

## Guidelines on the preparation of presentations in PowerPoint

PowerPoint, used in direct projection mode, is a versatile medium to aid the giving of presentations and lectures. By its very nature, software like this can be used well or badly. This document is an attempt to crystallise the basic elements of good practice in the context of its use for lecturing in biology, as opposed to the subtly different activity of giving business presentations (which the guidelines in the software itself provides).

1. Keep to a consistent design throughout the presentation e.g. in background, font type etc.
  - a. Set up in Slide Master before you start preparing your presentation. Then stick to it.
  - b. Changing styles distracts from the presentation.
2. Do not have too many slides. Rough guide: 1 slide per minute, not including the title and acknowledgements slides. i.e., a ten minute presentation should have about 12 slides.
3. Do not include large amounts of text on the screen.
  - a. General guide: maximum of 20 words per slide or view.
4. Do not show complete sentences on the screen and then simply read them.
  - a. Show short headings or key words and speak to them.
  - b. Words to be spoken to your slide can be entered in the Notes section for that slide (as a reminder just in case you forget what you wish to say, but do not read them out).
5. Animate bulleted points may appear one at a time in sentences, and speak each point in turn. When using animated bulleted points, once you move on to the next sentence / bullet point the previous sentence/bullet point should fade to a less prominent colour (e.g grey).
6. Absolute minimum size of character should be 1/60th of the screen width (18 point character setting for 'On screen show' page setup). Even those are usually a bit small.
  - a. Generally recommend 28pt for text and 40pt for titles and headings. This is especially important when labelling diagrams, graphs etc.
7. Serif fonts (e.g. Times New Roman) make text easier to read than sans serif fonts.
  - a. Sans serif fonts (e.g. Helvetica, Futura, Arial) should only be used for titles and headings.
8. Take great care in the choice of colours for background and text.
  - a. Avoid strong primary colours.
  - b. People suffering from colour blindness find it almost impossible to read text if some combinations are used (e.g. red on green, green on red).
  - c. Red on blue is also bad.
  - d. It is advisable to stick to the colour schemes provided with PowerPoint.
  - e. Background for direct projection:
    - i. Not too dark (sends audience to sleep).
    - ii. Not too light (uncomfortable with most modern data projectors).
  - f. Avoid complex background schemes, apart from in title slides
    - i. Most people will have seen the standard PowerPoint designs, so their use tends to make a negative impact.

9. Clutter: Although some institutions insist on showing their logos on every slide, this is very distracting and clutters up the slide.
  - a. Corporate logos should be restricted to first and last slides, if possible.
  - b. Remove date and footer details from the Slide Master
10. Fancy animations (such as text flying in from all directions) or slide transitions should be avoided, unless they serve a specific purpose.
  - a. Usually, they only distract from the presentation.
11. Complex diagrams should be introduced in sections (using the animation feature, or a sequence of slides).
  - a. Do not introduce too much information at one time.
12. Bitmap images should be made to fill the slide, if possible.
  - a. Except where comparisons between images are to be made between images.
  - b. Use \*.jpg format for photographic type images, if possible.
  - c. When labels (e.g. arrows) need to be added to bitmaps, these should be incorporated in the bitmap – no overlaid.
13. Always save your bitmap images in a size suitable for presentation (e.g. 92dpi).
  - a. The XP version of PowerPoint has a tool to compress all images in a presentation to the appropriate size. File is then only as large as it needs to be with no delays in the appearance of images.
14. All images should have a scale bar, given in SI units of measurement (e.g., m, mm,  $\mu\text{m}$ , nm). Placing a magnification on micrographs (e.g. x400) is meaningless.
15. Take care when showing numerical data that you do not imply accuracy of measurement that is clearly absurd (e.g. 'average diameter of the mitochondria was  $1.2135632\mu\text{m}$  – when normal resolution limit of TEM for biological specimens is about  $0.005\mu\text{m}$ )!
16. All axes of graphs/charts etc. must be clearly labelled – with units of measurement shown. Those displaying numerical data should show error bars.
17. Only use cliparts etc. if you really need to (maybe in the Title or Payoff Side) – most people will have seen them before!
18. Spell-check your slides carefully – mistakes will only distract the audience.

**Then, when giving your presentation / lecture:**

1. Have a printed version of the presentation in front of you – including any notes etc.
  - a. You then know which slide is coming next, and can lead into it.
2. Look at the audience – not the screen. Scan and look at their faces, but do not dwell on any individual – that can make some people feel very uncomfortable.
3. Try to place the PC screen in front of you, so that you can see what is on the screen without having to turn around and look at it, all the time – thereby turning your back on the audience.
  - a. You may turn to the screen to use a pointer – better still is to incorporate an animated pointer on your slide.
4. Speak clearly and slowly – no one remembers what you have said if you speak too fast. Vary the tone of your voice, if possible.