

A Modest Suggestion to Improve Proposals, Defenses, and Manuscripts

Advisory committees for graduate students often share this experience:

- a) Student submits document.
- b) Student presents related material in a public seminar.
- c) Committee then asks “Why was the written document confusing but the talk was so clear?”
- d) Committee expects the student to revise the document to reflect the talk.

Many of us (faculty included) fall into the same trap when writing a manuscript without a talk: we pour thoughts into paragraphs, then edit repeatedly to filter that text to a clearer story. There are two reasons why this is unwise:

- a) For research proposals and defenses, the two audiences (i.e., committee and fellow grad students) are not necessarily that different. But the above process treats them differently, where the less clear product is delivered to the committee with a formal judgment task.
- b) We can spend lots of time and effort re-writing – a task that challenges many of us, and that does not lead to clear communication of complicated science.

So here's an idea:

1. Use presentation software (e.g., Powerpoint), because it is *an outline in disguise*, with opportunities for color graphics, etc. Use the bullet lists etc. as an outline, where words will naturally flow later to fill in details around each bullet point and graphic. Explain only the details needed to get your points across, the same as you would in front of an audience.
2. Now write the document. Follow the outline, and use the same words you would speak around the bullet points and graphics.
3. Edit your conversational, draft document to make it less conversational and more in line with formal scientific writing (but not overly stiff). Insert citations, formatting, etc. Give that to your committee. Or consider that a draft manuscript if not presenting.
4. If presenting, then revise your talk/poster to update it for changes you thought of while writing the document.

Now you have a document that is more logically composed and tightly organized and matches the talk/poster in style and content. Your paper will stick to the main points more efficiently and lead the reader more explicitly through opaque parts. Likewise, your talk is polished to the standards of scientific papers, and has been edited to match your written work.

Try it, and let me know how it works,

Dave Jenkins
UCF Biology