Presentations can be viewed from three stylistic perspectives:

- Structure and Speech
- Delivery
- Visual Aids

An advantage of using slides is that audiences remember more when the slides are well-designed. Recall (%)

Verbal only
Verbal and Visual

Perfusion is the microscopic flow of blood through tissue:
- carries nutrients and waste
- regulates heat exchange
- has units of g/s/mL

This talk presents a slide design that is much more effective than the default design of PowerPoint:

- More quickly read
- More memorable
- More persuasive

To allow audiences to read your slides quickly, you have to choose a proper typography and layout:

Choose legible type
Sans serif type

Choose a helpful layout
Much more effective than PowerPoint’s default layout is a sentence headline supported by images.

**Sentence headline**

Our goal is to test a fillet design for turbine vanes downstream of the combustor.

**Key image**

Combustor Turbine vanes Flow

The purpose of the fillet design is to reduce vortices that cause aerodynamic penalties.

**Needed words**

17

Fillets reduce leading edge vortices in nature and in engineering.

**Fillet on dorsal fin of shark**

Fillet on Seawolf submarine

[Devenport et al., 1991]

The sentence headline should state succinctly the purpose or assertion of the slide.

A strong headline—

identifies the slide’s purpose for the audience

identifies the slide’s purpose for the speaker

Computations show that the fillet prevents the leading edge vortex and delays the passage vortex.

**Measurements show that the fillet prevents formation of the leading edge vortex**

Velocity profile: vane without fillet

Velocity profile: vane with fillet

The body of a slide should support the headline primarily with images and with words where needed.
Three classes of methods exist for reducing emissions of sulfur dioxide:

- Post-combustion methods
- Combustion methods
- Pre-combustion methods

To make slides memorable, you have to consider what to include and what to exclude. This presentation compares several methods for reducing emissions of sulfur dioxide.

Slides should also include signals for the presentation’s organization:

- **Beginning**
  - [Image of a building]
  - [Image of a map]

- **Middle**
  - [Image of a figure labeled “Middle 1”]
  - [Image of a figure labeled “Middle 2”]

- **Ending**
  - [Image of a building]
  - [Image of a map]

**Computational Analysis of the Aerodynamic Energy Required of Morphing Wings**

Greg Pettit, Harry Robertshaw, and Daniel J. Inman
Center for Intelligent Materials, Systems and Structures
Air Force Office of Scientific Research (F49620-99-1-0294)
This presentation evaluates composite materials for the bipolar plates of fuel cells

Role of bipolar plates in fuel cells

Comparison of bipolar plate materials

Evaluation of bipolar plate performance

Power passive modules perform the same functions as discrete circuits but with smaller volumes

Discrete Components

Passive module

<table>
<thead>
<tr>
<th>Discrete circuit</th>
<th>Passive module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total volume (cm³)</td>
<td>168</td>
</tr>
</tbody>
</table>

The total volume is cut by more than half

In summary, the phantom for blood perfusion has many useful applications

The phantom can—
produce reasonable and reproducible perfusion
allow for simple and inexpensive construction
be modified for future experiments

Questions?

Bullets are not memorable, because bullets do not show the connections between details

Review of Test Data Indicates Conservatism for Tile Penetration

- The existing SOFI on tile test data used to create Crater was reviewed alongside FIIA Southwest Research data
  - Crater overpredicted penetration of tile coating significantly
  - Initial penetration described by normal velocity
  - Values with volume mass of projectile (e.g., 200 lbs) for 30s tps
  - Significant energy is required for the ultra SOFI to penetrate the relatively hard tile coating
  - Test results show that it is possible or sufficient mass and velocity
  - Approximately, once the tile is penetrated SOFI can cause significant damage
  - Minor variation in total energy (above penetration level) can cause significant tile scoring
  - Flight condition is significantly outside of test database
  - Volume of ramp is 1320 cu in vs 3 cu in for test
The slide design presented here is more persuasive than PowerPoint’s default.

Sentence headlines can clarify assertions.
Images in body can supply cogent evidence.
Design leads to fewer slides, which can increase ethos.

In summary, the slide design presented here is much stronger than PowerPoint’s default design.

The design can be read more quickly.
The design is more memorable.
The design creates a more compelling argument.

Templates: http://writing.eng.vt.edu/slides.html