How to Prepare and Present a Great Research Poster

Dr. Jacqueline Jenkins

Civil & Environmental Engineering Department

Important Dates for USRA Students

Wednesday, July 31

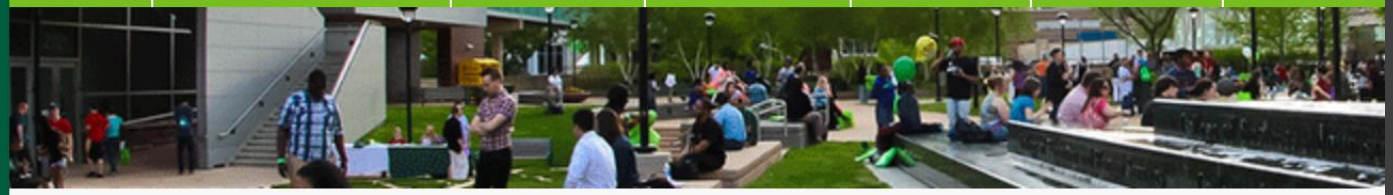
- Advisors email Joy Yard the title and authors of your poster, and the times between 11 am – 2 pm that you will be present at the poster session on Thursday, September 5

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

https://www.csuohio.edu/student-research/2018-undergraduate-summer-research-award-recipients

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”

24”

Comparing Two Driving Simulation Practice Scenarios for Steering and Speed Control

Student: Nancy Seck

Advisor: Jacqueline Jenkins

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

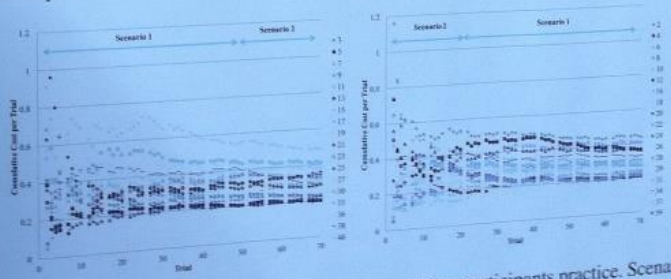
Methodology: Repeated measures driving simulation experiment with counterbalanced scenario order

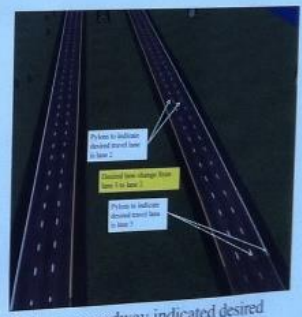
- Scenario 1, participants followed posted speed limits, ranging from 30 to 65 mph and made 50 lane changes
- Scenario 2, participants drove at 50 mph and increased speed, as they were comfortable to do so, and made 20 lane changes

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.

onclusion: Both scenarios were effective in providing participants practice. Scenario 1 was more efficient, indicated by ver variances after 10 lane changes and a larger range of observed travel speeds. Therefore, directing participants to travel en 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

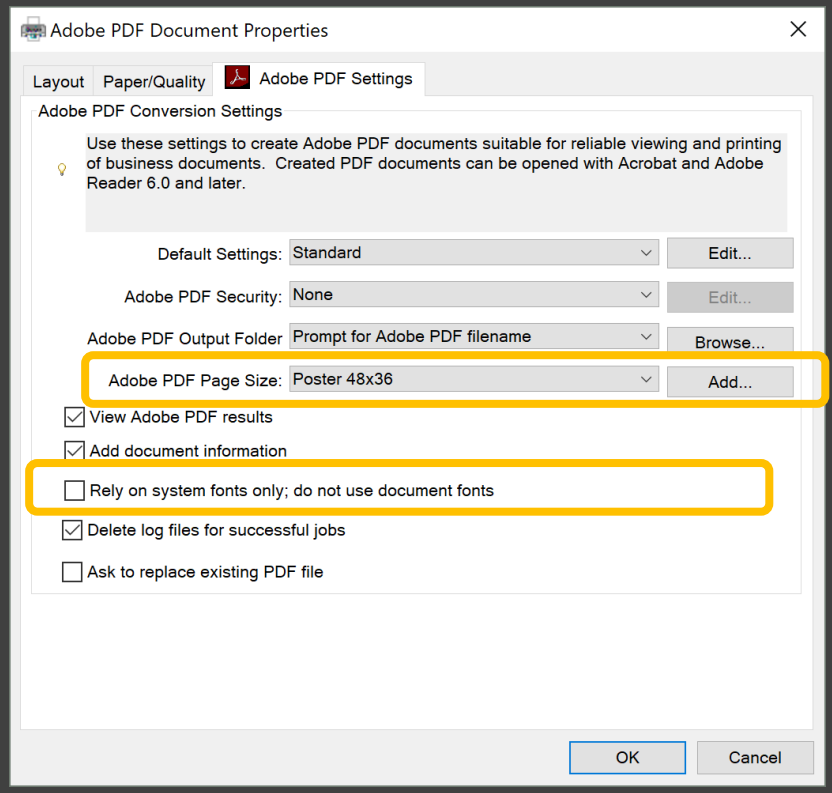
PowerPoint

To set poster size

Design → Slide Size → Custom

To set paper size

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



Designing Your Poster

Content

Objective
Need
Tables
Results
Conclusion
Title
Abstract
Data
Author
Figures
Hypothesis
References
Introduction
Analysis
Discussion
Apparatus
Method
Acknowledgements
Objective

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

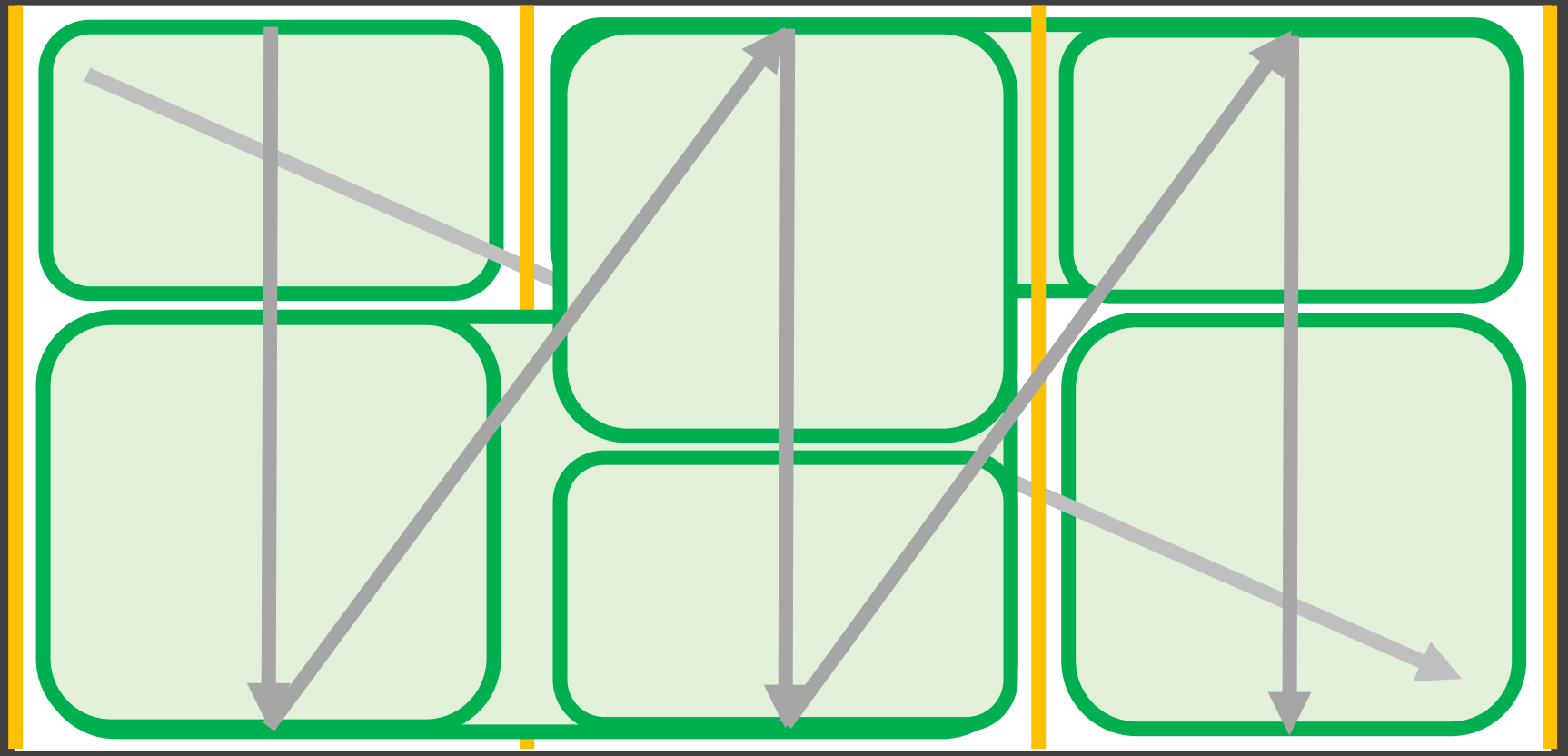
30-56 pt Authors

30-48 pt Headings (San serif font)

24-32 pt text (Serif font)

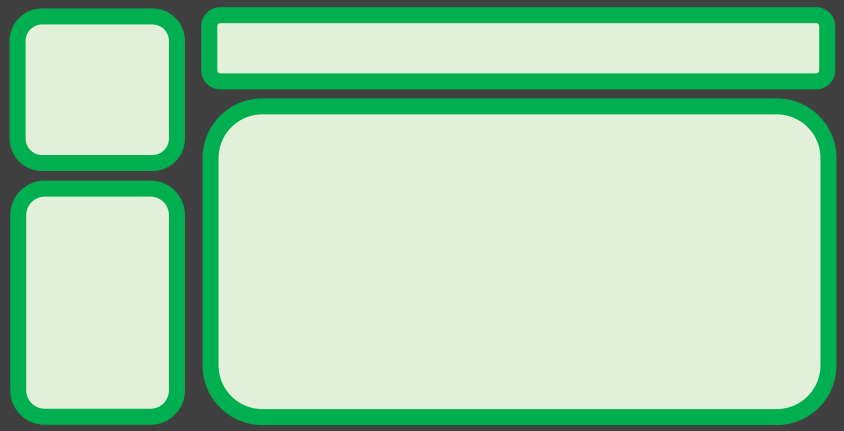
18-24 pt text for references, acknowledgements, captions

Arrangement

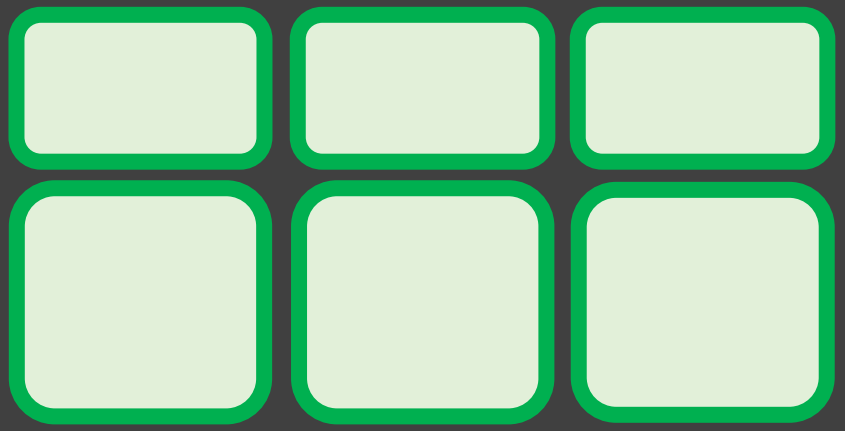


Which is Better?

GREEN



WHITE



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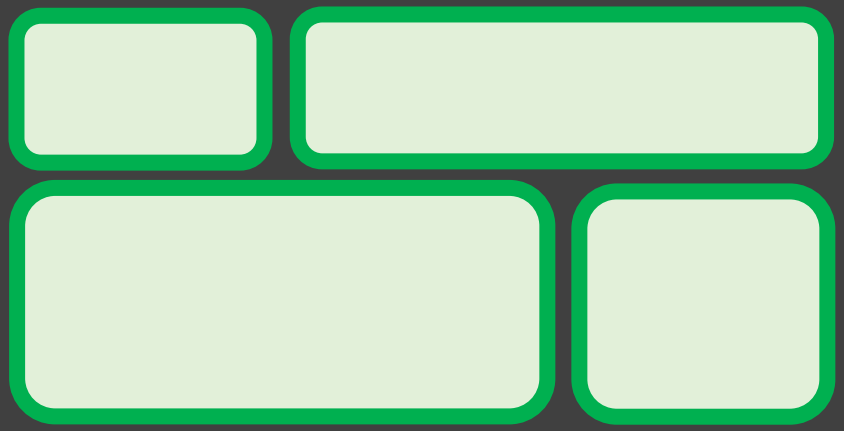

Which is Better?

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

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Which is Better?

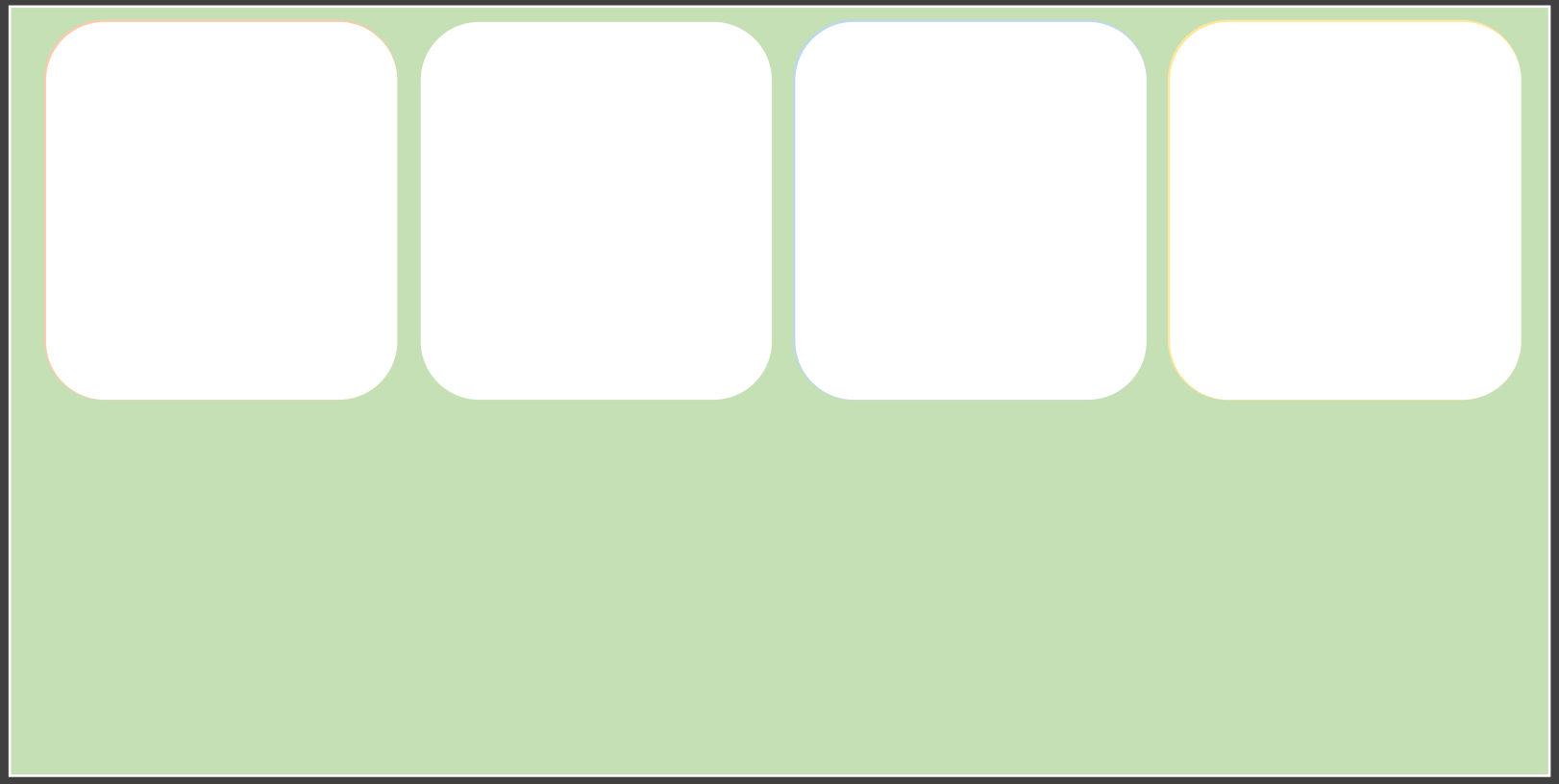
GREEN

Text

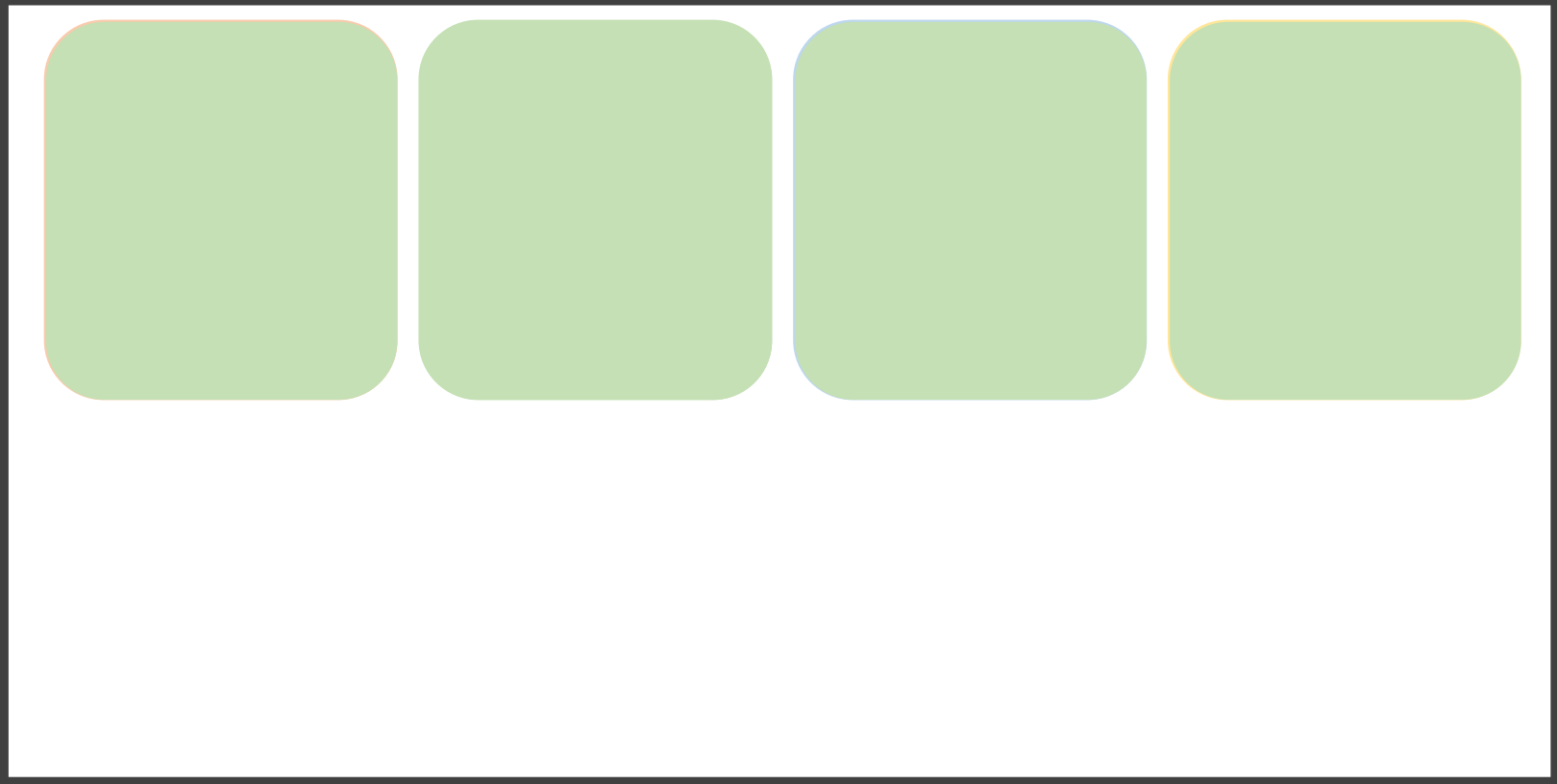
WHITE

Text

Color Palette



Color Palette



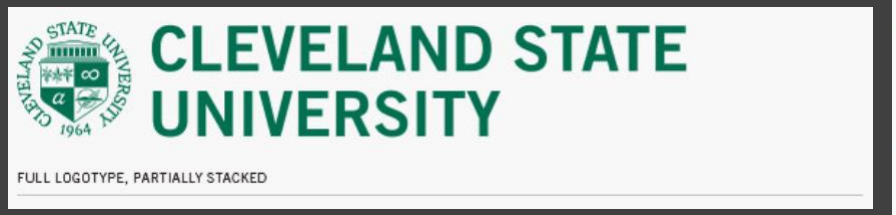
Which is Better?

GREEN	WHITE
Text	Text

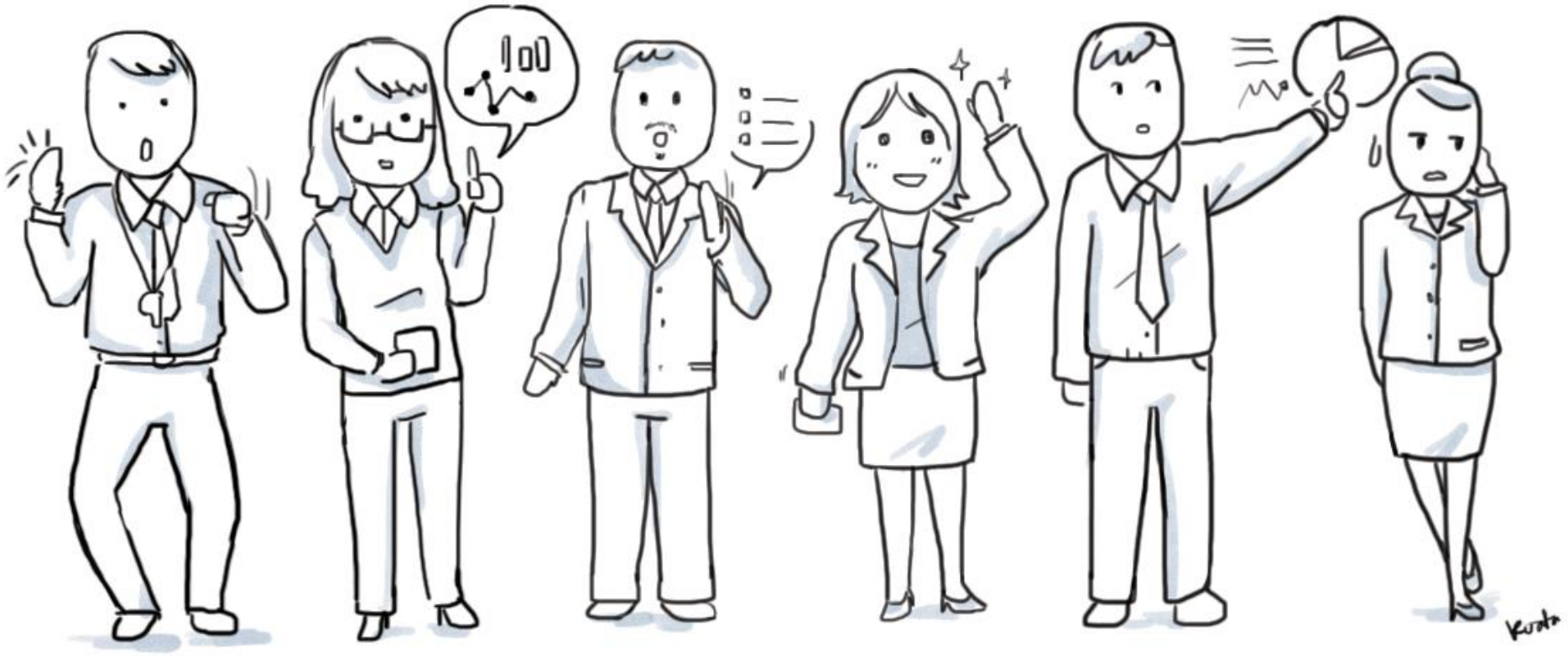
CSU Representatives

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

- CSU color palette
- CSU seals
- CSU logos



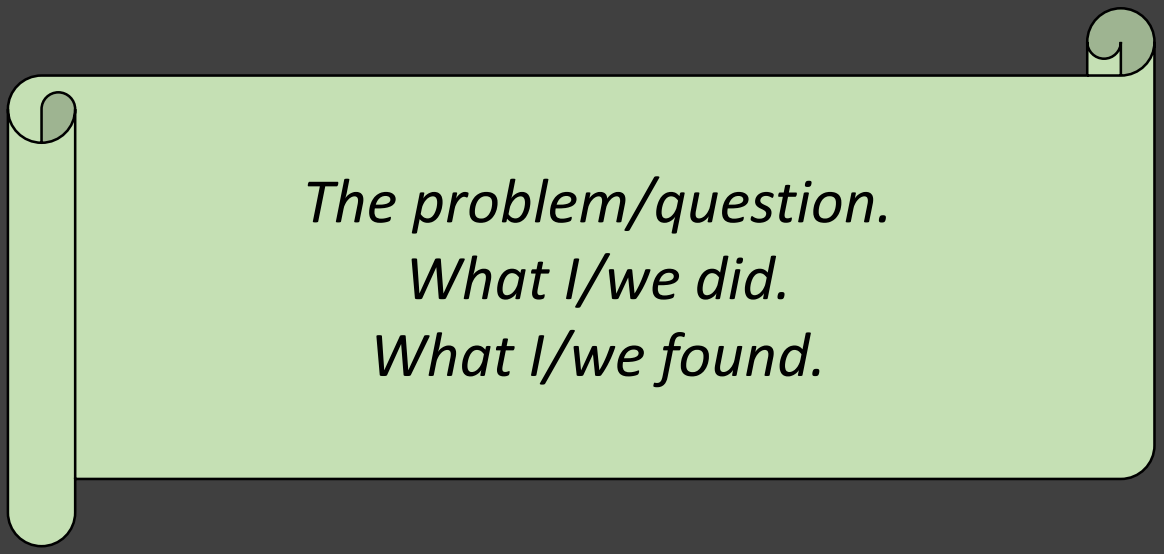
Presenting Your Poster


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



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/