Scientific Communication: Writing and Presenting with Impact

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Agenda

Objective: Crafting Clear Abstracts, Posters, and Talks

01. Why does Scientific Communication Matter?

02. Elements of Scientific Communication.

03. Crafting a Clear Abstract.

04. Effective Poster Design.

05. Preparing Engaging Talks.

06. The Visual Appeal.

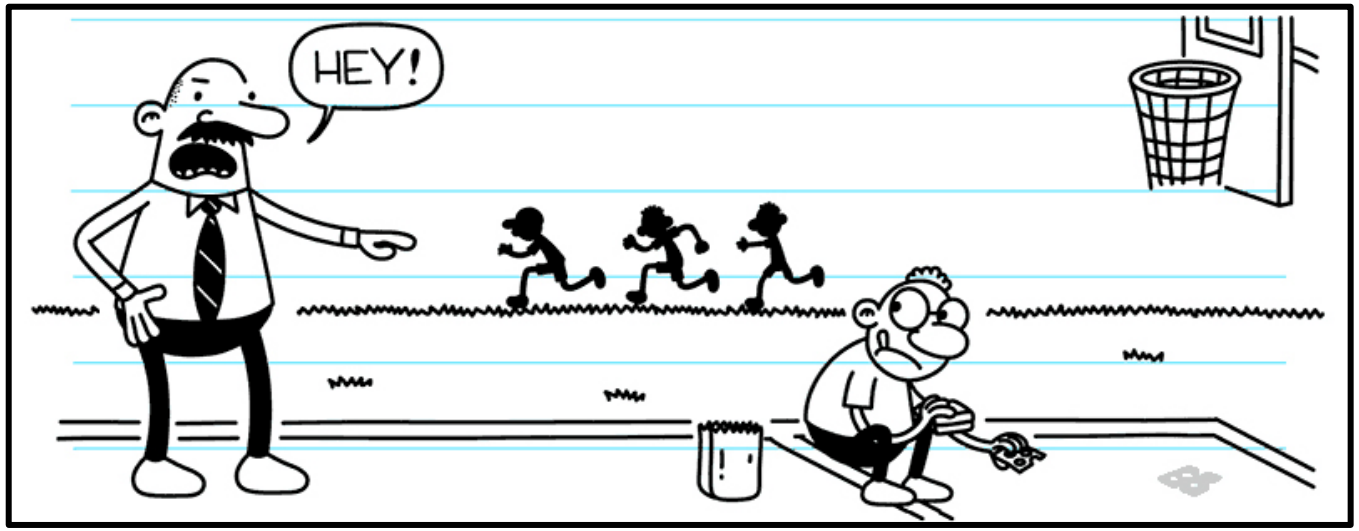
07. Common Mistakes.

08. Practice and Feedback.

09. Summary.

Research = Work + Share.

- Makes your research **understandable** and **memorable**.
- Helps share ideas with **broader** audiences.
- Essential **skill** for career success in science.

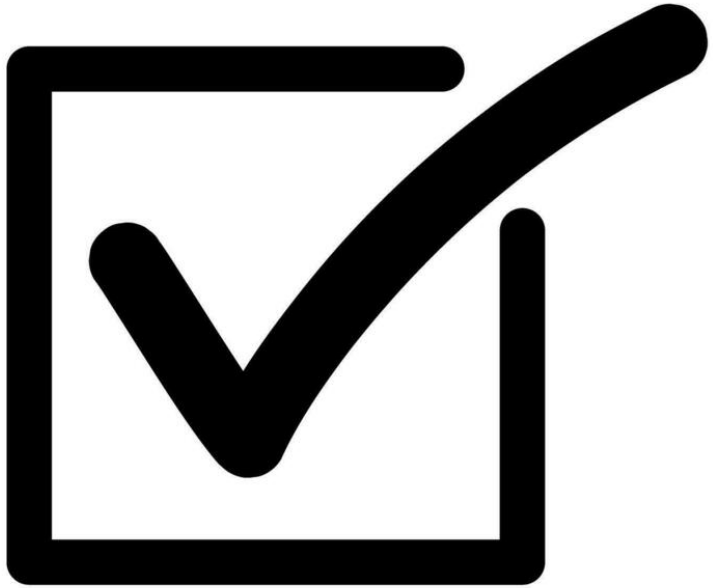


Elements of Scientific Communication.

- **Writing**: abstracts, papers, reports.
- **Visuals**: posters, slides, figures.
- **Speaking**: talks, seminars, discussions.

Crafting Clear Abstracts.

- Summarize key points briefly (background, methods, results, conclusion)
- Use simple, precise language
- Highlight significance and novelty
- Standard: 250 words!



Designing Effective Posters.

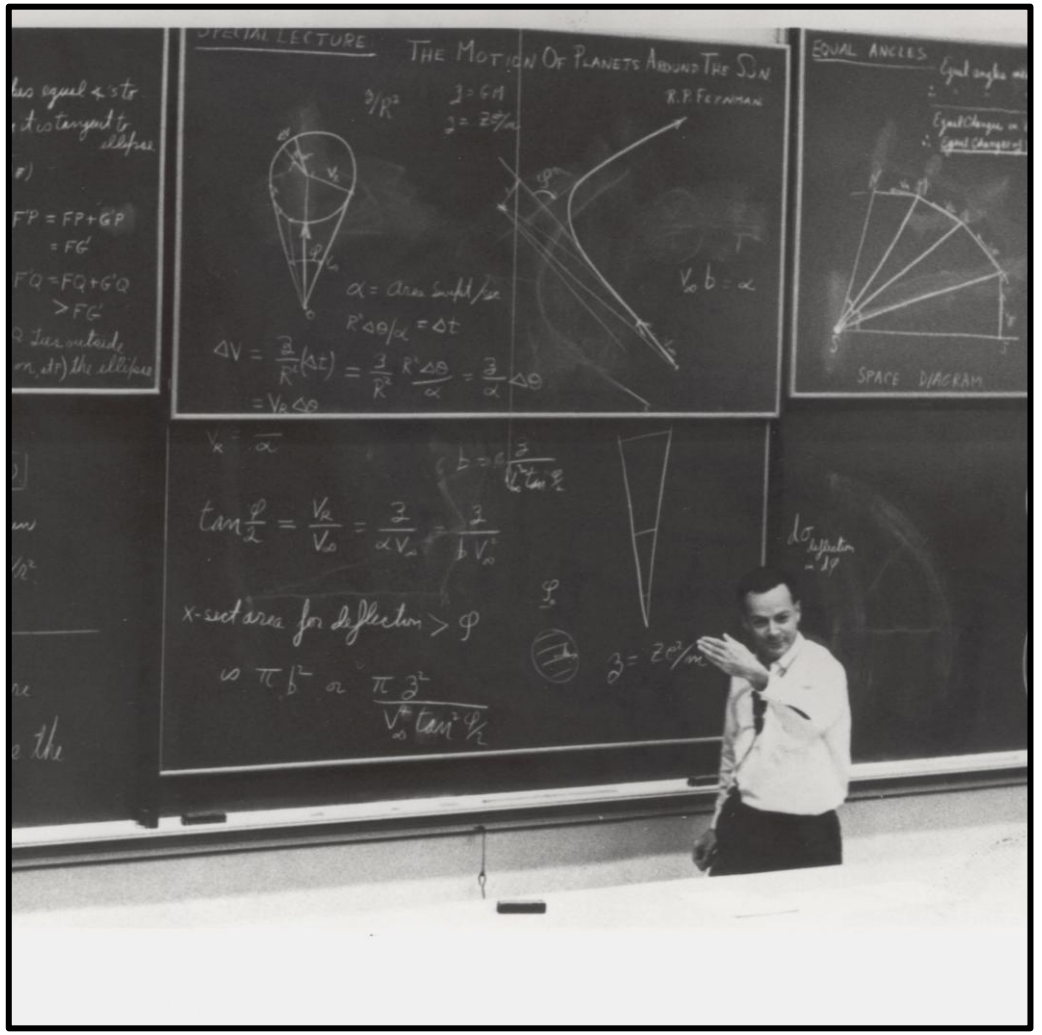
- Keep text concise, use bullet points
- Choose readable fonts and colors
- Use visuals (charts, diagrams) to tell a story
- Organize content logically with clear headings.

Poster Examples.

- https://www.umn.edu/posters/examples.html
- https://lsa.umich.edu/lsa/undergraduate-studies/academic-advising/research-poster-presentation-examples.html
- https://research.unc.edu/for-researchers/research-poster-gallery/
- https://depts.washington.edu/ccph/undergrad-research/poster-examples/
- https://www.sciencedocs.com/poster-templates-examples/

Preparing Engaging Talks.

- Start with a hook or key question
- Tell a clear story—problem, approach, results, impact
- Use visuals to complement, not overwhelm
- Practice timing and voice modulation



Visual Appeal.

- Use simple, clean slides—one main idea per slide
- Use large fonts and contrasting colors
- Label graphs clearly, avoid clutter
- Use animations sparingly to focus attention

Mistakes & Pitfalls?

- Overloading slides with text
- Reading slides verbatim
- Ignoring the audience's level/background
- Poor quality images or unreadable fonts

Practice & Feedback.

- Rehearse your presentation multiple times
- Seek feedback from peers and mentors
- Record yourself to improve delivery
- Be prepared for questions

Summary.

- Scientific communication is key to sharing your research
- Keep writing clear and concise
- Design visuals to support your message
- Practice delivering talks effectively

Q&A.

- Invite questions and interaction.
- Encourage sharing communication tips or challenges.