
Improving Presentation Skills

Poster, PowerPoint, and Virtual Presentation Tips

James Eller

Co-Interim Director

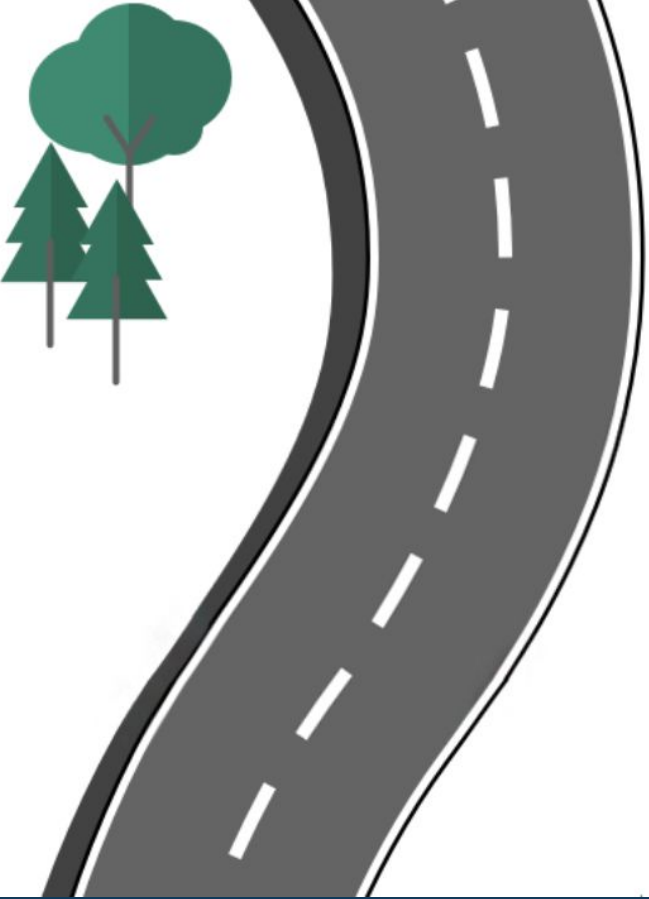
Student Advancement & Academic Resources

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think beyond the possible



Agenda

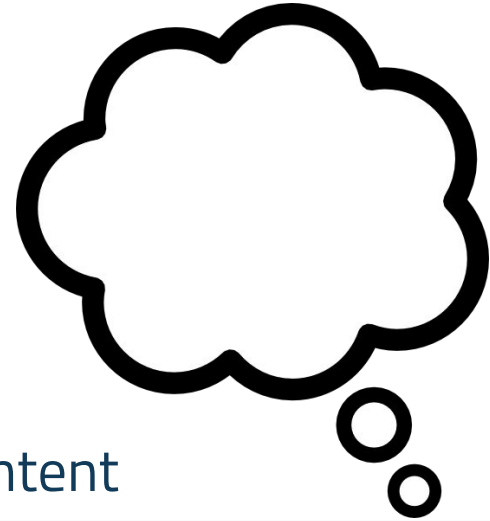
- Selecting Content
- Bookends: Introduction and Conclusion
- PowerPoint Presentations
- Posters
- Virtual Presentations
- Verbal and Non-Verbal Communication
- Wrap-Up

Selecting Content

- How long will you be presenting?
- Purpose of presentation? Format?
- Who will you be presenting to?
- What information do you want to convey?

Your message? Takeaways?


- Know your goal
- Think big picture
- Consider any guidelines governing your poster content





Presentation Bookends

Starting Off Right - Introduction



You only get
one first
impression.

- First impression
- Introduce yourself (mentors, advisors, etc.)
- Be welcoming
- Sets tone for presentation
- Outline main points

Starting Off Right - Introduction

- Narrative approach - creating story, conversational
- Think big picture - intriguing and relevant
 - Necessary background information or definitions?
 - How did this lead you to your research question?
 - What were you hoping to find?
- Very short synopsis to peak interest
 - What is your research topic? State your purpose.
 - What have you found?
 - Why is it important?

Tips for Delivery:

<https://visme.co/blog/presentation-structure/>

Finishing Strong - Conclusion

- Connect and summarize
 - What is the ultimate consequence of your journey?
- Restate main points and re-answer the question (*tell audience where they are going, take them there, and then remind them where you took them*)
- Considerations for future research
 - Is this really the end?
 - What happens next?



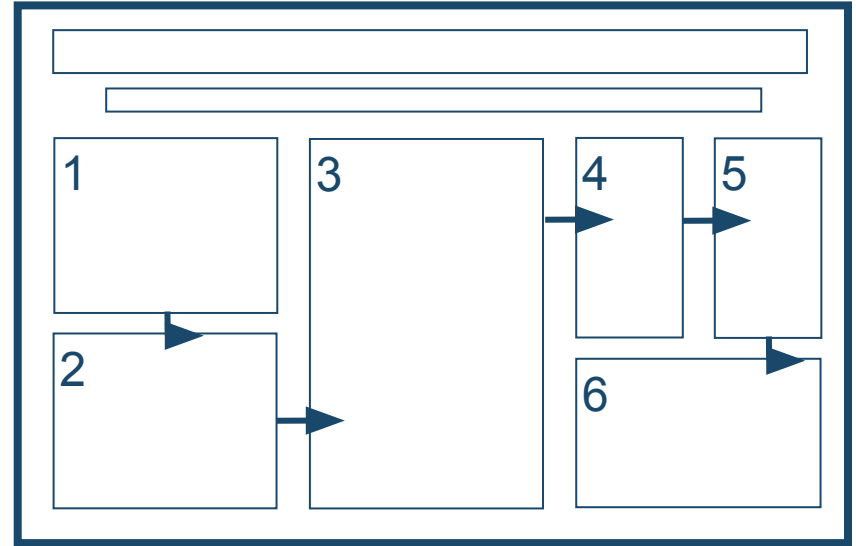
Creating an Academic Poster

Great Resource for Presenting:

<https://www.scientifica.uk.com/neurowire/tips-for-presenting-your-scientific-poster-at-a-conference>

Creating an Academic Poster - Structure

- **Information Tracking:** Vertically from center to top to bottom, and horizontally from left to right
- **Content Areas:** Title, Presenters and Contributors, Logos, Abstract (Introduction), Methods, Results, Conclusions, References
- **Presentation:** Lists, diagrams, figures, etc.



Creating an Academic Poster - Style & Structure

- **Do not** single space (double spacing after punctuation is easier to read)
- Justify text (be consistent)
- Visually appealing color and contrast
- **Font:**
 - Title: 60 point Bold
 - Section headings: 30 point Bold
 - Text: 24 point

Creating an Academic Poster - Style & Structure

- Templates available online and through research guides
- Check the poster size for conference/presentation
- Steps:
 - PowerPoint: Design → Slide size → Custom slide size
 - Slides: File → Page setup → Custom
- Save as .pdf for printing



Learn More:

[https://researchguides
.case.edu/posterdesig
n](https://researchguides.case.edu/posterdesign)

Creating an Academic Poster - Example 1

I
ILLINOIS

Rachel Zarky
Mentor: Daniel Palac

TRAIN THE BRAIN: An Efficacy Study on Brain Recovery After Injury

University of Illinois at Urbana-Champaign
Department of Kinesiology and Community Health

INTRODUCTION

In the scientific community, medication along with physical and cognitive rest is widely prescribed and recommended by medical professionals when treating individuals with concussions or mild traumatic brain injuries (mTBIs). Less is known regarding treatment for lingering symptoms that go beyond the typical period of recovery of 7 to 10 days. Every year in the US, millions of sports and participants of recreational activities sustain between 2.5 to 4 million concussions. 3 months after sustaining a concussion 10% - 20% of the concussed patient population are still symptomatic. A growing body of novel research reveals the benefits of structured intervention treatments in alleviating ongoing concussion symptoms. Research findings have indicated aerobic exercise interventions and cognitive training improve facets of executive functioning in cerebral regions susceptible to head trauma. In this presentation, we provide an overview of a multimodal physical activity and brain training program that could reduce the severity of symptoms reported by individuals with post-concussion syndrome.

CONCUSSIVE AND MILD TRAUMATIC BRAIN INJURY SYMPTOMS

COGNITIVE	AFFECTIVE
<ul style="list-style-type: none">Working memory impairmentAttention deficitSlow processing speedPoor concentration	<ul style="list-style-type: none">AnxietyDepressionEmotional disturbancesIrritabilityMood swingsSadness

SLEEP	PHYSIOLOGICAL
<ul style="list-style-type: none">Sleeping more than usualSleeping less than usualDifficulties falling asleep	<ul style="list-style-type: none">HeadachesBlurred visionFatigueNauseaLight sensitivityDifficulties with balancing

COGNITIVE TRAINING WITH BRAIN HQ

Brain HQ is a non-traditional form of intervention that tests the brain and exercises attention, processing-speed, and working-memory. We expect that when paired with a structured aerobic exercise regimen, brain training and physical activity together improve cognitive performance in individuals who have sustained concussions and other mTBIs.

STUDY DESIGN

This efficacy study is a two-armed lab- and home-based randomized controlled aerobic exercise trial for individuals with lingering symptoms of concussion or other mTBI. The study consists of a 4-week structured exercise intervention.

Participants are randomly assigned to one of the three groups:

- EXERCISE AND COGNITIVE TRAINING**
30 minutes of exercise within participants' recommended intensity level → Rate level of perceived exertion and complete a symptom questionnaire → 20 minutes cognitive training that test facets of executive functioning
- EXERCISE AND VIDEO**
30 minutes of moderate aerobic exercise on a treadmill → Rate level of perceived exertion and complete a symptom questionnaire → Watch 20 minutes of a health-related documentary
- WAITLIST**
Complete all baseline and follow-up physical and neuropsychological testing → Continue normal behavior

We expect a statistically significant decrease in the severity and number of symptoms reported and an improvement in cognitive functioning.

This attention-control group is not expected to show a statistically significant reduction in the severity and number of symptoms reported when compared to the Group 1 treatment group.

We do not expect to see a statistically significant change in the severity and number of symptoms reported by this true control group.

BASELINE & FOLLOW-UP TRAINING

At baseline and follow-up appointments, all participants complete physical and cognitive testing.

- Functional Fitness Testing** - All participants are asked to complete a short battery of physical assessments that measure balance and mobility.
- Neuropsychological Testing** - Participants are asked to complete a series of computerized neuropsychological tests (memory, fluency, matching, and picture-comparison tasks) that assess different aspects of executive functioning (attention, working memory, decision making and speed-processing). We expect a statistically significant increase in Group 1's neuropsychological test scores after the 4-week intervention period.

PREDICTED OUTCOMES

After the 4-week intervention period, we predict 30 minutes of moderate aerobic exercise and 20 minutes of cognitive training three times weekly will reduce the severity and number of affective, behavioral, cognitive, sleep, and physiological symptoms reported on *The Concussion Post-Concussion Syndrome Questionnaire* by Group 1 participants.

At follow-up testing, we expect a statistically significant increase in the exercise and cognitive training cohort's neuropsychological test scores. This increase would be indicative of an improvement in facets of executive functioning (attention, speed-processing, working memory) when compared to the control group.

REFERENCES

Center for Disease Control and Prevention. (2019). Traumatic Brain Injury and Concussion Symptoms. <https://www.cdc.gov/traumatic-brain-injury/symptoms.html>

National Center for Biotechnology Information. (2014). Treatment and Management of Prolonged Symptoms and Post-Concussion Syndrome. <https://www.ncbi.nlm.nih.gov/books/NBK163342/>

ACKNOWLEDGEMENTS

Thank you to the Undergraduate Research Program (URAP) and my graduate research mentor, Daniel Palac, for the opportunity to serve as a research mentor on his dissertation project.

Poster design by PATRICIA NATALIE (patricianatalie@gmail.com)

Creating an Academic Poster - Example 2


PARECO013


JUVENILE IDIOPATHIC ARTHRITIS (JIA)


IT'S NOT JUST AN OLD PERSON'S DISEASE


Simon R. Stones¹ and the MyJIA expert advisory group
¹Faculty of Life Sciences, The University of Manchester, Stopford Building, Oxford Road, Manchester, United Kingdom M13 9PT



WHAT IS JIA?

 **Juvenile** = begins before the age of 16.
Idiopathic = unknown cause.
Arthritis = joint inflammation for a minimum of 6 weeks.

 Arthritis is still viewed as a disease of 'old age', but...




 **ONE**
IN EVERY THOUSAND young people are living with JIA.

 It is increasingly evident that collaboration and transparency between researchers, the public, and people with JIA is important for improving the quality of life of those living with JIA.

  @SimonRStones





WHAT DID WE DO?

The aim of this final year undergraduate research project is to improve the understanding of JIA amongst the **general public, researchers and young people living with the condition**. This was achieved using four different routes of communication. These included **two magazine articles, a presentation to academic researchers and an eLearning activity for young people with JIA**.

OUR RESULTS

Overview of the literature → The science of JIA → Bringing the patient to life → Empowerment through interactive learning

“ It is so interesting to read, and I understand everything in the article, despite having no prior understanding of the science.
Biological Sciences Review article

A great article, brought to life by including patient stories.
New Scientist article


I didn't fully appreciate the impact of JIA before the presentation.
Presentation to academic researchers

MyJIA highlighted things that I can actually do to help.
MyJIA eLearning activity ”

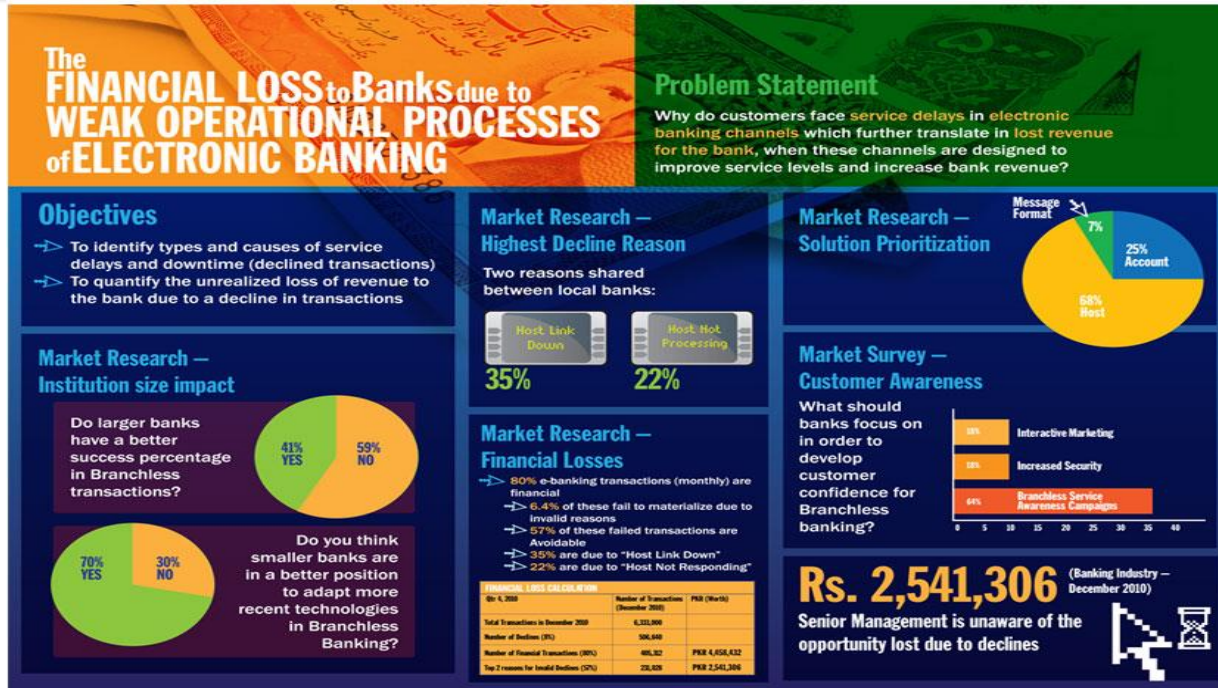
WHAT DOES THIS MEAN?

This **undergraduate science communication project**, which uses a variety of resources, is raising awareness of JIA, generating discussions for future research, and actively involves patients and members of the public in academic research.

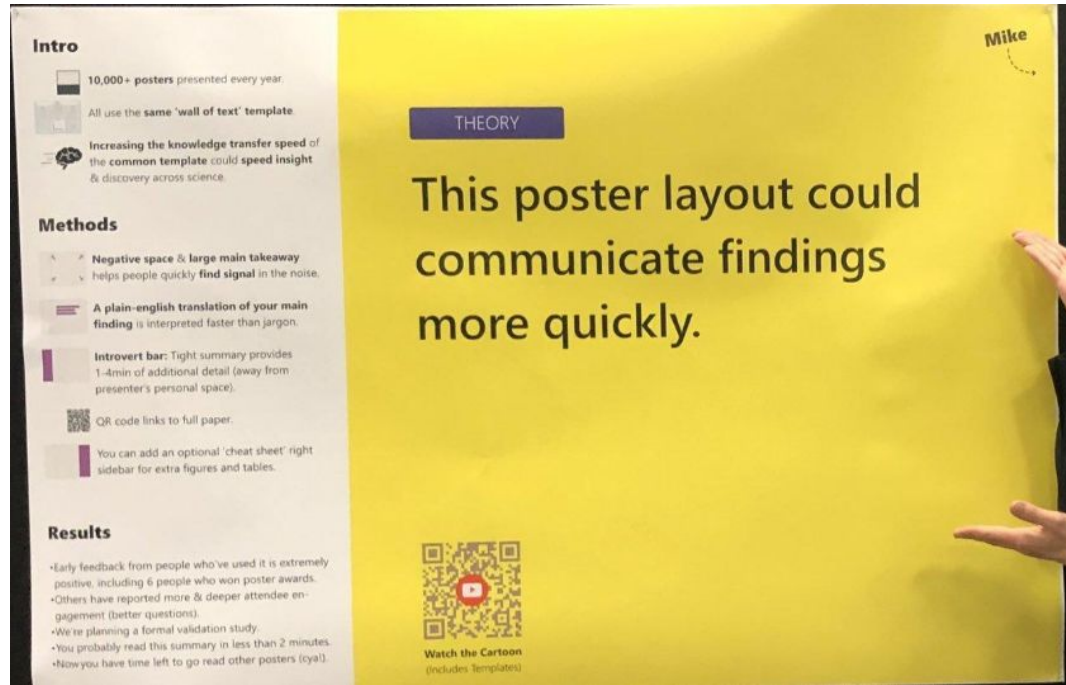
This project has been conducted as part of a final year BSc (Hons) Biomedical Sciences undergraduate science communication and media project. The author would like to thank Dr Sheena Crookbank and Dr Susan Vestergaard for supervising this project and the MyJIA expert advisory group for shaping the project: Petera Balazova, Navea Charles, Wendy Corbridge, Paul Dawson, Debbie Jensen, Florian Klotz, John Ioannidis, Carrie Thompson, Francesca White and Catherine Wright. The author would finally like to thank all individuals and organisations who took part and promoted the project.



Creating an Academic Poster - Example 3

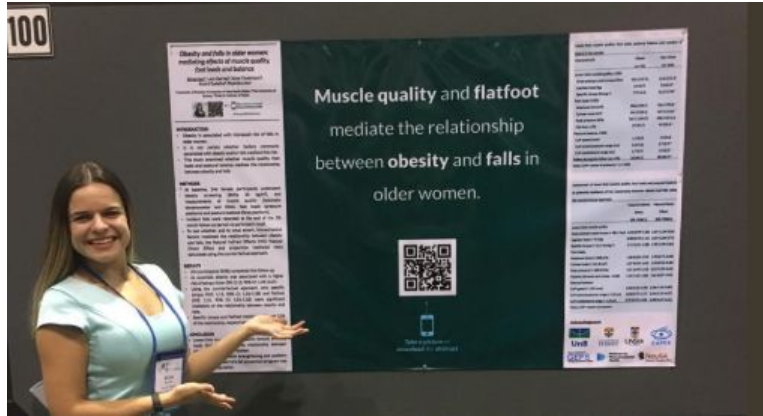


Creating an Academic Poster - Alternative



Reimagining the Academic Poster:
<https://radio.wosu.org/post/save-science-poster-researchers-want-kill-it-and-start-over#stream/0>

Creating an Academic Poster - Alternative





Considerations for PowerPoint

Considerations for PowerPoint

- Keep text to a minimum (6-8 lines per slide, < 30 words per slide)
- Visually appealing color and contrast
- Images, lists, diagrams, etc. (label and cite sources)
- **Font:**
 - 18-point or larger
 - Sans Serif fonts
- Simple animations

**Be sure to
number slides**

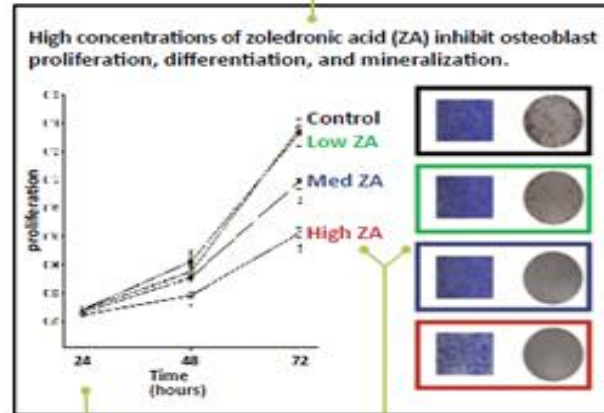
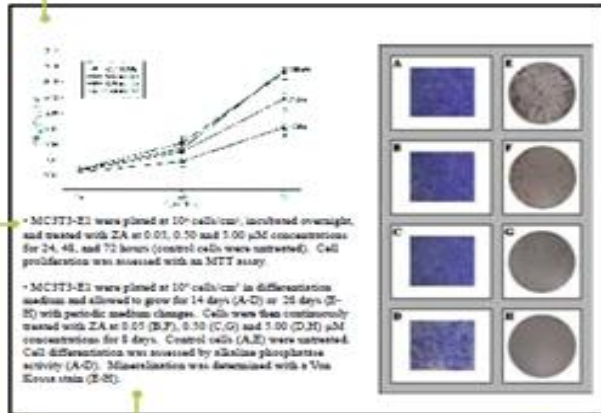
Considerations for PowerPoint

BEFORE

AFTER

Graph details too small to read

Unified concept simplified into assertion statement



Text pulled directly from figure legend

Graph and images color-coded for clear referencing

Bullet points too detailed and make hard-to-connect reference to figure

Graph much larger and easier to read

Alternative Text

Before:

- Graph details too small to read
- Text pulled directly from figure legend
- Bullet points too detailed and make hard-to-connect reference to figure

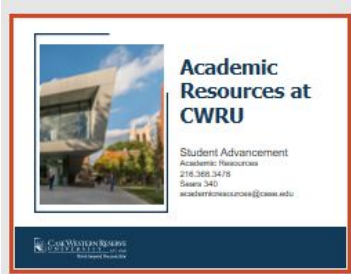
After:

- Unified concept simplified into assertion statement
- Graph and images color-coded for clear referencing
- Graph much larger and easier to read

Considerations for PowerPoint - Example 1



Considerations for PowerPoint - Example 2



Academic Resources at CWRU

Student Advancement
Academic Resources
216.368.3478
Sears 340
acadres@cwrucare@case.edu

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Student Advancement

- Navigators**
Their mission is to help students find their way and maximize their experience at CWRU. The Student Information System (SIS) links a student's navigator and includes that person's contact information.
- Academic Resources**
Supplemental Instruction Peer Tutoring Study Group +1
Courses and Seminars Preparation Individual Consultations Tips for Academic Success Academic Inventory

STUDENT SUCCESS: Sears Library, Suites 229 and 340

2




Professional Staff Members

- JANIS BLAKE**
ASSISTANT DIRECTOR
Behavioral Areas: Supplemental Instruction (SI), Peer Tutoring, Instruction (IT), Peer Preparation, and study strategies
Phone: 340-1517
Email: jba@case.edu
- JENNIFER DEWANTIS**
ASSISTANT DIRECTOR
Behavioral Areas: Peer Tutoring, Study Group +1, Peer Preparation, and study strategies
Phone: 340-3335
Email: jrd@case.edu
- MICHELLE LANE**
ASSISTANT DIRECTOR
Behavioral Areas: Section English, Peer Preparation, and study strategies
Phone: 340-3659
Email: mlan@case.edu

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Peer Learning Programs

Supplemental Instruction (SI)

Peer Tutoring

Study Group +1

Connect CWRU undergraduate students who have taken the course, done well, been recommended by faculty members, and invited by Academic Resources.



"SI sessions taught me to think, instead of just giving me the answers."
-CWRU Student

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Peer Tutoring

- Who are tutors?** CWRU students who have been nominated by professors and trained by Academic Resources to work with students on an individual basis regarding undergraduate courses
- Why tutoring?** Here are some things students can accomplish by working with a peer tutor:
 - Clarify course content and assignments
 - Connect class notes and readings
 - Practice problem solving
- 5 tutoring appointments per week
- Peer Tutoring for over 200 courses, students can request a tutor for a course not listed

Find appointments at tutoring.case.edu

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Study Group +1

- Discussion of course content in a peer tutor-supported study group of no more than 5 students
- Study Group +1 can help students:
 - Prepare for a lecture and class discussion
 - Prepare for a quiz or exam
 - Work through a challenging homework assignment
- Study Group +1 allows students to utilize their collective knowledge to achieve a shared academic goal: UNDERSTANDING!

Four brains are better than one!

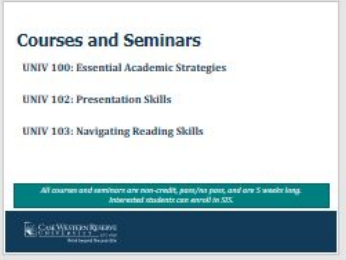
Submit a request at: case.edu/submitrequest/academicresources

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Last year, our peer led programs had over **21,000 visits** with more than **2,000 students**

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Courses and Seminars

- UNIV 100: Essential Academic Strategies
- UNIV 102: Presentation Skills
- UNIV 103: Navigating Reading Skills

All courses and seminars are non-credit, pass/no pass, and are 5 weeks long. Interested students can enroll on SIS.

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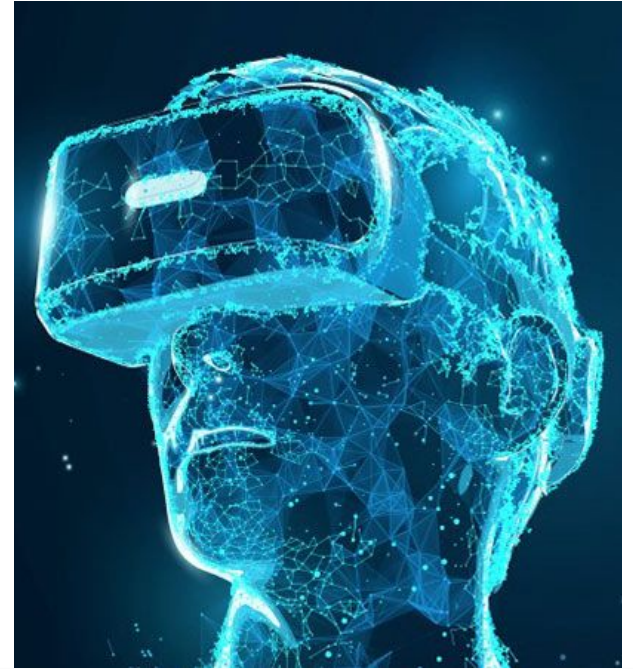
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Virtual Presentation Tips

Virtual Presentation Tips

- Engage the audience
- Use a professional background
- Check the Tech
 - Consider using a headset
- Dress professionally
- Stand-up (if possible)
- Use a mirror





Verbal and Non-Verbal Communication

Verbal Communications

- Rate of speech and volume
- Avoid monotone speech and use pauses
 - Be enthusiastic
- Avoid filler words
- Speak to your demographic
- Ask questions to keep engaged



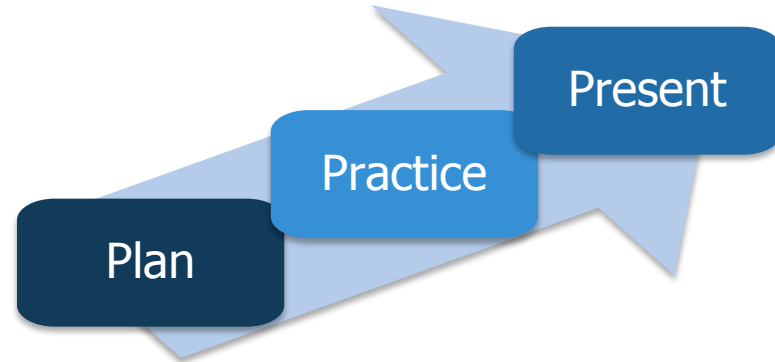
Non-Verbal Communications

- Comfortable distance
- Eye contact (camera contact)
- Appear confident
- Appropriate facial expressions
- Gestures and movement



Wrap-Up: Conclusion

- Content is key!
- Determine the message and narrow focus
- Consider approaches for each format and best structure
- Pay attention to the details
- Seek feedback and resources
- Have a plan B
- Practice, Practice, Practice



Thank you! Questions?

James Eller

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