Guidelines for writing and delivering a scientific presentation

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Preparing your presentation

- Speak to your audience. Find out what the level of your audience is going to be and design your talk accordingly. If a talk is supposed to be at the advanced undergrad level (this is really common) then don’t include technical details about your work.

- An outline slide is typically not needed. Every outline slide tends to look the same so why bother? I think including an outline slide is a waste of precious time, especially for a short talk.

- Use color to emphasize points and provide structure, not to show your artistic creativity. Use color in the same way that you would use bold, underline or italics in a document.

- Use Arial or similar font with large font sizes. It has been shown that Arial or similar fonts are much easier for people to read. In addition, a good rule of thumb is to use a minimum font size of 20. Clarity should be your goal so this is not the time to get creative with fonts.

- Give the audience a single take home message. A commonly used phrase from the book Dazzle 'em with Style is “tell 'em what you’re gonna tell 'em, then tell 'em, then tell 'em what you’ve told 'em.” In other words, you should have one lesson that you want the audience to learn, then tell them about it multiple times in your presentation.

- One minute per slide. If you put more than two minutes of information on a slide people tend to lose focus. If you put less than 30 seconds of information on a slide then people don’t have time to properly absorb the information. So, a good rule of thumb is one minute per slide.

- Make your slides clean and simple. Bullet points should be simple concise phrases, not complete sentences. The exception to this rule is that if people have a hard time understanding you then it is better to use longer sentences to ensure that the audience can follow your presentation.

- A picture is worth a thousand words. It is always better to show a well-designed picture than a list of bullet points. It is always better to show a plot than a table.

Delivering your presentation

- Respect the clock. Your talk should be within 10% of the allotted time, e.g., if your talk is supposed to be 10 minutes then it should be between 9-11 minutes. No exceptions or excuses! The best way to test the length of your presentation is to give a practice presentation to a friend.

- Practice makes perfect. Rehearsing your presentation is critical to giving a good talk. Don’t just whisper the presentation to yourself. Find a friend that is willing to listen to your talk and give constructive criticism.

- Make eye contact with the audience. You want to speak to your audience not just in front of them.

- Slow down. Many speaking problems can be remedied by simply taking a deep breath and slowing down.