Checklist for your research presentations

Jan van Gemert, j.c.vangemert@tudelft.nl
January 22, 2018

The goal of this document is to give structure to presentations. Benefit for you: avoid my comments by following these guidelines.

Make a deliberate choice for the medium for your presentation (white-board/slides). This document assumes that slides are used, if not, you will have to extrapolate yourself.

Motivation	Content	Form	Analysis
M1 Goal M2 Audience M3 Refresh M4 Unburden	C1 1 slide 1 topic C2 Less=More C3 Self-contained C4 Consistent C5 No Guessing C6 Multi-modal C6 Multi-modal	F1 Too much F2 No TOC F3 Layout F4 No Sents F5 Animate F6 Complete Figs F7 Number slides	A1 Exps answer Q A2 Limitations A3 Peer review

Motivation of your presentation

What is the goal? What you want to get out of it. There is a reason for giving your presentation: What is it? (and, no, it is not: 'it is my turn' or 'they told me to'). It may help to share this reason with the audience.

Audience. Whom are you presenting for? What do you want the audience to take away? What is their background and what are they looking for? Help your audience find it. Avoid Jargon.

Refresh. Always start with 1 or 2 slides (re-)introduction. Do not assume your audience will remember anything from your previous presentation; there

may also be new viewers present. If it is important: briefly repeat it.

Unburden the audience. If the audience misinterprets the message it is the fault of the presenter. Its the responsibility of the presenter to reduce the understanding effort. Prof Freeman: The most dangerous mistake you can make is assuming that the reviewer will understand the point. Audience understanding can be validated by asking them.

Content of the presentation

A single slide has only one single topic. A slide has a title to scope the topic. It has a concluding phrase that makes the main point of the topic.

Less is more. Every word/figure/image should have an explicit reason to exist. Do this test: Can I safely remove it yes or no? Presenting concisely takes time and effort; it enhances understanding.

Self-contained. The audience has not memorized the full presentation. Remind the audience of definitions or symbols when defined 'a long time ago'.

Consistent. Use a defined symbol/term consistently and uniquely.

No guessing. Never expect the audience to do inference. If the viewer has to guess, the guess will often be not what you had in mind. Always explicitly write what the viewer is supposed to see/conclude.

Multi-modal. There are various people in the audience. Personal preferences range from visually, formulas, auditory. Be sure to present a mix.

Syntax, layout and form

Do not present too much. A rough guideline: at least 1 minute per slide.

Do not use a table of contents. Avoid the default toc of "•intro, •method, •exps, •conclusion". Another form (e.g.: visual abstract) can be useful.

Good layout eases the viewer's effort. Use the full screen. Be Consistent.

Do not write long sentences. Use bullet points with one phrase per point. One phrase fits on a single line. Correct grammar is secondary, e.g., there is no need for complete sentences with a subject, a verb, etc.

Only use animations IFF they add value. For example, to emphasize, or to prevent overload by iteratively making more content appear.

Figures are complete. Label all axis, show the units on the axis, use a legend with clear differences between entries and add a title to each (sub)figure so that the reader can directly see what is shown. Do not use too thin lines or too small of a font: It has to be seen from the back of the room. Add the conclusion you would like the viewer to draw.

Number your slides. so that viewers can refer to them.

Presenting analysis

Experiments answer a question. If you present experiments, note that every experiment starts with a question. Write the question on the slide. The experiment should answer that question. Write the answer on the slide.

Limitations. If applicable: What are the limitations of your method. No method will always be the best. Showing insight where it fails is strong. The goal of research is understanding.

Peer review. Find a peer to review each others presentations. Check if their presentation follows these guidelines. Keep in mind that if an honest viewer did not understand it, it is the mistake of the presenter.