Imagine a widely used and expensive prescription drug that promised to make us beautiful but didn't. Instead the drug had frequent, serious side effects: It *induced stupidity*, turned everyone into bores, wasted time, and *degraded the quality and credibility of communication*. These side effects would rightly lead to a worldwide product recall.

— Edward Tufte, 2003; emphasis mine
How would it go?
Interesting topic, good speaker—but 62 slides filled with bulleted, animated points that said the same thing as the speaker.
Audience boredom
... a decoration failure?
Audience boredom is usually a content failure, not a decoration failure.

– Edward Tufte, 2003
Focus on the **content** you intend to deliver through the slides.
Choose your presentation visuals based on their purpose, relevance, and usefulness.
When you use a visual, ask yourself two questions:
“What am I trying to show? Why am I using this visual?”
“What am I trying to show? Why am I using this visual?”

Information?  Dramatic effect?
Presentation visuals should be relevant and support your material, not distract from it.
To visualize information, use the most efficient means to make your point.
Introduce visuals, and explain them. Tell your audience what you want them to understand from each visual.
Consider using visuals with callouts or labels rather than text descriptions.
Adapted from Cheung, Fava, Cunningham, & Liu, 2015
Avoid putting visuals and text—apart from callouts or labels—on the same slide.
Avoid putting visuals and text—apart from callouts or labels—on the same slide. Presentation visuals should be relevant and support your material, not distract from it.
Martian Battery Workshop

- Give an introduction to batteries and circuits
- Batteries used to “power the facility on Mars”
- Build tin foil hats to attract attention
- Brief explanation on aluminum blocking radiation
Background

- The total amount of waste in Florida and also the rate at which waste is being produced is steadily increasing.
REDUCE + REUSE + RECYCLE = FOR A HAPPIER EARTH
Don’t make slides too dense, either with visuals or text.

Poor Example

Meditation tumeric butcher squid wayfarers. Tousled locavore selfies, food truck YOLO microdosing hashtag schlitz meh pok pok portland vaporware kitsch listicle. Try-hard echo park small batch four dollar toast, kinfolk blog kogi air plant tousled. La croix PBR&B leggings iPhone copper mug, ramps humblebrag cray wolf. Gluten-free air plant locavore coloring book irony vegan forage, taxidermy literally af put a bird on it occupy slow-carb church-key lumbersexual. Vinyl viral hashtag, godard flexitarian jean shorts offal lumbersexual beard DIY vape 8-bit kogi mustache tousled. Pork belly vegan beard woke, semiotics unicorn yuccie small batch waistcoat four loko tattooed.
Stage 2: The Tasks

- Go into the Community Room
- Break kids further into 3 groups
  Each group will perform one task:
  - Throw ball and measure the distance
  - Run and measure the time
  - Jump and measure the height
- The groups will rotate; everyone performs every task
- Switch placebo groups (give candy to the others)
- Kids perform the tasks again
- Around 40 Minutes
More than seven lines, seven words per line is too much text on a slide (aka the 7x7 Rule).
Avoid letting your presentation software make design decisions for you—or tell you how to organize your information.
Templates often waste space, use distracting backgrounds, prioritize abstract information, and try to force users into using bullets and creating lists when no list exists.
Setup

Poor Example
Overview

1. Introduction
2. Background
3. Workshop Agenda
4. Overview of Scientific Concepts
5. Material and Equipment
6. Budget
AGENDA

Introduction

• Proposal details
  • On pasta building activity
  • On STEM lesson
  • Tentative schedule of the day of workshop

• Materials and cost estimate

• Our team's qualifications

• Conclusion

Poor Example
The most abstract information is often in the title and is the most prominent

• The majority of presentation software encourages bullet points.
• Bullet points often fool users into trying to make “lists.”
• Such “lists” are not always true lists.
• Even so, second-level lines contain more information than the title.
  • And if there is a third level (or fourth), it contains the most information.
    • But that information is in tiny letters at the bottom.
The most abstract information is often in the title and is the most prominent.

- The majority of presentation software encourages bullet points.
- Bullet points often fool users into trying to make “lists.”
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- Even so, second-level lines contain more information than the title.
  - And if there is a third level (or fourth), it contains the most information.
    - But that information is in tiny letters at the bottom.
The solution? Adjust the template master to suit your needs, or start with a blank one and create your own.
Make a good use of space, use backgrounds that offer good contrast and few distractions, organize information by prioritizing and then supporting your main points, and only use bullets for true lists.
Each Slide’s Main Claim Can Go Here

Doing so allows you to use this space for **relevant**, supporting evidence

*(If it’s not relevant, it doesn’t belong)*

Doing so is also efficient; your audience can grasp your point quickly
Rules for Using Bullets

• Use bullets for true lists only (a simple series of similar content, expressed in words or numbers)

• Use parallel grammatical structure in each point

• Do not use single bullet points at any level
Don’t forget that text is a visual element, too.
Text becomes a well-designed visual element when the font styles, sizes, and placement on slides remain consistent throughout the presentation.
Be sure to use fonts that are legible from the back of the room.

That was 100 point; this is 75 point.

This is 50 point. Point sizes may differ between software platforms and font styles, so use your best judgment. I’m using Helvetica in Keynote.

This is 20 point, and is too small. Remember that this rule applies to your graphics as well as to text-only slides.
Consistency, or parallelism, in design applies to graphical style too.
The following slide went horribly wrong…
Saturday Afternoon

• Circuits introduction
  • Basics of circuits
  • Conductors vs. Insulators
  • Materials
• Demonstrating playdough circuits
• Explore conductors and insulators
• Hi-res translucent on the go iMac change slo-mo. Better 6000+ songs teraflops iMac. Pixels personality brilliant. iPhone Metal 3X faster. iBooks new A8 chip instantly iCal. Bigger Smart Cover iPhone 6+ thin upshot 1080p fingerprint in the world.
Saturday Afternoon

- Circuits introduction
  - Basics of circuits
  - Conductors vs. Insulators
- Demonstrating playdough circuits
- Explore conductors and insulators
  - Hi-res translucent on the go iMac change slo-mo. Better 6000+ songs teraflops iMac. Pixels personality brilliant Jony iPhone Metal 3X faster. iBooks new A8 chip instantly iCal. Bigger Smart Cover iPhone 6+ thin upshot 1080p fingerprint in the world.

Title doesn’t reflect slide contents

Bullets are not grammatically parallel

Diagram is too small to read or be useful

Inconsistent line spacing and font sizes

Image overlaps text

Block of text is too long, and if it’s a sub-bullet (hard to tell) it’s the only one
Imagine a widely used and expensive prescription drug that promised to make us beautiful but didn't. Instead the drug had frequent, serious side effects: It induced stupidity, turned everyone into bores, wasted time, and degraded the quality and credibility of communication. These side effects would rightly lead to a worldwide product recall.

– Edward Tufte, 2003
The author was talking about PowerPoint and how people use it, arguing that rather than thinking, they let the software make the decisions for them.
Presentations largely stand or fall on the quality, relevance, and integrity of the content. If your numbers are boring, then you've got the wrong numbers. If your words or images are not on point, making them dance in color won't make them relevant. Audience boredom is usually a content failure, not a decoration failure.

– Edward Tufte
References


Image Credits (in order of appearance)
Information Icon. (n.d.). Retrieved from https://img.clipartfest.com/699df1ea9e04bd9a85d84202e51f3fb9_information-symbol-clip-art-information-symbol-clip-art_300-300.png

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