
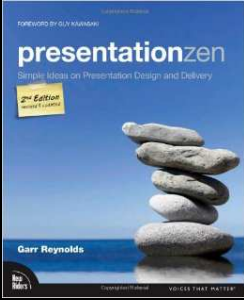



# Presentation Skills



Prepare  
Design  
Deliver



Great for big picture



<https://www.youtube.com/watch?v=Hp7Id3Yb9XQ>

Specific to Science Talks

- ### Top 10 Tips
- 1) Have a clear goal for the presentation and for each slide.
  - 2) Slides are a visual aid, not the main event. You are the main event.
  - 3) Know your audience, give a talk that is appropriate for them.
  - 4) Tell a story, not a list of bullet points.
  - 5) There are no rules. Be creative.
  - 6) Simple slides. Minimize text, simplify graphics.
  - 7) Body language and attitude matter – connect with the audience.
  - 8) Pause when you speak. Don't apologize.
  - 9) Use notes. But don't use your slides as notes. Face the audience.
  - 10) Be gracious. Humor is good.



### Message & Expectation

What is the purpose of this talk?

What does the audience expect?

**Different audiences, different needs & goals**

Research talk on Memory in Mice  
Audience: Biology Lab studying Genetics of Learning

Class presentation on fMRI study  
Audience: Cog Neuro Course

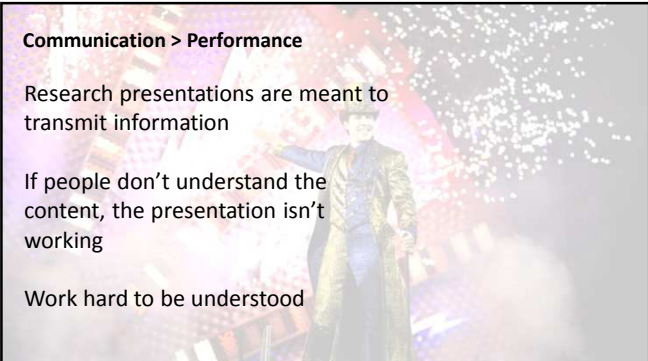
Research talk for an RA job in Neuroscience  
Audience: Neuroscience Lab

### Communication > Performance

Research presentations are meant to transmit information

If people don't understand the content, the presentation isn't working

Work hard to be understood



**Clear Content**

**Exercise**

If the audience remembers 3 things from my talk, they will be:

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

Avoid a "data dump"

**Highly Structured**

Obvious logical flow

Plan on Paper (or whiteboard)

Visualize the logic and flow



**Cut out any fluff**

*Keep asking yourself*

**So what?**

**Message: The elevator test**

**Exercise**

State the main point of your presentation in 30-45 seconds



**Give a Narrative (story telling)**

Interesting beginning, provocative middle, and logical conclusion.

Always building toward a conclusion

Start broad, get specific, end broad

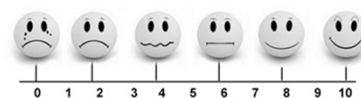


**More prepared, more confident**

Rehearse several times with a monitor or projector

Learn the flow, and the transitions

Anticipate questions



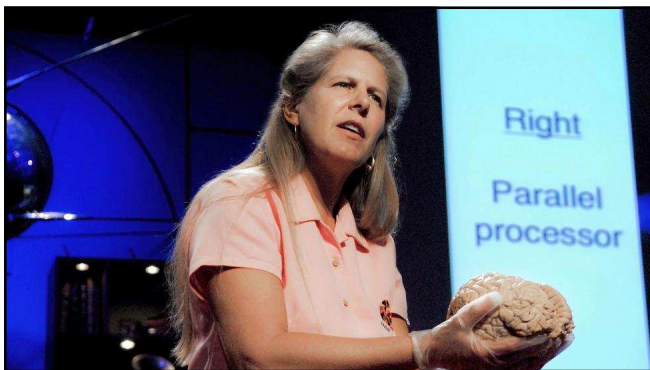


**Simple Slides**

- 1) Images are powerful
- 2) People can only process a certain amount of information
- 3) Some visuals make it easier, others make it harder.

Keep it Simple:

- Include only most critical text
- Clean, powerful graphics
- Allow negative space



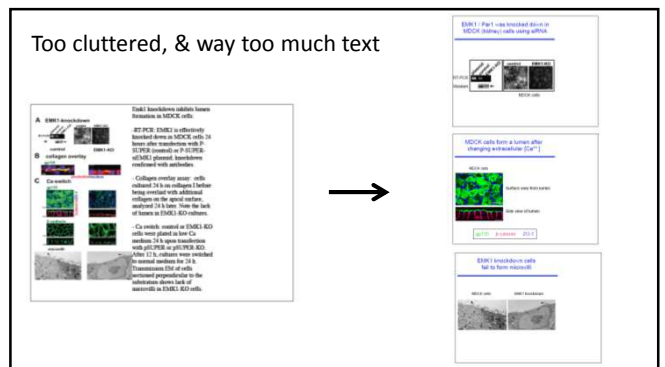
**Simple designs are easier to understand**



Steve Jobs



Bill Gates



Limit text, useless design graphics, and animations

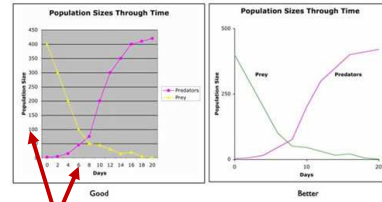


Clutter, weak graphics, useless designs



Simple, strong text and graphics

Well-drawn graphs, well-explained



Say what each axis is, and what the pattern is

Concrete examples from video or audio

- 1) Illustrates your point better than verbal description
- 2) Change of pace

But no superfluous video or animation – lose credibility



Font choice

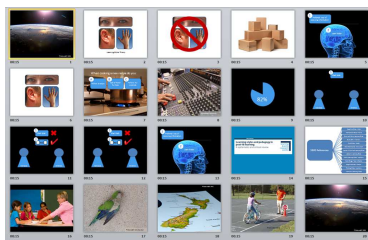


Serif fonts take longer to read...  
This font is Times New Roman.  
This font is Courier.  
This font is Didot.

Use a Sans Serif font:  
This font is Arial.  
This font is Comic Sans.  
This font is Trebuchet.

18 point      20 point      24 point      28 point      36 point      40 point

Zoom Out



How many slides?

it really depends on content

10 slides  
20 minutes  
30 point font (minimum)

Guy Kawasaki's rule



## Keep it simple, clear, and concise

**Steve Jobs**  
 Average Words Per Sentence: 10.5  
 Lexical Density: 16.5%  
 Hard Words: 2.9%  
 Gunning Fog Index: 5.5

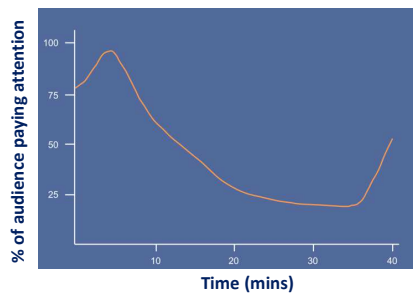


**Bill Gates**  
 Average Words Per Sentence: 21.6  
 Lexical Density: 21.0%  
 Hard Words: 5.11%  
 Gunning Fog Index: 10.7



*The Presentation Secrets of Steve Jobs: How to Be Insanely Great in Front of Any Audience*

## Audience attention is short



Mills, H.R. (1977) *Techniques of Technical Training*, 3rd Ed. Macmillan, London

## Show Genuine Enthusiasm

“The biggest item that separates mediocre presenters from world class ones is the ability to connect with an audience in an honest and exciting way.”

*Presentation Zen*

## Dealing with “um”

- 1) Pause, think, speak
- 2) Use a speech rhythm: burst of words, break, burst of words, break...
- 3) Pre-plan transitions: “Let’s move on to...”, “Next I want to show you...”, “Another important issue is...”

## Answer questions graciously & professionally

### Gracious

a: marked by kindness and courtesy  
 b: marked by tact and delicacy: urbane  
 c: characterized by charm, good taste, generosity of spirit

### Delivery Resources



**TOASTMASTERS**  
for Effective Communication & Leadership

<https://www.facebook.com/Daybreakers-Toastmasters-Club-Rochester-NY-227065094155005/>

*Writing, Speaking, and Argument Program*

<http://writing.rochester.edu/OnlineSchedule/AppointmentScheduleEnterStudentID.php>

Sunday-Thursday 7pm-12am Rush Rhees G-121

### Real Research Talk Openings

Allison Gopnik California Cog Sci talk

Professor at UC Berkeley

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

Elizabeth Loftus TAM Talk

Professor at University of Washington

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

Jeffrey Elman Kavli talk

Professor at UC San Diego

<https://www.youtube.com/watch?v=K1pbnWcabMY>