

## WHY AND HOW TO COMMUNICATE SCIENCE

**Student guide:** Below you will find information on the importance of communicating your science project to the general audience plus various tips on how to best succeed in doing so.

Why is it important to communicate your science project to the non-expert audience?

- **Nothing in science has any value unless it is communicated back to the society.** It is important for the general audience to have a baseline of scientific literacy especially nowadays, and this will not be possible if scientists (i.e. you!) do not ‘talk science simple’ to them!
- **When science returns to the society, then the need for more science becomes obvious.** Most research is funded by the people, and people want to have a say in the type of research that will be funded in the future. Communicating your science makes people understand why your scientific endeavor is important.
- **It is better for you to communicate your science to the general audience.** You have not understood something fully unless you can simplify it, unless you can explain it to your ..grandmother!

How to communicate your science: Tips for effective Science Communication

The tips to help you communicate your research project to the general audience are many. Below you will find a selection of some of the main ones that will help you in your first attempts to speak science simple!



- 1. Know your audience.** Always make sure you “modify” your presentation to the specific audience: are you talking to fellow researchers? To your class, to your professors?
- 2. Don't use jargon.** Jargon is like a wall between you & your audience. If you do have to use technical terms then make sure to explain them, you can use an example or an analogy for it.
- 3. Get to the point.** Tell them what you are going to tell them, then say it to them, and then summarize what you told them! This should be the general rule!
- 4. Use analogies and metaphors.** Because they work! DNA can be the “book of life”, "Weather can be your mood, whereas climate can be your personality" or "if you don't like the weather wait a few hours, if you don't like the climate move". This really helps people understand the various scientific terms.
- 5. Use stories:** people always like a good story. Storytelling is a great tool to get messages across. Before presenting data from your field trip for example, narrate the story behind the trip itself. Use personal experience and your own personal touch! If you can, be funny!
- 6. Cut the bullets:** slides full of bullets do “kill” the presentation! Try to keep your slides simple, with big messages and pictures and tell the audience the details. We will give you a more detailed toolbox as to how to prepare your ppts for presentations to the general audience, but do keep this advice for now!
- 7. Eye-contact:** talk to your audience, look at the, do not read the sides.
- 8. Practice:** Practice makes perfect. Even the more experienced presenters spend a good amount of time practicing their presentations before they go on stage. It might seem spontaneous and relaxed, but many hours of practice have been put into it.

## Effective Science Communication when presenting at a Science Festival

**Student guide:** Below, you will find important tips on how to effectively communicate your scientific project to the general audience in the context of a Science Festival. This type of communication is different to when you talk to someone that knows the science behind your research project. Specifically, we have gathered some important information as to how to write your abstract for the layman audience and how to prepare your power point presentation, again for presenting your

research project to an audience that lacks the scientific expertise but is still keen to learn all about your science project.

## Abstract

The style of the abstract for a Science Festival talk or Researcher's Night activity is totally different from a scientific conference because the audience is totally different. A great tip for the abstract of your talk or event is that a 9-year-old, with their intelligence and vocabulary, should be able to read, understand and get inspired! See more detailed tips below.

## Presentation

1. The talk needs to answer the most obvious question in the simplest way possible, which is "so what?" Tell us **why your science is relevant to our everyday life**.
2. Beware of **jargon**. Jargon is perhaps the biggest barrier to the public's understanding of scientific ideas. Sure, you can say "spatial and temporal," but why not just say "space and time," which is so much more accessible to everyone?
3. Making your ideas accessible is not the same as dumbing them down or oversimplifying. At the same time, a great tip is that in science communication you can never be completely right. But you can **avoid being wrong**.
4. A few things to consider are having **examples, stories and analogies**. Giving examples from our personal life (e.g. brothers, sisters, friends and students) will surely excite us about your talk and content.
5. **Remove bullet points**. They kill the presentation. You can instead use a single, readable sentence that the audience can key into if they get a bit lost, and then provide visuals (images, graphics, etc) which appeal to our visual sense and create a deeper sense of understanding of what's being described.
6. **Show off your passion!** Do not be embarrassed! You worked hard for this project and now is the time to show it! If you did enjoy it, do show off that passion – it is contagious!

Have the above tips in mind and your presentation will surely....be a winner!