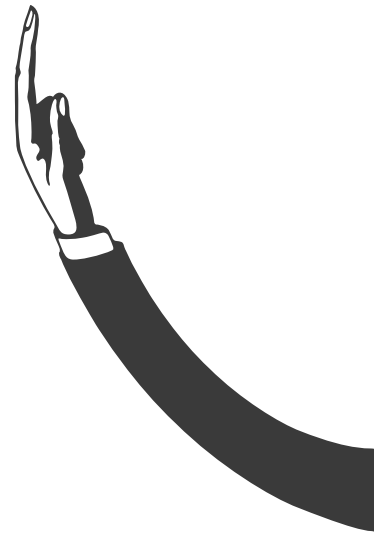# INSTRUCT
VISUALLY

PRINCIPLES INSTRUCTIONAL DESIGNERS MUST CONSIDER IN CREATING SUCCESSFUL LEARNING SOLUTIONS.

MICHAEL ZIELINSKIE
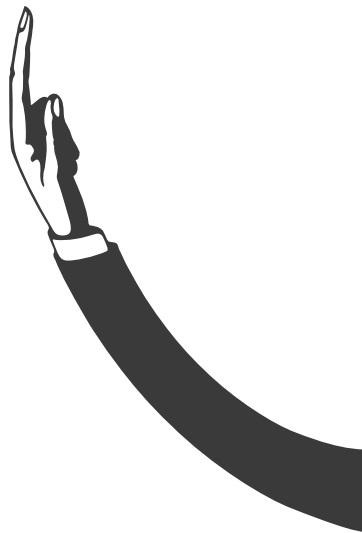
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There are times when the subject matter of instruction requires the *instructional designers* to bend and break design principles for a desired effect.

In a third of a second, your eyes have already held a conversation with your brain about the meaning of this sentence. They spoke of word order, typography, color, grammar, and a handful of other visual elements. Your brain was trying to assign meaning to the words and decide whether to keep or discard the information. How the brain sorts through visual information is one of the many challenges facing today's instructional designers.

The instructional designer (ID) systematically creates instruction. IDs carefully consider how their target audience processes visual information. This can be difficult for instructional designers without a strong understanding of visual design principles.

Implementing basic visual design principles when designing instruction increases the clarity of communicated information. However, these principles are adaptable in nature. There are times when the subject matter of instruction requires the ID to bend and break design principles for a desired effect.

This paper outlines core visual design principles and dispels myths that instructional designers may have of creative development. In addition to instilling confidence, this paper will outline a few tips and tricks to get students, instructional design departments, consulting firms, and freelance instructional designers thinking visually. Knowing the pitfalls and successes of any task will improve the process and achieve dynamic results for those willing to implement that knowledge.

It is always good to know the rules before you make decisions to break them.

Visual Design Principles

Communication

Successfully designed instruction focuses on the learner. *How does the learner interpret visual information?* Instructional designers often forgo learner analysis in favor of a particular learning solution. Without a clear picture of how the audience receives information, instruction can easily fall flat. Having the ability to add animations and images to instruction does not mean they *need* to be added. The profile of your audience should guide your decisions when determining the visual assets for instruction. Asking questions along the way is a great way to reinforce clarity.

Does this image complement the text-based information presented alongside of it?
Redundancies in learning design are common. If the learner will receive the same information from both the text *and* graphics onscreen, consider replacing one of the two. At least revise overstated information to allow the text and graphics to complement each other.

Does animation promote learner engagement?
Using animation to enhance instructional design should immerse the learner in the content. Using animation as an after thought can be distracting. A flashing GIF of a policeman is tacky, but the busy scene inside a police station is immersive. Carefully consider if the animations you add to your projects are helping the learner understand the information or if they are purely for your own entertainment.
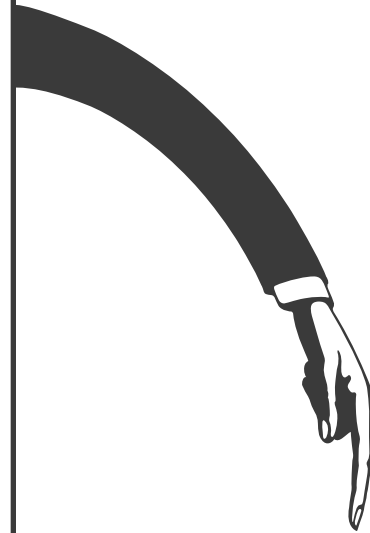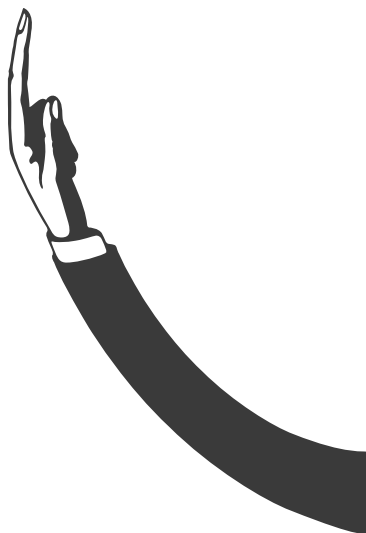
Animation should be integrated into learning, not used as an after thought.

Ctrl + Z

=

<3

Do learners need this graphic asset to learn?
Animation is not the only visual asset that needs to prove its worth before making the final cut. All of your graphic elements should go through a quick mental vetting process before implementation, but don't jump the gun on removing *all* of your graphic elements either. Pretty soon you will be left with little more than an electronic book. Try scaling a graphic asset up or shrinking it. Maybe a color change would make the graphic more effective at conveying your intended message. With the luxury of rapid authoring programs and the Ctrl + Z function (Command Z for the Mac fans out there), you can quickly run through scale, color, and placement options and backtrack if you need to.

The answers to the questions above will look vastly different from project to project. Communication is not a one size fits all measure. Still, instructional designers need to be aware of the clarity of their message. If the project budget and timeline allow, do not be afraid to replace ineffective multimedia assets to improve communication.

Practice Tip: Be aware of ads. Next time you are walking downtown or driving through an area with heavy business advertisements, pick an ad and try to design it better. Pay attention to the intended message of the visual information.

Did you receive the intended message? What could be done differently to communicate it? You may be surprised by how often you can improve upon visual design. If you happen to see a design you can't improve upon, you have found some incredible design. Be sure to take notes on it!

Composition

Not all instructional designers are specifically trained in creation of effective multimedia assets. This can be problematic during course design and development, but the fun is in the challenge. Cast off the myth of the "stick figure fallacy." The stick figure fallacy is the idea that because you can only draw stick figures you cannot create well designed visual assets. I am here to tell you that this is simply not true.

IDs can create dynamic and effective learning solutions without inherent artistic ability. Your ability to sketch does not need to negatively influence your design decisions. Contrast, alignment, repetition, proximity, hierarchy, balance, color, and space are only a few of the design principles that can enhance content to promote learner engagement.

Content storyboards can be made with simple shapes, lines, and yes, *even stick figures*. Rapid development platforms, including *Articulate Storyline*, *Adobe Captivate*, and *GoAnimate*, can make simple storyboards aesthetically pleasing. It is up to the instructional designer to assure those aesthetic choices are made deliberately.
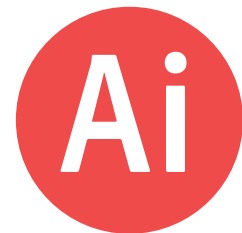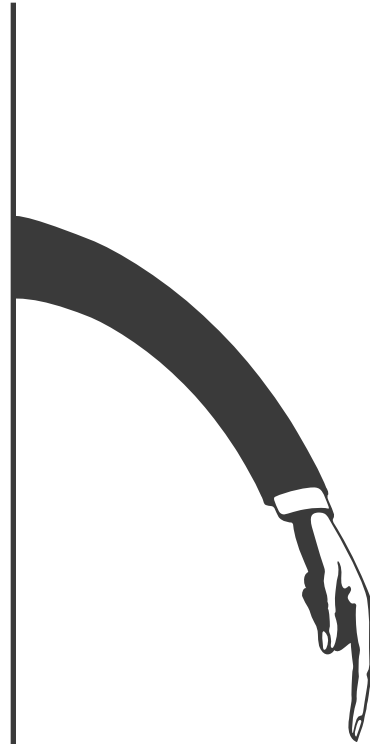
Adobe Illustrator

Articulate Storyline
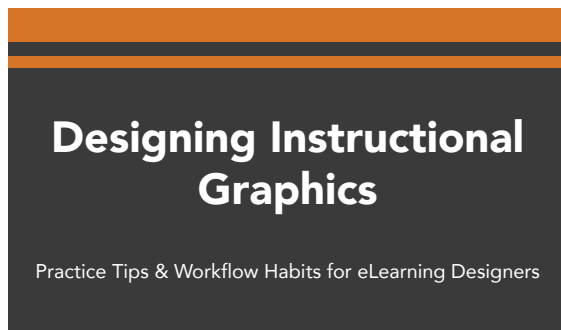
Where should I place this graphic element?

Making design decisions is all about practice. Breaking out of the confines of the standard layouts can achieve wild results. Here are some of the design principles that deal with "where": alignment, repetition, proximity, balance, and space. Take a look at the two example layouts on the left.

Both screens use identical colors and fonts, though the two are noticeably different. The top screen's text is center aligned, meaning that all the text is aligned vertically down the middle. The screen on the bottom, however, uses an asymmetrical approach to balance (left aligned).

Neither of the screens are terribly hard on the eyes, and both have their benefits. Creating layout choices is always fun. Whether you are working in Adobe Illustrator, Articulate Storyline, or even Microsoft PowerPoint, do not be afraid to experiment. Simply moving elements around the screen and changing font sizes can give your content the punch it needs.

What color should this element be?

Deciding on color choices in learning can be fun, complex, and often challenging. Understanding a bit of color theory and how color affects the way humans think and learn is a must for today's instructional designer. Your greatest ally in color choices is contrast. Contrast can make text and graphics seem like they are jumping out of the screen or subtly hiding in the background. After we have settled on a layout for our course on designing instructional graphics, we can start to play with colors.

Designing Instructional Graphics

Practice Tips & Workflow Habits for eLearning Designers

Designing Instructional Graphics

Practice Tips & Workflow Habits for eLearning Designers

Layout Options

How do I choose a color palette?

Each of the mock ups to the right will invoke different feelings from your audience and draw their attention in different ways. In screen number two, the line graphic on the right has a low contrast between the background and does not pop off of the screen as much. In the number three screen, the graphic is the only element of color and may draw the learner's eye away from the important information. Distractions that last even a few seconds can significantly impact knowledge retention, especially if the distractions repeat throughout a project.

There are an infinite number of things that can impact your layout and design choices. Practice will help you to understand what works and what won't. If you work for a company, one day your layout may be restricted by your content, and the next day your color palette may be restricted by client preference. These restrictions can negatively impact learning by altering the content's intended meaning. Do not be afraid to speak up with suggestions on improving the project visuals.

Practice Tip: Play in *PowerPoint*. In your free time, take a finished design layout -whether one of your own or someone else's- and try to recreate it in *PowerPoint*. Pay close attention to the names of commands in the program. When you hover over a button in most design software interfaces it will tell you what that button's name is. Make sure you don't begin to play with a project that has a set deadline. Removing the fear of failure from design tasks will allow you to experiment, make bolder decisions, and have a little more fun.

Designing Instructional Graphics
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Color Choices

How to Spot
Child Abuse

Understanding the Warning Signs
of Child Abuse & Neglect

1

How to spot
Child Abuse

Understanding the Warning Signs
of Child Abuse & Neglect

2

How to Spot Child Abuse

Understanding the Warning Signs
of Child Abuse & Neglect

3

How to Spot
Child Abuse

Understanding the Warning Signs
of Child Abuse & Neglect

4

Style Variations

Consistency

Style decisions should be made as early as possible in design ideation, because consistency and style go hand in hand. Having set themes and visual design guidelines for instruction helps to immerse the audience. Sudden shifts in quality of images, location of information, or color decisions can confuse and clutter up the mind's visual processing. Having too many fonts, mixtures of photographs and illustrations, or wild color choices can force the brain to work harder to distill information. IDs want to deliver information to their audience as quickly and efficiently as possible.

How can I tell if my style is inconsistent?

Style among the design world is often preferential. It is the feeling you get from visual design. When your audience is presented with your visual designs will they feel upset, excited, bored, or anxious? Your style decisions should be influenced by your message. If you are trying to convey the importance of child abuse to medical professionals you may not want to use script fonts that feel flowy and lighthearted like in screen three on the left.

Inconsistency between the content styling and the feeling it conveys can create confusion in your audience. Another consistency pitfall to avoid is the clashing of individual graphic elements. A common mistake in visual design is combining realistic photographs with illustrations or cartoon-like images. The stark contrast between the real world and an animated world can be disorienting to your audience. Neither of the two are bad, but it is good practice to stick to one or the other throughout an individual project.

Style is one of the trickier elements of visual design, but it does come with time. Limiting fonts, and colors throughout a project is a great way to assure project consistency. If you are designing a course and one screen uses fonts found nowhere else in the project, you may want to replace it. Your content should be the first consideration in selecting a style. An online course for 4th Grade Mathematics will have a vastly different style than that of a Responsible Alcohol Management Training for bartenders.

Practice Tip: Look a bit longer. When you find yourself back at your favorite restaurant, examine the style decisions of the menu. Is the menu consistent with the atmosphere of the restaurant? Does the menu use real photographs of burgers, illustrations, or both? Identifying what makes the restaurant consistent with its menu will help aid in keeping your visual design consistent with your content.

What Now?

Familiarize yourself with the vocabulary of visual design and the tools required to successfully execute visual design principles. The more you practice creating, organizing, and experimenting with visual design elements the more fluent you will become in using visual elements to communicate with your audience.
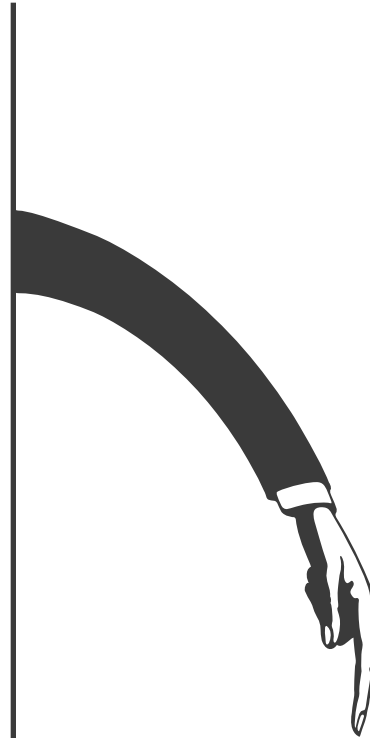
Limiting fonts, and colors throughout a project is a great way to assure consistency.

> Good visual design does not mean that you are an excellent artist, but an excellent problem solver.

Key Takeaways

◖ An audience can be quickly inundated with visual information that leads to clogging of mental processes.

◖ Visual design of a project will become more effective as an instructional designer avoids random design decisions.

◖ Graphic design software will help to create graphic elements with ease, but requires practice and a visual design vocabulary.

◖ Your environment and daily activities can be a crucial resource in finding examples of good and bad design as long as you pay attention.

◖ Good visual design does not mean that you are an excellent artist, but an excellent problem solver.

◖ Consistent styling of a project will help the audience to focus more on the information and less on the style itself.

Glossary

Alignment - Organizing visual elements in a straight line or in appropriate relative position

Adobe Illustrator - Top of the line graphic creation software

Articulate Storyline - Top of the line rapid authoring software

Balance - Giving visual elements equal visual weight either symmetrically or asymmetrically.

Center Aligned - Lines of text are centered along the vertical axis

Color Palette - A range of colors

Communication - The exchange of information

Composition - The result of arranging multiple visual elements into a whole

Consistency - Maintaining accuracy and uniformity over time

Contrast - Visual elements strikingly different from one another

GoAnimate - A web-based, drag and drop, animated video creation interface

Hierarchy - A ranking of visual elements in order of importance

Layout - Visual elements set out in a particular way

Left Aligned - Lines of text are centered along the left margin

Proximity - A visual element's nearness to another in relationship or space

Repetition - The act of repeating a particular visual element

Space - The distance between two or more visual elements

Stick Figure Fallacy - the myth that a person is lacking in visual design skills because they can only draw stick figures.

Style - A distinctive appearance

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