

# How to Prepare and Present a Great Research Poster

**Dr. Jacqueline Jenkins**

**Civil & Environmental Engineering Department**

# Important Dates for USRA Students

## Wednesday, July 31

- Advisors email Joy Yard the title and authors of your poster, and the times between 11 am – 2 pm that you will be present at the poster session on Thursday, September 5

## Thursday, August 15

- Advisors email Joy Yard the abstract of your poster
- Advisors email the CSU library the electronic version (i.e. pdf) of your poster for printing

## Thursday, September 5

- Undergraduate Research Poster Session, 11 am – 2 pm, in the Student Center Atrium



## STUDENT RESEARCH

### Undergraduate Research

#### » Funding Programs

Undergraduate Research  
Award Program

Undergraduate Summer  
Research Award Program

#### » Guidelines

#### » 2017 Award Recipients

#### » 2018 Award Recipients

#### » 2019 Award Recipients

#### » Research Journals

#### » Research Links

#### » University Honors Program

#### » Undergraduate Research at CSU (Video)

#### » University Scholars Program

### Student Research

## 2018 UNDERGRADUATE SUMMER RESEARCH AWARD RECIPIENTS

### Award Recipients

CSU undergraduate students will have the opportunity to work on research projects with faculty mentors during Summer 2018. Fifty-five proposals were funded across six colleges.

- [2018 Undergraduate Summer Research Awards](#)
- [2018 Undergraduate Summer Research Abstracts](#)

### Seminars

- [Introduction](#)
- [Graduate School Application Workshop](#)
- [How to Do Great Research](#)
- [How to Make a Great Research Poster](#)

# Undergraduate Student **RESEARCH**



# Poster Size

- Typically 4 feet  $\times$  3 feet, or 3 feet  $\times$  2 feet
- Landscape orientation
- Library plotter has 42" width

36"

## Comparing Two Driving Simulation Practice Scenarios for Steering and Speed Control

Student: Nancy Seck

Advisor: Jacqueline Jenkins

24"

**Purpose:** To test the effectiveness and relative efficiencies of two practice scenarios

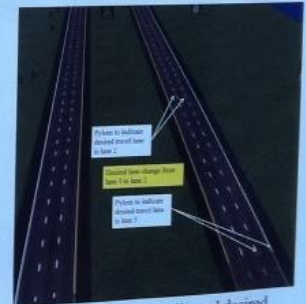
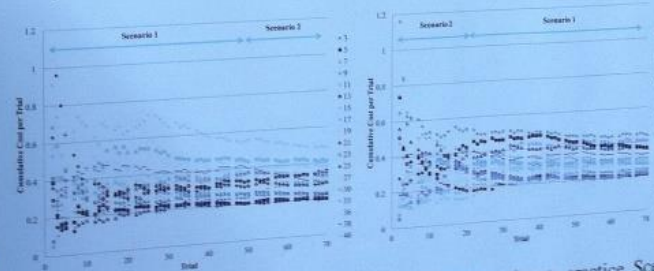
**Methodology:** Repeated measures driving simulation experiment with counterbalanced scenario order

- Scenario 1, participants followed posted speed limits, ranging from 30 to 65 mph and made 50 lane changes
- Scenario 2, participants drove at 50 mph and increased speed, as they were comfortable to do so, and made 20 lane changes

**Data:** Lane position (LP) at pylons and travel time ( $t_i - t_{i-1}$ ) between pylons

**Analysis:**

- Fit learning curve to cost at pylons  $C_i = |LP_i| \left[ \frac{t_i - t_{i-1}}{t_{ideal}} \right]$
- Fit experience curve to cumulative cost per trial  $CCPT_n = \frac{1}{n} \sum_{j=1}^n C_j$
- Compare means (t-test) and equality of variances (F-test) of cost and CCPT



Pylons on roadway indicated desired travel lanes and lane changes.

**Conclusion:** Both scenarios were effective in providing participants practice. Scenario 1 was more efficient, indicated by lower variances after 10 lane changes and a larger range of observed travel speeds. Therefore, directing participants to travel at higher speeds improves their learning to interact with the driving simulator.

# Software

- PowerPoint, Adobe Illustrator, InDesign, Canvas, Publish-It, Corel Draw, LaTeX, etc.
- Library requires pdf file for plotting

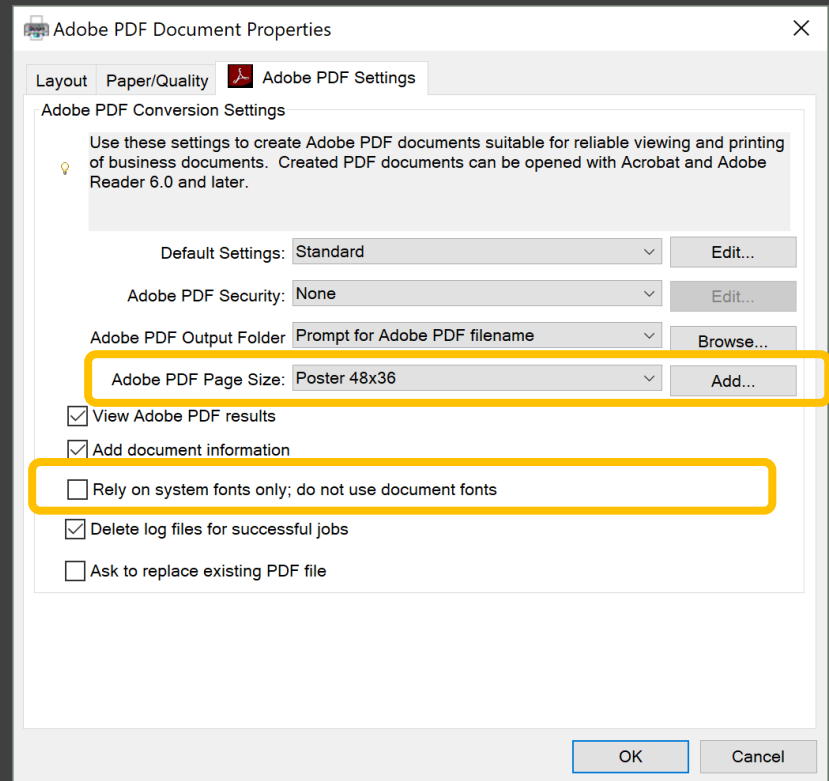
# PowerPoint

To set poster size

Design → Slide Size →  
Custom

To set paper size

File → Print → Printer  
(Adobe PDF) → Printer  
Properties →



# Designing Your Poster

# Content



# Content

~~THROW EVERYTHING ON!~~

## Text

- Capture people with a short, compelling title
- Highlight key points
- Audience should be able to follow the poster on their own

## Graphics

- High resolution
- Artistic or technical

# Spacing

84 to 96 pt Title

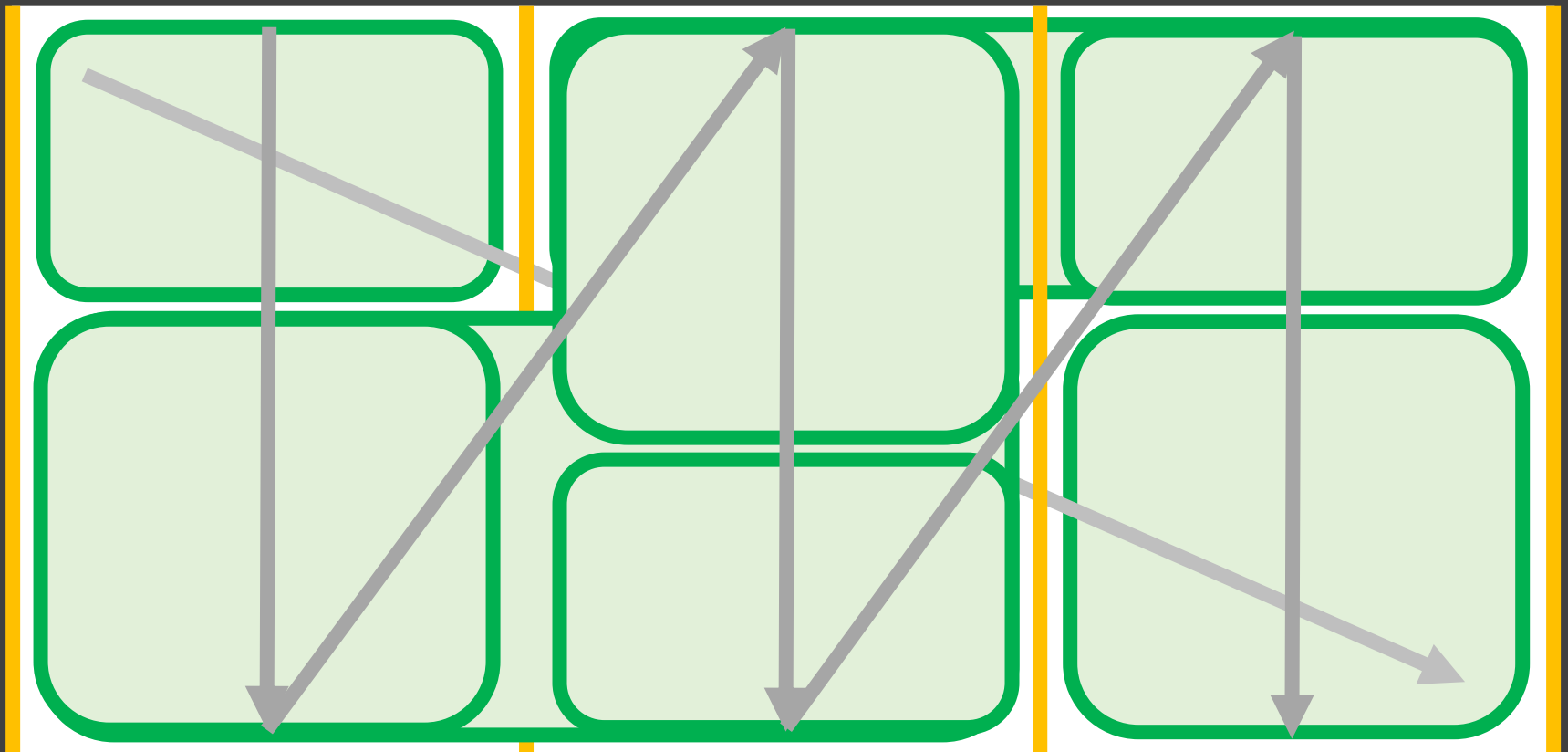
30-56 pt Authors

30-48 pt Headings (San serif font)

24-32 pt text (Serif font)

18-24 pt text for references, acknowledgements, captions

# Arrangement



# Which is Better?

**GREEN**



**WHITE**

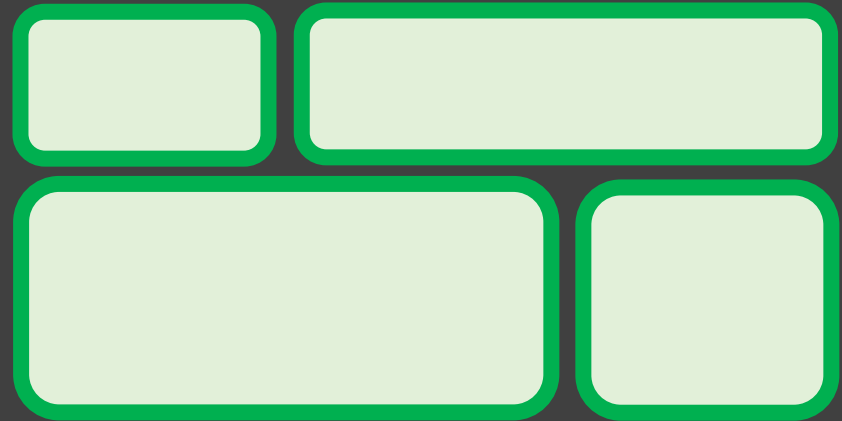


# Which is Better?

**GREEN**



**WHITE**



# Which is Better?

## GREEN

Pink Floyd  
THE WALL  
1979  
Another Brick  
in the Wall  
Roger Waters

~~We don't need no education~~

We don't need no thought control  
No dark sarcasm in the classroom  
Teachers leave them kids alone  
Hey! Teacher! Leave us kids alone!  
All in all you're just another brick in the wall.  
All in all you're just another brick in the wall.

Daddys Flown Across the Ocean  
Leaving Just a Memory  
A Snapshot in the Family Album  
Daddy what else did you leave  
for me?  
Dad What You Leave Behind for  
me?  
All in all you're just another  
brick in the wall.  
All in all you're just another  
brick in the wall.

When we grew up  
and went to school,  
there were certain  
teachers who would  
hurt the children  
anyway they could  
by pouring any  
region upon anything  
they did, exposing  
every weakness and  
carefully they did to  
the kids.

## WHITE

Pink Floyd  
THE WALL  
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Another Brick in the Wall  
Roger Waters

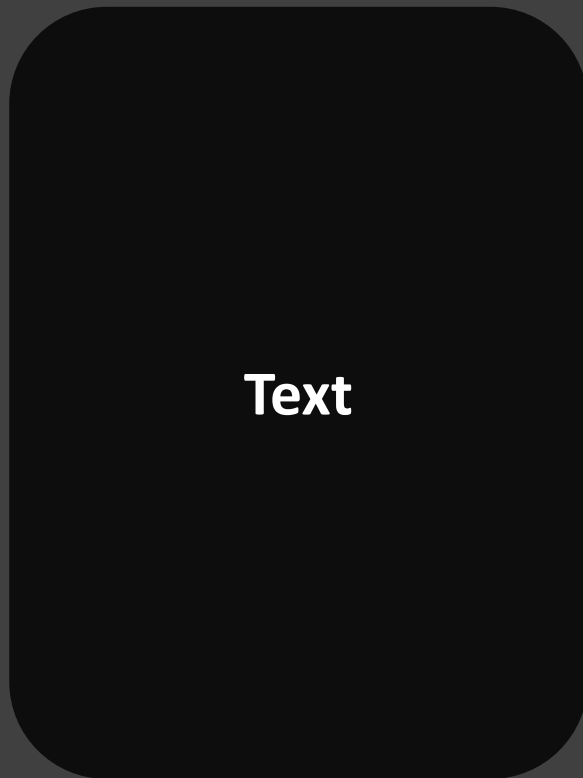
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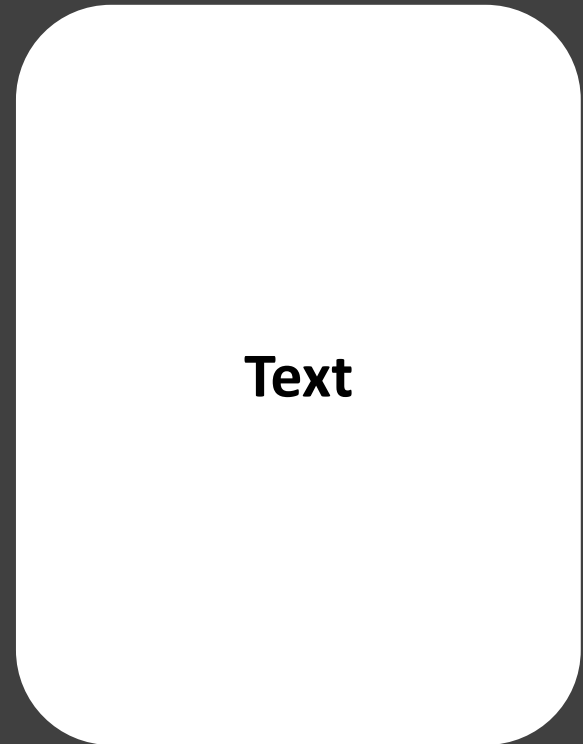
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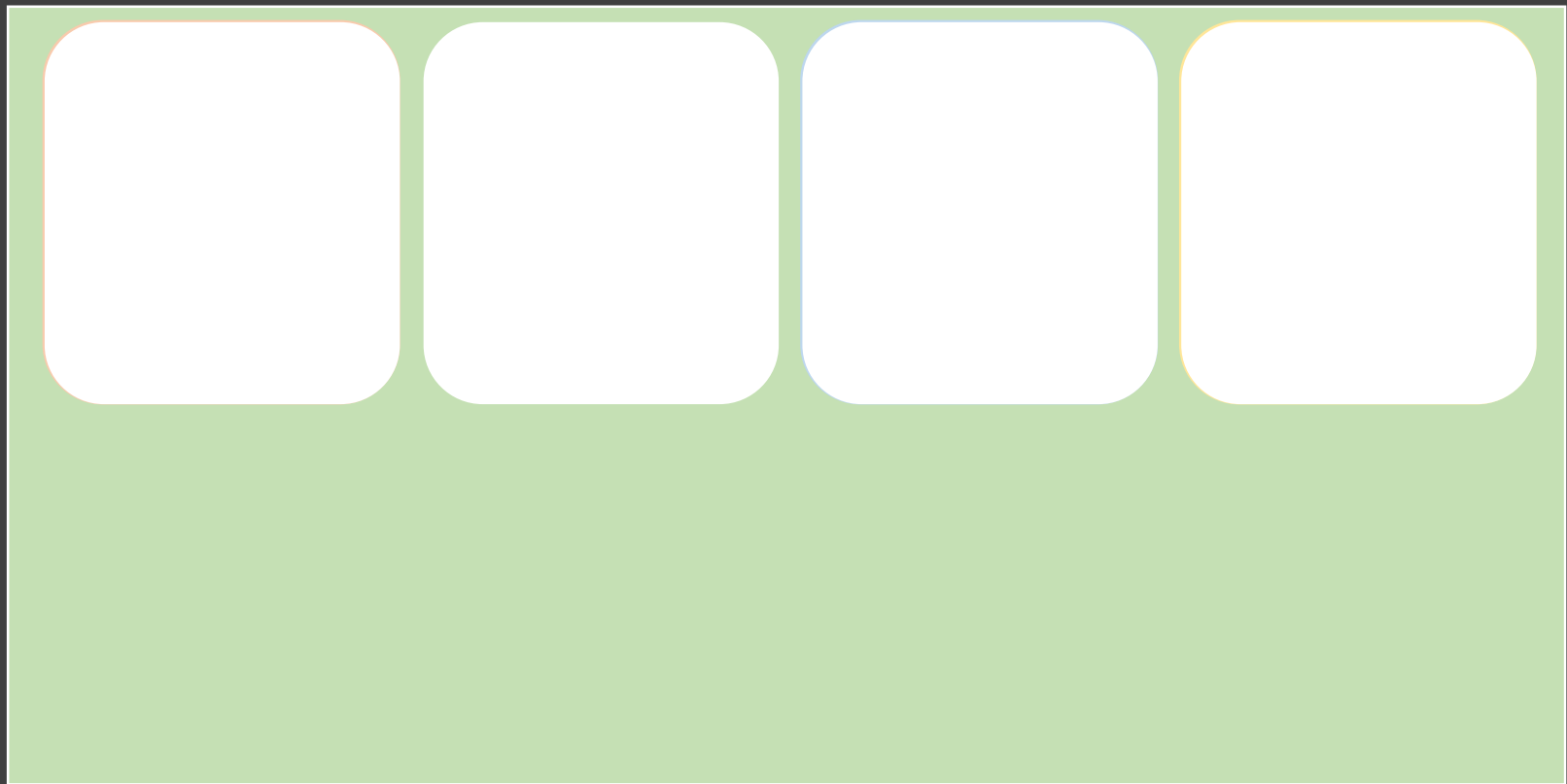
**GREEN**



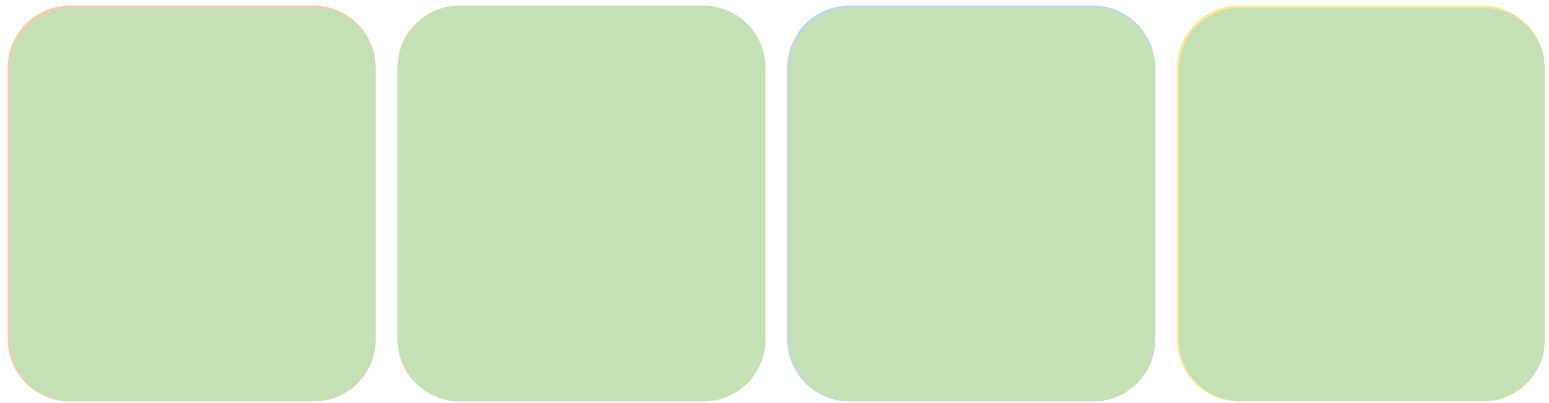
**WHITE**



# Color Palette



# Color Palette



# Which is Better?

**GREEN**

Text

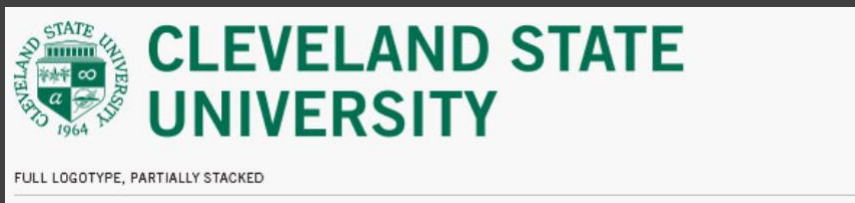
**WHITE**

**Text**

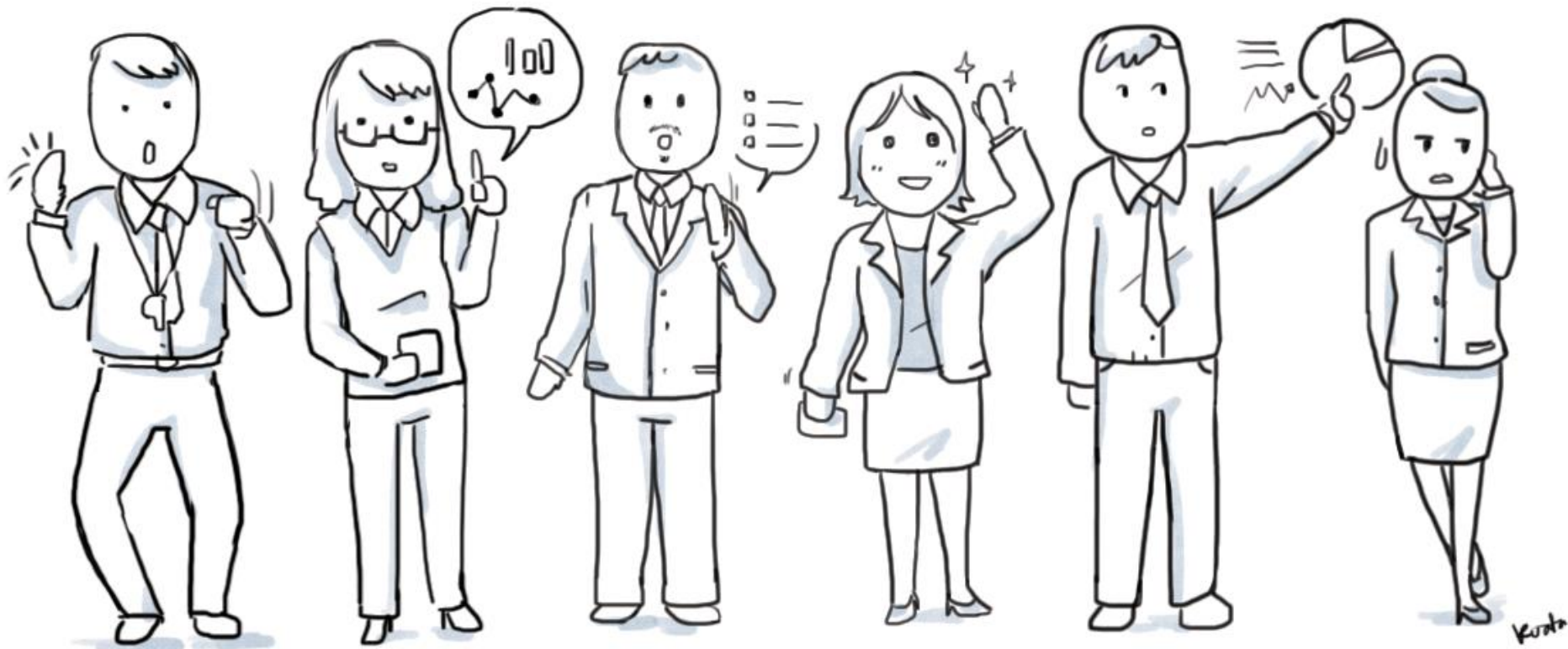
# CSU Representatives

<https://www.csuohio.edu/marketing/brand-style-guide>

- CSU color palette
- CSU seals
- CSU logos



# Presenting Your Poster



The Coach    The Inventor    The Counselor    The Storyteller    The Teacher    The Coordinator



The Drone

The Teacher

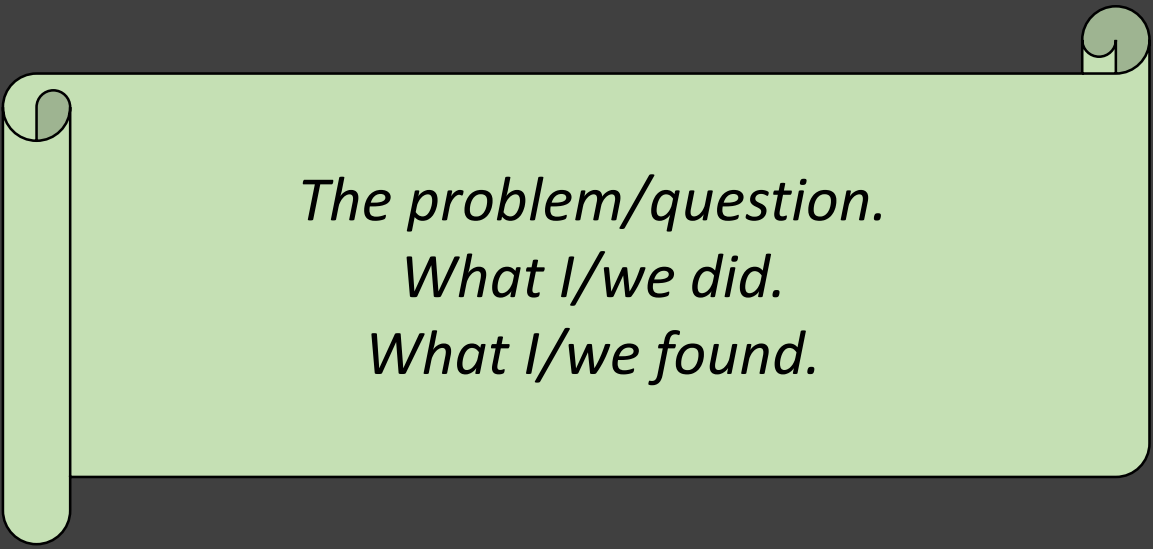
The Movie Star

The Relationship  
Builder

The "excellent"  
Presenter

# Spiel

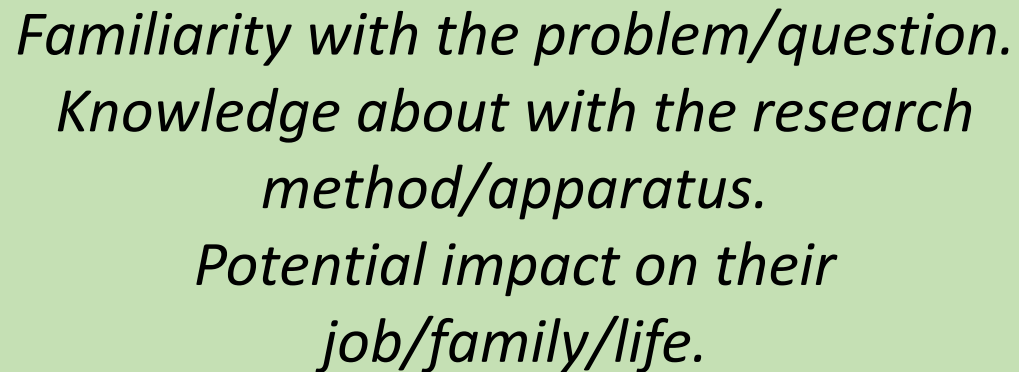
- In 2 or 3 sentences, tell me about your research
- Audience appropriate
  - Technical jargon
  - Layman terms



*The problem/question.  
What I/we did.  
What I/we found.*

# Engage the audience

- Prepare a couple questions
- Audience appropriate
  - Technical jargon
  - Layman terms



*Familiarity with the problem/question.  
Knowledge about with the research  
method/apparatus.  
Potential impact on their  
job/family/life.*

# Setting the stage

- Dress the part
- Meet your neighbors
- Clear the poster area
- Remain attentive



Don't Forget...

Have fun sharing your research  
and meeting new people!

# Google & YouTube

- Anatomy of an Ace Research Poster  
<https://inchemistry.acs.org/content/inchemistry/en/college-life/research-poster-infographic.html>
- Scientific Poster Design - Good and Bad Examples!  
<https://www.youtube.com/watch?v=agtgnJP3KoQ>
- How to create a better research poster in less time (including templates)  
<https://www.youtube.com/watch?v=1RwJbhkCA58>
- 6 Types of Presenters: Which One Are You?  
<https://visme.co/blog/types-of-presenters-quiz/>