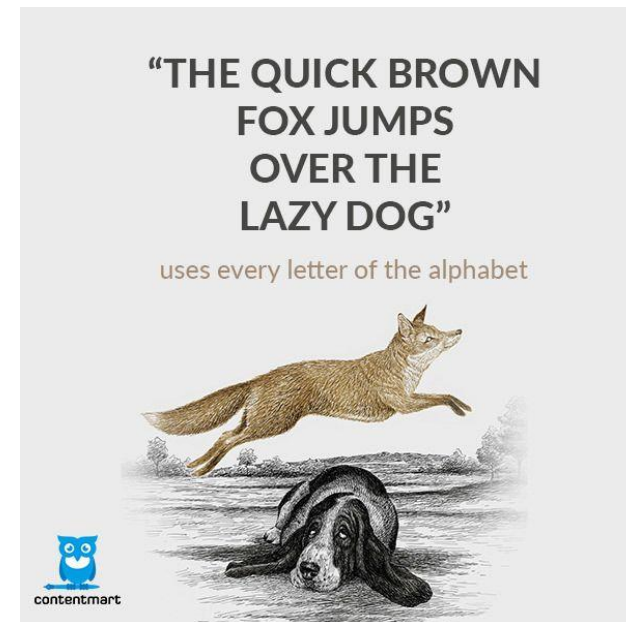
What did you change your foreground color to
in order to pass all the contrast tests?

Fonts

- Alphanumeric characters are the specific shapes that represent the letters, numbers and punctuation we read and sounds we pronounce.
- A font is a **style** of alphanumeric characters.
- Before computers, fonts were created by different designers to be used on printing presses.

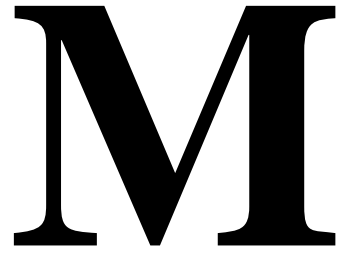


Metal printing press blocks of a geometric sans serif font. Image downloaded from typenetwork.com



A pangram. Image downloaded from pinimg.com

Readable Typefaces



This is a Serif font.

Serif comes from *seraphim* (a winged angel). Serif means “wing”.

Serif fonts have little “wings” on the ends of each of the letter strokes.



This is a Sans-serif font.

Sans means *without*.

Sans-serif means “without wings”.

Not-So-Readable Typefaces



This is a Script font.

Script fonts look like either cursive, handwriting or calligraphy.



THESE ARE DECORATIVE FONTS.

Mostly used for creating logos for companies or they may have specific meanings and uses.

Common Font Attributes...

Point Size

The width of the capital M in a font (plus kerning), the widest letter in a Roman font.

Printing press typesetters needed to know how wide the letters would be to fit on a line of text on a page.

72 points = 1 U.S. inch

Bold

Makes the font characters wider and heavier to bring **ATTENTION** to a word or phrase.

Sometimes a font can be **bolded**:

In the font Futura, bold becomes **bold**

Sometimes the font is already bold:

The font **Arial Black** is already bold.

Adding **bold** will not have any effect.

...and More Common Font Attributes

Italics

Slanting the letters *mimics handwriting* to bring *spoken emphasis* to a word or phrase:

In the font Times New Roman,
italics becomes *italics*.

This is not the same as using a script font :

Adding italics to a script font might make the letters appear *too slanted* !

Underline

Putting a line under text characters brings visual emphasis to a word or phrase.

How and when underline is used can have specific meanings for students:

Used to bring attention to vocabulary in textbooks.

On web pages, underlined words are typically clickable links.

ACTIVITY #3

Do a Google search for newspaper pages.
Look at several current and older image samples.

What types of fonts and attributes are used for:

Newspaper Names? Headlines and Titles?

Paragraph Text? Photo Captions and Bylines?

Why do the fonts we choose matter for readability?

Text Styles

Headings are usually designated as:

- Titles
- Headings
- Subheadings

Paragraphs are blocks of regular, unformatted text.

- Content that goes with each heading

Lists can be used to break up large pieces of content.

- Bullets
- Numbers

The brain can better perceive information when viewed as chunks with negative space around them, defining each chunk of text!

Text Styles

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Lists can be used to break up large pieces of content.

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This is the same text blocks and content as the previous slide, only there is less negative space, so it does not appear as chunked!

Text Styles Help Accessibility!

Let's watch the following brief videos:

https://www.youtube.com/watch?v=zRTqCGJ_HwQ



<https://www.youtube.com/watch?v=25qEqJQkxtk>

Any Questions?



LET'S CONNECT
ON LINKEDIN!



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