Visual Aids

Part 2

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This class discusses strategies for how to be successful in three critical areas of your presentations.
Dr. Amos’ use of assertion evidence transformed her presentation in the BIOE 435 senior design class

Form Follows Function

- Central dogma of design

- Function
  - What needs to be done

- Form
  - The “shape” of a solution that addresses
  - Form is not function
    - Form does not define function
  - Form is not the end all be all
    - Form does not define form, outside of a function

Traditional

Assertion-Evidence

The guiding principle of design is the function guides, not the form.
Research shows comprehension and retention is much higher with assertion-evidence slides.
Clever visual evidence can help for better understanding from the audience.

The Law of Conservation of Mass is used to calculate the velocity inside of a nozzle.

[www.air-space.com]
Clever animations can help for better understanding from the audience

https://exploration.grc.nasa.gov/education/rocket/nozzle.html
Clever animations can help for better understanding from the audience

The Law of Conservation of Mass is used to calculate the velocity inside of a nozzle

\[ \rho_1 V_1 A_1 = \rho_2 V_2 A_2 \]

- \( \rho_1 = \rho_2 \)
- \( A_1 > A_2 \)
- \( V_1 < V_2 \)
Computational Fluid Dynamics (CFD) allows engineers to visualize flow through a nozzle


[www.wn.com]
Exercise: it is now your turn to practice and write a sentence headline with an effective assertion
Clever animations can help for better understanding from the audience

http://www.ted.com/talks/hans_rosling.shows_the.best.stats.you_ve.ever.seen
Clever animations can help for better understanding from the audience
Clever demonstrations can help for better understanding from the audience
Clever demonstrations can help for better understanding from the audience

http://www.ted.com/talks/jill_bolte_taylor_s_powerful_stroke_of_insight
Using assertion-evidence means you will need to avoid the weak defaults of PowerPoint

Tsunamis cause devastating destruction, especially to sparsely vegetated areas.

- 2004 Indian Ocean Tsunami: Gleebruk Village, Sri Lanka

Before: 

After:

PPT’s defaults crowd this slide

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Tsunamis cause devastating destruction, especially to sparsely vegetated areas

2004 Indian Ocean Tsunami: Gleebruk Village, Sri Lanka
In summary, the assertion-evidence approach leads to talks that are better focused, delivered, and understood.

| More focused | More engaging | Better comprehension |
This class discusses strategies for how to be successful in three critical areas of your presentations:

- **Content**
- **Visual Aids**
- **Delivery**
References: Week9-2


Using assertion-evidence means you will need to avoid the weak defaults of PowerPoint

The way a dog sniffs does not contaminate the vapor stream from the scent source

[Settles et al., 2002]