Getting More Power Out Of PowerPoint Presentations: An Evidence-Based Approach

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I can’t attend class today due to ___.

What I anticipated:

Are we doing anything important?

What was actually said:

Are we just copying today?

The emotional arousal hypothesis: Sensory stimulation would spark student emotions and improve learning.

Percentage of Studies

Does PowerPoint use increase student grades? Two-thirds of the studies show no improvement.
PowerPoint presentations may encourage passive learning and student disengagement.

Students have positive attitudes towards PowerPoint.

PowerPoint needs to be more than a pretty chalkboard.

Pretty slides have only a modest effect on engagement.

Aim for high visibility: Large fonts, high contrast.
"These slides have an old school, the-80’s-called-and-they-want-their-slides-back look to them."

Large text and high contrast promotes an inclusive classroom environment (ADA document compliance).

Common visual impairments include...
- Low acuity
- Red/green insensitivities
- Age-related changes

Common practice #2: Emphasis on bullet point lists

The bullet point slide format is a flawed business standard.

Problem: Too much text overwhelms cognitive capacity.

- Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut
  aliquam eleifend vivamus nam wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper
  suscipit lobortis nisl ut aliquip ex ea commodo consequat.
- Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel
  illum dolore eu feugait nulla facilisi. At vero eros et accumsan et justo odio ding dolore eu
  feugait nulla facilisi.
- Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod
  maximus placerat
  facer possim assum. Typer non habent claritatem in ink qui faci eorum claritatem.
- Claritas est etiam processus dynamicus, qui sequitur mutationem consuetudium lectorum. Minus
  est notare quam littera gothica, quam nunc lectores legimus quod ii legunt saepius.
- Investigationes demonstraverunt lectores legere me lius quod ii legunt saepius.
- Claritas est etiam processus dynamicus, qui sequitur mutationem consuetudium lectorum. Minus
  est notare quam littera gothica, quam nunc lectores legimus quod ii legunt saepius.
- Eodem modo typi, qui nunc nobis videtur parum clari, fiant sollemnes in futurum.

Problem: “Can’t see the forest for the trees.”
Using fewer bullet points and shorter items is helpful.

- Lorem ipsum
dolor sit amet
consectetuer adipiscing elit

Standard layout:

Assertion-evidence layout:

Educational images are informative and engaging.

German hyperinflation, 1923

The assertion is a headline that states a complete idea.

The supporting images can be ...

Graphs  Diagrams  Photos

Common practice #3: PowerPoint presentations are a passive learning experience

Posing questions to the class can promote active learning.

Classroom response systems – “Clickers”
Posing questions is the beneficial part (not tech).

Which part of the mind is entirely unconscious?

A. Id
B. Ego
C. Superego
D. None of the above

End class with a written, collaborative activity.

Closing Thoughts

PowerPoint has harmful default modes, such as...

- Unnecessary decorations/animations
- Too many bullet points
- Uninformative images
- Passive information delivery

Educators need to use PowerPoint in a more deliberate way to realize the full educational potential of this tool.

For more information:

- slidesforstudents.com
- garyfisk.com
- assertion-evidence.com
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