

Scientific skills and
develop the expertise
required



**ASSIGN
BUSTER**

Scientific conferences come in a variety of forms, from small focused one-day workshops of 1–20 people to larger multiple-day meetings of 1,000 or more representatives (Corpas, Gehlenborg, Janga, & Bourne, 2008). They serve as an informal peer review where researchers can present their work at an early stage to their colleagues with the purpose of receiving feedback, which can help researchers clarify and refine their work. These meetings offer a way for scientists to practice their presentation skills and develop the expertise required to discuss their research topic in a clear and eloquent fashion. And they are a venue for researchers to present their work to interested colleagues in hopes of attaining funding.

They also allow scientists to socialize with colleagues to learn about and discuss what others in their field are undertaking. Whether the conference is a small daylong 1–20-person workshop, or weeklong 1,000 plus gathering, developing the content of an oral presentation can be difficult to develop and execute because the greatest obstacle is remaining in the strict time constraints. During the course of a large conference hundreds of papers will be presented, composed of various presentations. Most sessions are short and concise allowing 10–30 minutes per speaker (“Giving a Good Scientific Presentation” -asp.org). The strict time limit is assigned and monitored by conference officials to ensure that the entire agenda is completed on time. Each speaker is kept aware of the time remaining for each presentation by timers displayed throughout the program and are advised to be available during their allotted time slot. Time constraints are so crucial that speakers are encouraged to be waiting in the room during presentations prior to theirs

and advance to the front of the room to be available as soon as the preceding presentation is complete (“Criteria for Presentation”).

The structure of an oral presentation must be concise and specific to fit in the time limit but interesting enough to stand out in a crowd. It must contain enough evidence to emphasize the motivation of the work and the validity of the outcome (Doumont, English Communication for Scientists, 2010, Unit 4. 1). Oral presentations, unlike research papers, are localized to the audience and include a certain level of interaction in the form of questions and answers. Consequently, oral presentations are not chronicled like a typical research paper, instead the information can be delivered with one or two limited points with supporting information (“Giving a Good Scientific Presentation 1 – asp.org”). The best presentations follow published paper guidelines with an introduction, methods and results section (the body of your paper) and a conclusion, but the time constraints demand 3-5 minutes per section. Once you know what message you will deliver, you must supply information supporting your claim.

There are a number of recommendations about the content of a verbal presentation but remember that your audience will have been to many other presentations, so make it as interesting and uncomplicated as possible. The easier your presentation is to follow the more information your audience will retain. The following pages will detail what information to include in an oral presentation. Introduction: The introduction for an oral presentation is similar to the abstract for a research paper.

It supplies a short explanation of the need, context, task and conclusion to prepare the audience for the body of the presentation. Try to compose a summary of the presentation that can be stated with less than 20 everyday words (“ Giving a Good Scientific Presentation1- asp. org”). It is the main message you want the audience to remember, so opening with an “ attention getter” is beneficial (Doumont, English Communication for Scientists, 2010, Unit 4.

1). It could be a statement, question, object, pictures projected on a screen, anecdote (amusing or not), etc. You can stimulate their interest by providing the need for your research, work or product.

A great introduction will focus the attention of the audience and put everyone at ease. It will explain what the speaker wishes to achieve during the presentation, and give an overview of key points (“ oral presentation – content and structure”). When a presentation is interesting more researchers will be curious about the work and it may bring several opportunities. Body: The body includes your methods and results and should focus on presenting the main message. State the reason for choosing the project and statistical analysis. Provide chronological steps for carrying out the project and data collection.

And share how the project is supported. And reveal whether the results were expected or unexpected (York, “ University of York”). There should be two to five statements to support your main message, and two to five subpoints for each main point. These should provide as much detail as the audience can retain from a single speech (Doumont, English Communication for Scientists,

2010, Unit 4. 1). These details need to be organized in a logical sequence with the two strongest points first and last so the audience is drawn in at the beginning and intrigued at the end. Time management is necessary so include only the details that will be convincing to the audience when reporting the methods and materials (Doumont, English Communication for Scientists, 2010, Unit 4. 1).

The topic may need some back-ground information so everyone can understand the significance of the presentation, but this should not disrupt the discussion. After providing sufficient information, redirect the focus back to the research by restating the main message (“How to Make an Oral Presentation of Your Research”). Closing: Closing the presentation is as important as the opening. This part is often rushed because the speaker is trying to get as much information to the audience as possible. Review the main points so the audience will remember them and be prepared for the conclusion. Provide highlights that are tied to the audience’s reason for attending the presentation.

Next, restate your main message in greater detail. And finally, close the presentation by letting the audience know these are your last words on the subject by referring back to the attention getter. Mentioning your initial statement, question, object, picture, anecdote etc. indicates that you have completed the loop and gives the audience the signal to applaud.

Acknowledgments and references are usually not required in an oral presentation unless the presenter has used seminal works or direct quotes, in this case relevant references should be provided (“Giving a Good Scientific

Presentation1 -asp. org”). There are special considerations when citing references since your oral presentation will be composed mostly of a research paper. Observation regarding citations should be followed by incorporating verbal cues, voice inflection or pausing in strategic places (“Conference Papers”), such as saying ‘Litao and Kamat said, quote, “Understanding the principles of the erythrocyte sedimentation rate and C-reactive protein is essential as both test systems are widely used by clinicians for monitoring all causes of inflammatory conditions.

‘ end quote. However, overuse of quotations is ill-advised as it appears as though you are only regurgitating what other people have reported instead of presenting your findings. Instead, The Writing Center at Chapel Hill advises to use voice inflection or strategic pauses to indicate when quoting. In conclusion, open and close the presentation strong. Establish why your presentation is significant and provide results. Demonstrate why the audience should care about what is presented. And, finally, thank the audience for attending and close with a question and answer session.

The audience should leave the presentation with the belief that the presenter knows the literature and has a desire to collaborate or learn more about this particular presentation.