The art of science communication: creating posters & newsletters
Outline

• General design principles
• Use maps and aerial photos for context
• Use of color
• Tips for posters
• Tips of newsletters
Design principles for effective print documents

- Balance
- Proximity
- Alignment
- Contrast and emphasis
- Blank space
Balance

These designs are symmetrical

The left design is balanced, the right creates tension
Balance

Dividing in thirds is often more subtle than dividing in halves
Balance

Place the focus of the image along the column line or intersection
Proximity of objects can be used to imply association – whether objects are similar or different
Alignment can be used to help draw a reader through a document.

Center alignment of text can be difficult to read.
Contrast and emphasis

Contrast with color

Contrast with TYPE

Contrast with SIZE
Blank space helps readability

- No blank space creates a ‘crowded’ feel
- Blank space is easier to read, and allows for flow between sections
Tips for posters

- Types of posters
- Software
- Titles and text
- Color
- Mock-ups
- Time allocation
- Handouts
Types: Technical/methods

- Audience – specialist scientists
- Includes – detailed methods
- Capturing attention less important
- Need to justify key elements of techniques
- But… still includes photos/maps/conceptual diagrams
Types: Informed public

- Audience – informed public or non-specialist scientists
- Includes – clear syntheses
- Capturing attention – important
- Needs to summarize information
- Conceptual diagrams, maps and photos very useful tools
Types: General public

- Audience – general public
- Includes – message, no justification
- Capturing vital attention
- Need to be visually attractive
- So... good photos are key
Types of science posters

Your target audience determines the mix of poster elements

Specialist scientists

Informed public

General public

Formatting tip:
If in doubt, use a plain background.
Start right — use the right software!

- **Adobe InDesign** – best…
  - Graphics files can be linked

- **Adobe Illustrator** – good…
  - Files get large

- **Microsoft PowerPoint** – avoid!!!!
  - Inflexible and printing difficulties
Use a short, active, large title

- The one main message of the document should be summarized in the title
- Title can be a statement or a question
- If you can’t read it from ~10 meters, it is too small
- Use san serif font at 96 pt (5 cm high letters)
Authors and affiliations second only to title

- Authors’ names should be easily legible
- Put authors’ names at top
- Include relevant, high quality logos (not web grabs)
- Photo of principal author is useful
Use active subtitles

Replace methods/results/discussion with synthetic active subtitles
Clear, large text should be used to support graphics

- Use a clear, system font (e.g. Arial)
- 1cm tall when printed, i.e. approx. 24 pt
- Use bullet points and extended legends (not an essay)
Use photos/maps for context—not decoration!

• Need to provide good context (maps/aerial photos)
• Photos should AT LEAST have a caption, no decoration!
• Distinguish captions from the rest of the text
Judicious use of color

- Subtle background and one or two high contrast text colors
- Colors and icons can be used to link photos/figures & text
Mock up and review, review, review

Depth range and light requirements of the seagrass *Zostera capricorni* in Moreton Bay, Australia

- **Title**
- **Mock layout**
- **Final poster**

- Start with fundamental message – the title
- A mock layout helps plan balance and flow
- Does it work? Get input from others
- Run the 10 second test (the time available on average to get a reader’s attention)
- Check the required size requirements/limitations
Do you have a week of your life to spare?

An effective poster takes time, even after all the data is analyzed.
Make handouts

• Should be able to read text printed at A4
• Ensure your address is readable
Tips for newsletters

• Many poster tips apply
• Broad audience consideration
• Effective 4-page spread
• Front page elements
• Back page elements
Poster tips that also apply to newsletters

- Active titles and subtitles
- Visuals that provide context
- Use the right software
4-page spread

- Depending on size, use 2 or 3 columns per page
- Text boxes and visuals can take up 1, 2, or 3 columns
Front page elements

- Descriptive title
- Abstract or summary of message
- Interesting visuals
Back page elements

- Reference list
- Contact information
- Acknowledgements
Reminders

• Consider your audience
• Apply the general design principles
• Mock-up and review
• Consider your timeline