

TOP 10 FEATURES OF A GOOD ORAL PRESENTATION AT PSB

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PSB plenary talks are only ten minutes, followed by five minutes of questions and answers. Contrary to what you may believe, creating a ten minute talk requires much more effort than producing a longer one, a phenomenon Blaise Pascal noted in 1657 when he said “I have made this longer than usual because I have not had time to make it shorter.” After attending more than 20 years of PSB sessions on a wide range of topics, we have identified some of the features that excellent presentations. Here is our top ten:

10. Use only relevant graphical elements

Everything on your slides should be related to the scientific points you are trying to make. Leave the cool backgrounds and cute clip art for birthday party e-vites. Avoid movement on your slides; animated gifs and slow reveals distract from your message. Do not use them unless there is a good scientific reason. Keep your transitions subtle.

9. Use a large, dark font on light background

This includes fonts for tables and captions. Rooms at PSB are large, and your slides should be readable in the back. Many slide templates available in WORD or Keynote do not have adequate contrast between background and text. A good rule of thumb is to keep all fonts at least 24 points in size, and make titles larger than that.

8. Use very few (ideally no) mathematical formulas

Unless a formula is central to the point you are trying to make, they tend to be distracting. The audience will focus on understanding the formula, and pay less attention to what you are saying. A good alternative can be to verbally describe your mathematical approach (for

example: “we use a novel, parameter-driven weighting of the edges to calculate the cost of the path”). Interested listeners will go to your paper for the details (see #5).

7. Use graphics rather than tables

It is hard to quickly comprehend a table with more than 3 columns or 4 rows. Use simple, well-designed graphics for anything that would require more rows or columns. Make sure tables and graphics have clearly readable labels. Think about how to keep the audience focused on what you are saying, processing as you explain, rather than reading ahead.

6. Use the slides to complement your speaking, rather than duplicate it

Don't put too much text on slides, and especially don't read your slides to the audience. Put material needed to cue yourself in private notes, not on your slides. Slide text should tease your main points, not make them. The title of the slide should convey the main point, and the content should complement your speaking about it. Unlike class slides, presentation slides are not distributed, so the audience will only see them while you present. The slides are not there to provide the audience with notes about your talk.

5. Make your audience eager to read your paper

In the time you have, you cannot explain your approach and results fully. A successful PSB talk makes the audience interested in reading your paper. Convey the significance of the problem you are tackling, emphasize important results or innovative methods. A ten-minute talk is an advertisement, where you can make one substantial scientific point. Make your audience want to read the paper or see the poster.

4. Target a broad audience

The most common mistake at PSB is to assume the audience knows more than it does about your topic, its importance, and the state of the science. The PSB audience is very diverse, the areas of expertise of the audience vary, and they many not have thought about your area for a long time or even at all. Make the problem and the significance of your results clear to all. Practice presenting to a general audience. Recruit your family and friends, and make them sit through your presentation... several times. The problem and results should be clear to non-experts, even if the methods are not. This also gives you a chance to nail your timing (see #1).

3. Deliver your presentation clearly and enthusiastically

Show your excitement about your presentation; project your voice clearly. There is nothing like a barely audible and monotone presentation to guarantee that the audience tunes out... and will not have any questions at the end. Use the microphone even if you move around the stage. Be attentive to the audience—make eye contact. Look for the audience members who are nodding and interacting with you to gain energy. Make sure you are rested, hydrated, and fed for your presentation, as this will help you feel energetic. Leave any personal problems behind for the length of your presentation: you are on stage, and you owe your audience a good talk. Your talk has to be better than what is waiting for them outside... and that's a tall order at PSB.

2. Start with the end in mind

The audience needs to appreciate *what* you achieved before they will care *how* you achieved it. Right after you state the significance of the problem, tease your best result briefly so they wonder, “How did she get that?” Compare your work to others, and give motivating examples. If they the audience thinks the results are important, they’ll follow your methods and the rest of the talk.

1. Don’t rush, and be sure to leave time for questions

This is the most important part of a good presentation. Pick the single most important point you have to make, and make it well. A rushed or over-full presentation is counterproductive. Conclude with a restatement of your key point (e.g. your most important result, or the novelty of your method) and leave the complete 5 minutes for questions. The PSB audience is full of highly experienced researchers from a wide variety of backgrounds, and can give you great feedback on the spot if you let them. Time your talk to end at no more than 10 minutes, period. If you go over, you can lose the goodwill of the audience. Practice. Practice. Practice. If you need to cut something, discussion of future work is a good place to start. Remember, your goal is to get the audience interested in reading your paper and talking with you during the meeting. You don’t have to say everything you have to say in that 10 minutes. Your task is to raise the interest of hundreds of outstanding scientists in your work; there will be plenty of time for follow-up on the beach.