

National Science Week 2022

This handout will guide the development of the information you will need to present to your chosen school and students. After completion of this handout, you will have some clear, succinct messages to take with you to the school.

Your Audience

Different audiences require different types of communication. Within a school environment, you will be communicating with a variety of different groups, most importantly students and their teachers. To make the most impact, it is important to gain an understanding of your audience before stepping foot into the school.

- Why are you at the school?
- Who is your audience and what will interest them? For example, how many students and teachers, what grade and subjects?
- What do you want to achieve from presenting at the school?
- What do you want the school/students to gain from your visit?

Your Key Messages

Preparing key messages about your science before you present at schools will help improve the engagement of your audience, which will allow them to retain more information that you are providing. Key messages also help you stay on point when communicating science, so that you don't end up rambling and talking for longer than you need to get to your point.

In one sentence (each):

- Describe the purpose of your field of science.
- Describe the specific problem you are working on in a way that students would understand.
- What is the main take away message?

Engaging with the Students

When presenting to a classroom, it will help to use some teaching techniques to ensure you are engaging with the students as much as possible. Some classes may be shy, and others may be very engaged, so your speaking and engagement skills may be the difference between students gaining a lot out of a sessions or walking away confused.

- What are some questions you can use to engage with the students at different times throughout your presentation?
- What is an activity you could use to engage the students? Think about:
 - Practical component to your work
 - Scalability
 - Safety
 - Relevance to audience

If you do not have an activity, you could use one of these examples to engage the students during your presentation:

- What does a STEMist look like (drawing, activity, or classroom discussion). Provide prompts by reminding students that not all scientists wear lab coats.
- STEM supply chain- chose an object and unpack the STEM that has contributed to making it.
- Describe a challenge specific to your field of interest and get the students to come up with a solution to that challenge. Provide prompts by listing some criteria for students to follow.

Self-Reflection

In your communication, have you used:

1. acronyms or jargon
2. complex terms that are specific to your area of expertise
3. terms that are uncommon in everyday language (such as acquire or ascertain)
4. words you usually have to explain
5. terms that have multiple meanings

...if so, what terms could you use as a substitute to better engage students?

Tips for Your Next School Visit

- Engage with the teacher early to understand what their needs are from your visit.
- Have a lot of opportunities for engagement (e.g. question/answer).
- Have a clear response to the question, “what do you do?”
- Have a chat with the teacher about hands-on activities before you organise them.
- Make the activities and language accessible.
- Refer to the [Australian Curriculum](#) to understand what knowledge students may already have.

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