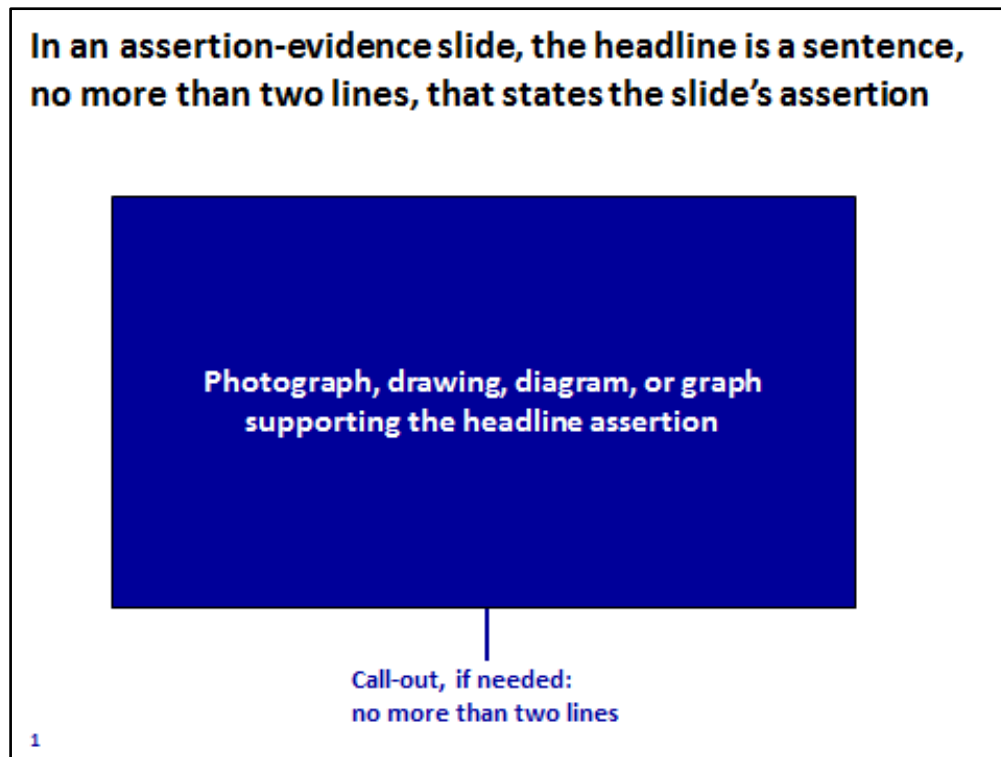


## How to Create an Assertion- Evidence Presentation

Technical professionals—engineers, scientists, researchers—are regularly called upon to give presentations that will help a company sell a new product to a client, get to approval for a project from upper management, or obtain grant money to fund research. To do this effectively, the presentation must be engaging and clearly state the presenter’s goals while providing clear evidence to support it.

Assertion-Evidence presentations aim to do just that. Assertion-Evidence is a style of presentation in which a sentence headline states the main message of the slide—this is the “assertion” part. The assertion is then supported with visual evidence—a photograph, chart, diagram, or video clip. Bulleted lists have no place in this style of presentation. An example of this style is shown below in **Figure 1**.



**Figure 1.** General layout of an assertion-evidence slide layout

This instruction set will provide you with all the information you need to begin designing your PowerPoint slides in the Assertion-Evidence style. It is assumed that the user already is already proficient in using PowerPoint software.

## What You Will Need

- Topic that you will present
- A computer
- Microsoft PowerPoint
- images, videos, graphs, diagrams that support your claims

## How Long It Will Take

Based on your skill level and the nature of the presentation, preparing the slides can take several hours. Practicing is another important part of preparation. A good rule of thumb is to practice for five times the amount of time as the actual talk. So if you are speaking for 10 minutes, practice for 50 minutes.

## Instructions

### 1. Plan what you want to say

*Know your topic and plan what points you want to cover. Remember that an oral presentation is different from a paper, and you do not need to include everything that you want to say on your slides. The slides should serve as a visual aid to your talking points.*

### 2. If possible, separate your speech into three to five distinct sections.

*When you separate your presentation into distinct sections, you can tell your audience what these sections are at the beginning of the presentation. This will allow to “map” your presentation to those sections, and the audience will better understand what part of the presentation they are listening to. See Step 4 for more information on the mapping slide.*

*If you are giving a long presentation, five sections may be necessary and therefore acceptable. However, for a 10-15 minute talk, it is best to not have more than three sections.*

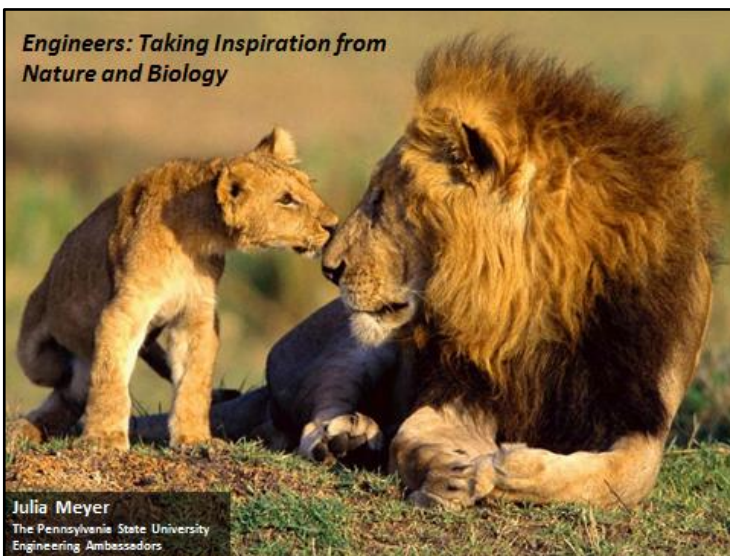
### 3. Create your title slide

3.1 Open PowerPoint on your computer. Add your title to the first slide.

*The title should clearly state the topic of your presentation.*

3.2 Include on the title slide your name, department, and company, as well as an image that introduces your topic. Get creative!

See **Figure 2** below for examples of title slide layout.



**Figure 2.** Examples of good assertion-evidence title slide design.

#### 4. Create your mapping slide

*This slide will show the audience where the presentation is headed, as well as help you stay organized and focused on the topic.*

**4.1** Add a new slide to the presentation.

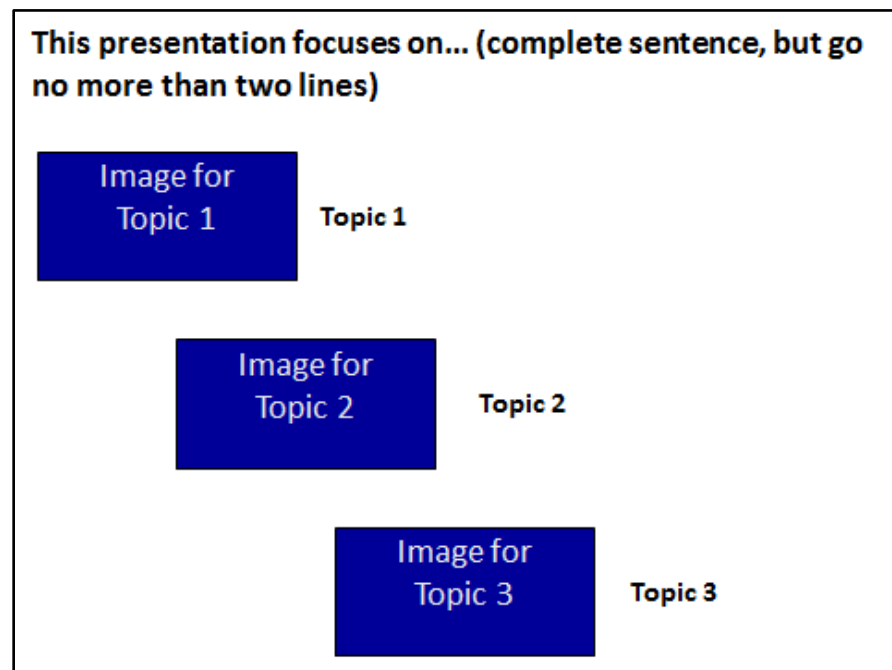
**4.2** State your assertion at the top of the page.

*This should be a one-sentence statement such as “This presentation will focus on...,” or “Today I will discuss...,” followed by the topic of each section.*

**4.3** For each topic, include a picture that represents that topic.

*Tip: It is helpful to use the first image for each section on the mapping slide. This will help the audience to remember that you are moving to a new section when they see the repeated images.*

*See **Figure 3** for the template of the mapping slide and **Figure 4** (on the following page) for several good examples.*



**Figure 3.** The temple for an effective mapping slide.

**Mechanical Engineers are responsible for our Health Happiness and Safety**



Health



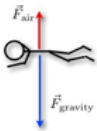
Happiness




Safety

2


**Today we are going to take you behind the scenes of this stunt and also show some of the applications**



Physics of free fall




Design of the components




Applications

2


**Today we will discuss the chemistry behind three different types of fuel that power our transportation.**



Gasoline




Hydrogen Fuel




Batteries


**Biocompatibility is the ability of a material to perform with an appropriate response in a specific application**



Implants



Tissue Engineering



Brain-Computer Interfaces

Figure 4. Good examples of mapping slides.

## 5. Create slides for the body of the presentation

**5.1** Add a new slide whenever you move on to a new talking point.

**5.2** Place a one-sentence assertion as the headline of each new slide.

*The assertion should be no more than two lines.*

**5.3** Provide visual evidence in the form of a photo, chart, video, etc. on each slide.

*Avoid bullet points.*

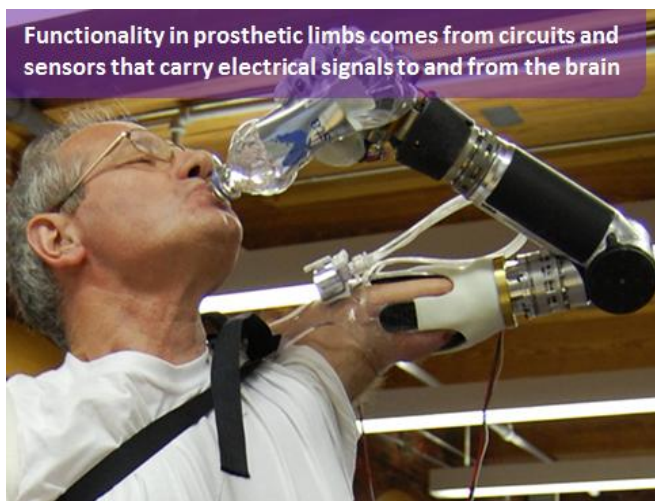
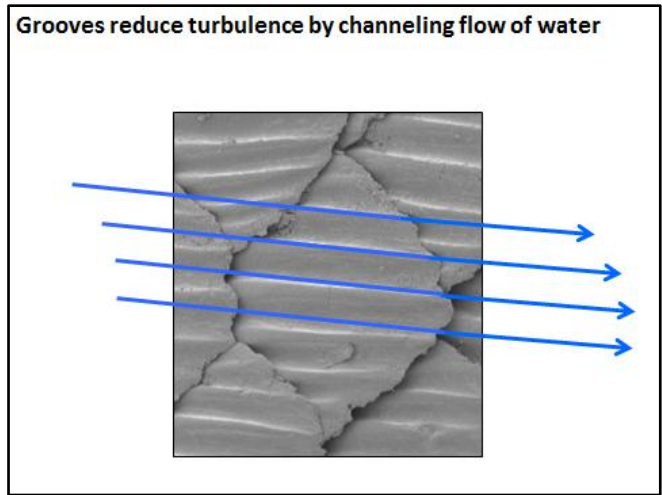
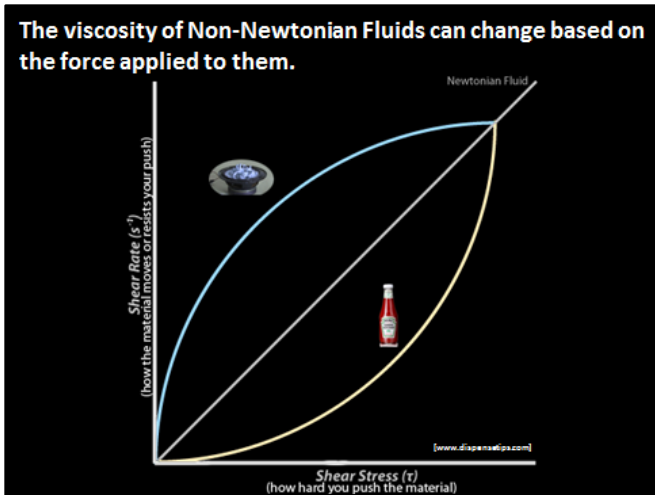
**5.4** If necessary, add a call-out (words or phrases used to clarify images) to improve the viewer's understanding of the visual evidence.

*Restrict yourself to one or two call-outs per page. Three or more can clutter a slide and decrease the effectiveness.*

*Remember that your knowledge of the topic should be shown in the oral part of the presentation, not in the amount of information you include on your slides.*

*See **Figure 5** on the following page for examples of body slides.*





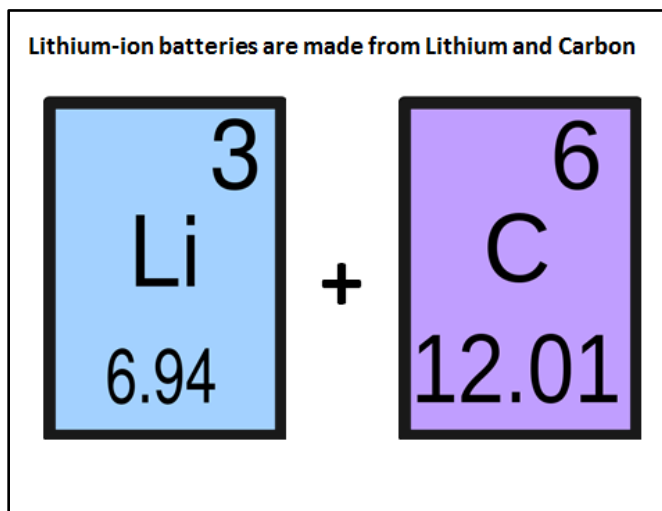
**Penn State ensures that their students are solidly grounded in the fundamentals of their discipline**

Fluid Dynamics Research

Wind Tunnel

Breazeale reactor

PENN STATE

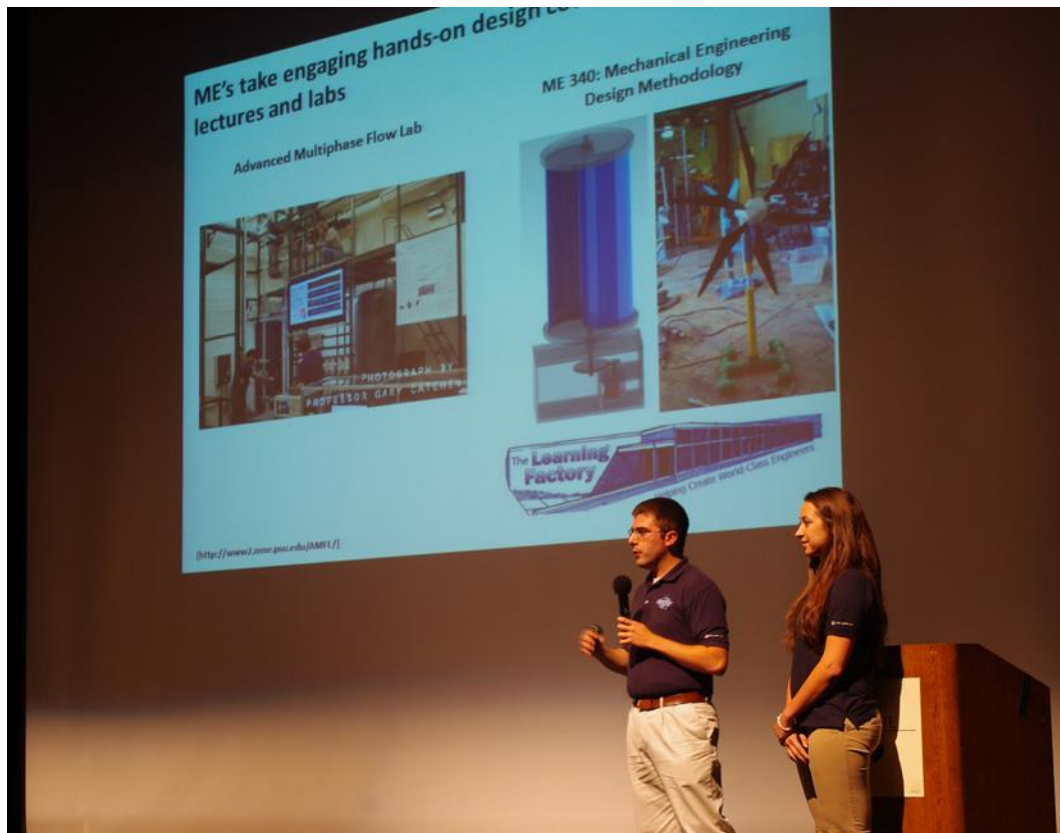


**Figure 5.** Sample body slides. Each contains a one-sentence assertion and visual evidence to support and reinforce the claim.

## 6. Practice!

*Practice your presentation several times. Make the situation as close to the actual situation as possible. If you will be holding a clicker or microphone, such as the students in **Figure 6**, practice while holding it in your hand.*

*You do not need to memorize your presentation, and it will be more effective if you don't memorize it. Become an expert on the topic and speak from your own knowledge, research, and experience.*



**Figure 6.** Students give an assertion-evidence presentation on the Mechanical Engineering program at Penn State to prospective students and their families.



## General Style Tips for Assertion-Evidence Slide Design

- Use a bold sans serif font such as **Calibri** or **Arial** for your assertions.
- Use 28 point type for the headlines, 18-24 point type for the body text.
- Keep blocks of text to one or two lines
- Keep lists to no more than four items
- Be generous with white space

*Mastering this style of presentation will take time and practice. Do not feel that your slides need to exactly match any of the ones shown in this instruction set. As long as they follow the overall style shown here, you will have an effective and engaging presentation.*

See Table 1 for further resources and PowerPoint tips.

**Table 1.**

Resource	Description	Link
Slide Templates	Slide templates available for download—click on “Body Slide Template,” “Full Talk Template,” or “Teaching Template” based on your need.	<a href="http://writing.engr.psu.edu/templates.html">http://writing.engr.psu.edu/templates.html</a>
Assertion-Evidence Information Resource	Background information, explanations, sample slides from Penn State engineering professor and presentation expert Michael Alley	<a href="http://www.writing.engr.psu.edu/teaching_slide_design.html">http://www.writing.engr.psu.edu/teaching_slide_design.html</a>
Assertion-Evidence Video	Assertion-Evidence style presentations given by Penn State students. Click on any of the videos you see when you visit the link.	<a href="http://www.writing.engr.psu.edu/models.html">http://www.writing.engr.psu.edu/models.html</a>
PowerPoint How-To	New to PowerPoint? This free online course from Microsoft Office will teach you everything you need to know to get started using the software.	<a href="http://office.microsoft.com/en-us/powerpoint-help/create-your-first-presentation-RZ001129842.aspx">http://office.microsoft.com/en-us/powerpoint-help/create-your-first-presentation-RZ001129842.aspx</a>
PowerPoint Tips and Tricks	You’ve used PowerPoint many times, but are you using it to its full potential? Find out some cool tricks at these links.	<a href="http://jc-schools.net/tutorials/tricks/ppt.htm">http://jc-schools.net/tutorials/tricks/ppt.htm</a> <a href="http://blog.hubspot.com/marketing/easy-powerpoint-design-tricks-ht">http://blog.hubspot.com/marketing/easy-powerpoint-design-tricks-ht</a> <a href="http://blog.laptopmag.com/powerpoint-2013-tips-tricks">http://blog.laptopmag.com/powerpoint-2013-tips-tricks</a>