How to give a good presentation

Problem-based learning - 11 May 2020
Things to take care of

1. Content
2. Graphics
3. Slides (Style, structure, …)
4. General things
Content (1)

- **Give a presentation** not just a summary of your work
  - Make sure the audience can understand what you explain immediately, they don’t have a chance to go back and read something again
  - Provide a clear structure so that the audience can follow your analysis
  - Think about interesting ways to show and highlight your results

- **Think about your audience**
  - Only present details that are understandable for your audience
    - Don’t cover e.g. technical or methodological aspects for which the audience is missing prior knowledge
  - Provide background information if needed
    - Depending on your audience, you can assume everyone to know certain things or not
    - E.g. names of databases, common methods,...
Content (2)

● Have a **clear focus**
  ○ A presentation should cover the most important aspects/results in the given time
  ○ Only show intermediate steps/details of methods that are relevant
  ○ Focus on your most important results without speculation of important negative results (don’t massage your results, just focus)

● Try to **simplify complex aspects**

● Use simple examples to explain complicated interrelationships
  ○ Try to find (artificial) examples as simple as possible
  ○ Explain the more complex application afterwards using e.g. a real-world example

● Example: You want to explain multiple sequence alignments
  ○ Start with 3 toy sequences of length <10
  ○ Show a real-world example of 100s of sequences from an alignment visualizer
References should be cited according to scientific conventions already in the presentation (i.e. title, author, journal, date of release)
- You don’t have to cite everything, but the main aspects like
  - Data sources/datasets
  - Methods from others
  - Surprising findings your results are based on
  - ...
- Do not use links, but give an actual citation
  - Exception: sometimes you can cite figures using a link
- When presenting methods from others, at least state the first author of the corresponding paper in your presentation
- See the example on the next slide
BLAST: Basic Local Alignment Search Tool

Content goes here…. (The citation can also be smaller)

Altschul et al. (1990): "Basic local alignment search tool."
Graphics (1)

- Try to **use graphics** as often as possible
  - Can include e.g. logos for used databases, sketches, workflow diagrams,...
  - “Unofficial” rule in the Rostlab: every other slide should contain a graphic

- If you adapt graphics from a journal/download them from the internet, include the proper citation

- Make sure your graphics have a **high enough resolution**
  - Sometimes, it looks better to draw the graphic again yourself instead of using a badly scanned picture

- Make graphics as big as possible (i.e. use the whole space available on the slide)
Graphics (2)

- Graphics should have a title and a clear labelling of the axes
- Make sure that title, labels, etc. are large enough
  - For most visualization tools, the default parameters don’t produce large enough labels
- Make sure the important aspects of your graphic are visually easy to see
  - Mark certain data points that you want to discuss with an arrow or similar
  - Draw horizontal or vertical lines to separate parts of the graphic
  - Colour different aspects differently (make sure that these colours are easy to distinguish)
- Make sure that you explain your graphic thoroughly
  - Start with a general explanation of what we see and the axes before discussing individual data points
  - Use a pointer to explain certain aspects of your figure
Include your name (first and last name on the 1st slide)
Usually, you don’t need an outline, the structure of your presentation should become clear through your way of presenting
Include slide numbers (makes it easier to ask questions in the end)

The font size should be at least 18pt
Don’t use a font with Serifen (e.g. Times New Roman)
Avoid center justification
Slides (2)

- Avoid too extravagant layouts and shrill colours
- Try to avoid animations/use them moderately
  - Use simple animations without big effects
- Avoid full sentences except for definitions or similar
- Make sure that the text is readable
  - Especially if you are using a different colour scheme than black text on white background
Slides (3)

- Make sure to use all the space on a slide without overloading it
- Follow the 5 ± 2 rule: 5 ± 2 bullet points per slide
- Take enough time to explain a slide (2-3 minutes per slide)
  - Might be even longer if you have figures or graphics on the slide
- Make sure you are presenting and not your slides!
  - Your slides should only support your presentation
  - People should not be distracted from your presentation by the information on your slides
General things

● Check the technical setup in advance
● Make sure to have a backup plan (i.e. have a USB stick with your presentation prepared)
● Introduce yourself
● Talk to the audience, not the screen
● Speak slowly and clearly
● Try to speak without note cards
● Stay within the given time
● Mark the ending of your talk clearly
● **Practice, practice, practice!**
  ○ Only practicing allows you to make sure that you stay within the given time
  ○ Make sure that your talk doesn’t sounds rehearsed
General things - for online meetings

- Not all of the points from the previous slide apply to the current situation
- Check if everybody can hear and see you/your slides (get feedback e.g. via the chat)
- Make sure everybody else is muted to avoid echoes or background noises
- Make sure that everyone has access to your slides (i.e. send them around beforehand)
- Regularly check if there are questions on the chat (questions regarding the content can be answered after the talk, but people might have connectivity issues)
- React to connectivity issues, i.e. pause for a minute or repeat what you just said
THAT CONCLUDES MY TWO-HOUR PRESENTATION. ANY QUESTIONS?

DID YOU INTEND THE PRESENTATION TO BE INCOMPREHENSIBLE, OR DO YOU HAVE SOME SORT OF RARE “POWER-POINT” DISABILITY?

ARE THERE ANY QUESTIONS ABOUT THE CONTENT?

THERE WAS CONTENT?