Effective Poster Presentations
Poster Presentations

This workshop will help you to create a poster that communicates your message to your target audience.

Content:
- Preparation
- Content
- Design
- Presentation

Poster Feedback

Once you have attended a poster presentations course you are eligible to receive feedback and/or some assistance with using PowerPoint on a poster you are preparing.

You should contact the course tutor to arrange an appointment.

Course tutors are very accommodating but busy people so please give them adequate notice, preferably at least two weeks, before you wish to see them.

Please note that we are unable to provide feedback via e-mail.

Dr Heather Sears
h.j.sears@leeds.ac.uk
What is a poster?
1. Preparation

- Audience – who are they?
- Message – what do they want to know? How are you going to communicate your message?
- Marketing - how to attract them?

Audience – who are they?

Define your audience. Who will be at the event? Be specific!

Message – what do they want to know?

Why is your research important to this audience?

What do you want this audience to remember about your research?

This is your take home message for the audience

Your take home message:
- This is the theme of your poster, the focal point.
- Everything you choose to include on your poster should support this theme
## Message – how are you going to communicate your message?

<table>
<thead>
<tr>
<th>How much do the audience already know about your area of research?</th>
<th>What don’t they know?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What specialist/expert language can you use?</th>
<th>What should you leave out or explain?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What can you use to communicate your message?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

The poster and presenter will (*insert active verb*)……………………
the audience about (*insert message*)……………………………………
………………………………………………………………………………...
………………………………………………………………………………...
Testing the level of your writing
Microsoft Word uses the Flesch-Kincaid grade formula and Flesch Reading ease formula to assess writing level. The Flesch-Kincaid grade formula calculates an overall reading grade level (U.S. school grade level** - Grade 8= 13-14 years old; Grade 12= 17-18 years old) while the Flesch reading ease formula calculates a score of reading ease from 0-100, 100 being easier to read. Both Formulae use average sentence length (ASL- number of words divided by the number of sentences) and average syllables per word (ASW- number of syllables divided by the number of words). Please note that Microsoft Word readability statistics will not display a grade level greater than Grade 12. These formulae also work best with documents over 200 words.

Displaying readability statistics in Microsoft Word 2007

- Click the Microsoft Office Button , and then click Word Options.
- Click Proofing.
- Make sure Check grammar with spelling is selected.
- Go to the review ribbon and select Spelling and Grammar.
- Under When correcting grammar in Word, select the Show readability statistics check box.
- When Microsoft Word finishes checking spelling and grammar, it displays information about the reading level of the document or the text you have selected.

Lowering the Grade level of your writing
Since the Flesch-Kincaid formulae use average sentence length (ASL- number of words divided by the number of sentences) and average syllables per word (ASW- number of syllables divided by the number of words) to calculate grade level, use more small sentences rather than a string of long sentences. Try using smaller words like “tell, show and merge” rather than “identify, illustrate and integrate” and use large technical words only when absolutely necessary. Generalize, simplify your grammar, use analogies, and omit sentences that do not add meaning.

Quick response code generator:
http://www.visualead.com/qurify2
Marketing – how to attract them?

- Make people want to visit your poster in advance with a well written, interesting abstract.
- Unless someone has specifically decided to come and visit your poster you need to capture their attention across a crowded room: the title and visual appeal of your presentation are important factors.

Abstract
A good abstract almost writes the poster text for you!

Some tips for abstract writing, particularly for non specialist audiences

“Have something to say and say it as clearly as you can. That is the only secret to style”.
(Matthew Arnold, 1822-1888).

Write for an invisible reader. This is a bright, intelligent person; one who is quite capable of understanding unfamiliar complex ideas if they are explained in a simple, straightforward way. Write your abstract with this person in mind. Write as though you are explaining things aloud to your invisible second reader.

One test of good writing is to read it aloud. If it sounds formal but still natural, you have probably got the style and tone right. If it sounds convoluted and pretentious and is difficult to read aloud then you need to rewrite.

Avoid jargon. Jargon is a specialised language shared by a group of people. Jargon is useful to the group but becomes a problem when it stops others understanding your message.

Use plain language and everyday words. Keep sentences short and simple. Sentences should be less than 25 words long.

Make sure your abstract is grammatically correct with correct spelling and punctuation.

If you are asked to meet certain requirements e.g. 250 words – then make sure that’s what you provide.

Avoid acronyms and abbreviations.

Provide context. Give concrete everyday examples. Paint a picture for the reader.

Focus on the relevance, application, benefits. The ‘so what?’ factor. Why is the work important?

What’s the WOW factor? Does it inspire? Make the reader excited about your work.
**Simple starting structure for an abstract for an academic, specialist audience:**
- Write a sentence or two briefly describing what you work on - covering the state of play before you came along
- Summarise your findings - making sure you refer to the methodology you used
- State your conclusions in succinct and descriptive terms

**Simple starting structure for an abstract aimed at non-specialists:**

<table>
<thead>
<tr>
<th>What’s the current situation?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What’s the issue/problem?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What would help improve the situation/ What am I going to do about it?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What will this mean – how will the world be different?</th>
</tr>
</thead>
</table>
Title

- capture the attention of your prospective audience.
- tell your prospective audience what’s in it for them
- deliver a complete, immediately understandable message.
- specific for the event and audience
- (Not your PhD title!!)

Why not start a swipe file for inspiration?

Traditionally, swipe files have been used in advertising and copywriting as a repository for copy, images and layouts. But swipe files can be applied to just about any type of creative work, development projects and writing assignments.

A swipe file is simply a file or box where you collect winning examples of whatever you’re interested in, in this case research presentations.

In our ‘posters and presentations’ swipe file (a word document) we collect examples of titles and abstracts that we can use in our training sessions. For example:

- School of Healthcare Research Seminar  
  *Smoking and severe mental ill health: what are the health implications and can we help people quit?* Professor Simon Gilbody, Health Sciences, York

- **Reducing Plague by Drowning Witches: locating the real mechanisms of change in social and health interventions.”** Prof Ray Pawson, Sociology and Social Policy, Leeds

- **Stephen Coleman** from ICS and **Steve Bottoms** from the School of English speaking, the title will be: **Enacting interviews: A dialogue between social science and theatre studies**

- Professor Anthony Turner Institute of Molecular and Cellular Biology  
  ‘A tale of tails: protein shedding and its implications in physiology and pathology’

- Leeds Eighteenth-Century Group meets next Tuesday to hear a paper from Dr Nicholas Tosney (History) entitled:‘One Vast Casino?’ English Gaming in the first half of the Eighteenth Century

- Dr. Alberto Saiani, Peptides Research Group, University of Manchester  
  **Designing functional hydrogels exploiting peptide self-assembly**
What’s your title?

Authors

It’s not a paper: Sears, H.J., Richardson, D.J. and Spiro S.

It’s not usual to include people’s titles: H.J. Sears, Dr D.J. Richardson and Dr S Spiro

It makes you easier to approach (and remember) if you include your first name on the poster:

Heather Sears, David Richardson and Stephen Spiro

Remember to show who the poster presenter is e.g. Heather Sears or Heather Sears*

BUT you should always follow the conference poster guidelines

Guidelines

You must adhere to any guidelines you are given:

- Abstract
- Poster
2. Content

- Concise
- Convey the message
- Clear portrayal of complexity

Concise

- You only have a few seconds to grab and retain your audience’s attention
- Most of them are only going to absorb the main message
- Leave out all the details and tell those who are really interested the “nitty gritty”.

Readability = a measure of how easily the ideas flow from one item to the next.

Headings (titles, subheading and figure titles)

- **Summarise** – headings are opportunities to summarise work – can a hurried reader get the main points from the headings alone?

- **Organise** – good headings are part of the visual grammar – do yours help readers through your poster?

Writing

Write in the active voice

Avoid abbreviations

Start from scratch (nothing):

- It’s much easier than trying to rewrite text you take from a paper or report that is written in the passive voice.

- You will be aware of how much space you have (or haven’t) which will help you to be more concise

Short sentences

- Lengthy sentences take longer to read and comprehend. Shorten your sentences to be as concise as possible.

- One way to re-work longer sentences is to underline the main points in the sentence and determine whether or not you can break this information into a list or graphic.
Active voice
Use the active voice when you want your writing to be simple, direct, clear and easy to read.
Sentences written in the active voice are less wordy than those in the passive voice

It can be demonstrated that...
The data demonstrate...
This shows....

Cutting unnecessary words - is there a shorter way of saying the same thing?

<table>
<thead>
<tr>
<th>Instead of writing the following:</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>appears to be</td>
<td>seems</td>
</tr>
<tr>
<td>in the absence of</td>
<td>without</td>
</tr>
<tr>
<td>higher in comparison to</td>
<td>more than</td>
</tr>
<tr>
<td>was found to be</td>
<td>was</td>
</tr>
<tr>
<td>in the event that</td>
<td>if</td>
</tr>
<tr>
<td>small number of</td>
<td>few</td>
</tr>
<tr>
<td>was variable</td>
<td>varied</td>
</tr>
<tr>
<td>at the present time</td>
<td>now</td>
</tr>
<tr>
<td>prior to</td>
<td>before</td>
</tr>
<tr>
<td>in order to</td>
<td>to</td>
</tr>
<tr>
<td>in a timely manner</td>
<td>promptly</td>
</tr>
</tbody>
</table>

Figures
• Title should state what the figure shows
• Remove non-essential information
• Label lines, bars etc. directly instead of using figure legends
• Keep with the relevant text

For example

![Figure 1: Effect of treatment A (C) and treatment B (D) on the substrate concentration.](image)

After 20 days treatment B induces a 4-fold effect on substrate concentration

![Graph](image)
What to leave out (unless required to include in the poster by the conference poster guidelines):

<table>
<thead>
<tr>
<th></th>
<th>Academic, specialist audience</th>
<th>Non specialist audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>Why include something that the poster viewers will already have a copy of? Takes up valuable space</td>
<td>Do not put your abstract on the poster. Instead use the ‘non –specialist’ audiences abstract to help you start writing the content</td>
</tr>
<tr>
<td>Copies of figures that you have used in reports/papers</td>
<td>Figures for reports/papers are done to meet the journal requirements. You have to revise figures to make them more immediately readable and understandable</td>
<td>For many public audiences you need to consider whether showing data is helpful or not. Would it better to tell them what you found rather than show them the evidence?</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>Use only abbreviations that you are absolutely sure that everyone in your intended audience will know.</td>
<td>Use only abbreviations that you are absolutely sure that everyone in your intended audience will know.</td>
</tr>
<tr>
<td>References</td>
<td>Use superscript numbering i.e (^1) for references in the text and write the reference in the briefest form possible e.g. Sears et. al. (1995) Biochem. J. 310: 311-314</td>
<td>For non specialist audiences you should avoid references unless absolutely necessary</td>
</tr>
<tr>
<td></td>
<td>If you find yourself using more than four references ask yourself why.</td>
<td></td>
</tr>
</tbody>
</table>
### Posters checklist

<table>
<thead>
<tr>
<th><strong>Do</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Don’t</strong></th>
</tr>
</thead>
</table>
3. Design

An effective poster
• Uses visual grammar
• Expresses your point in graphical terms
• Guides the viewer by using visual logic
• Displays the essential content (the message) in the title, main headings and graphics
• Looks like it can be read easily in no more than 5 minutes from a distance of 5 feet

White space (the area of your poster not covered with text or graphics) provides a visual breathing room for the eye, frames your material and makes the other components stand out. Too much white space and your viewer’s eye will wander. Too little and the result is confusion.

You can add white space to your poster by:
• Increasing space between lines of body text:
• Leaving enough space around the edges of graphics
• Use generous margins at the top, bottom, left and right handsides of the page to ensure that your poster content does not get too close to the edge of the page.

Reader gravity
• There are language-specific ways in which most people read.
• In English, it is top-to-bottom and left-to-right. Wheildon (1995) called this "reader gravity."
• Organizational constructs that defy reader gravity will confuse viewers

Logical layout
• Time spent hunting for the next idea or piece of information is time taken away from thinking about the research
• Use cues - numbers, letters, arrows - to help people navigate their way around the poster
Balance
Our eyes and minds are most comfortable with evenly balanced layouts where the page doesn’t seem to tilt to one side or the other.

- Your poster should have a good visual balance of figures and text, separated by white space.
- Balance occurs when images and text are reflected (at least approximately) across a central horizontal, vertical, or diagonal axis. This axis is known as the axis of symmetry.

Alignment
Alignment or grid is the placement of text and graphics so that they line up with each other in an organised way. Use alignment to:

- Create order
- Group items
- Create visual connections
- Organise page elements

Good alignment usually goes unnoticed as most readers will not consciously notice that everything is lined up neatly. ...but lack of alignment of the elements of the page creates a disorganised look.
Can you introduce visual elements by rearranging text and/or using shapes?

For example
Common symptoms of patients using chemotherapy are:
- Fatigue
- Nausea
- Hot flushes
- Pain
- Anxiety and Depression

Colours

Understanding the meaning of colour and how colours interact in order to convey the right tone, message and evoke the desired response to your poster. Colours are not simply cosmetic, they are a form of non-verbal communication and create a subconscious physical and emotional reaction. For instance, a muted colour scheme would be appropriate for a serious message, whilst bright primary colours would be appropriate to convey a fun and childlike message.

Avoid poor contrast and in particular the following colour combinations:
- Green on red and vice versa
- Brown on green and vice versa
- Blue on black and vice versa
- Blue on purple and vice versa
- Red on blue and vice versa

Colour combinations that work:
- Dark on a pale or white background
- Yellow on dark blue
- White on a black background

For an introduction to colour theory and overview of classic colour schemes:
http://www.color-wheel-pro.com/color-theory-basics.html
### Style for titles and headings

| ✓ | Capitals and Lower Case OR all lower case |
|   | San serif fonts (e.g. Arial, Tahoma, Helvetica) |
| ✗ | ALL CAPITALS, *italics* OR SMALL CAPS |
|   | Serif fonts (e.g. Times New Roman) |

### Why not ‘all caps’?

All caps have an even horizontal outline with letters of similar shape and size. Type set this way severely impairs reading.

Words set in uppercase and lowercase have more distinctive outline (compare LONDON to London). This enables the reader to recognise the words faster.

### Layout and style for body text

Text alignment can affect readability.

Left justified (flush left) text is easiest to read as there is an easily located starting point for each line and the ‘rivers of white (spots of negative space between words) found in justified text are eliminated.

| ✓ | San serif fonts (e.g. Arial, Tahoma, Helvetica) |
|   | Left justified (or centred) |
|   | Space between sentences |
| ✗ | Serif fonts (e.g. Times New Roman) |
|   | Justified |
|   | CAPITALS, italics and SMALL CAPS |
Minimize text and make it large!!

If you print your poster on an A4 sheet of paper, you should be able to read all of it - including text in figures - comfortably. If you can't, your text is too small.

<table>
<thead>
<tr>
<th></th>
<th>A0 posters</th>
<th>A1 posters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Title</strong></td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td><strong>Subheadings</strong></td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td><strong>Text</strong></td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>References and acknowledgements</td>
<td>as small as you want if you insist on putting them on the poster</td>
<td></td>
</tr>
</tbody>
</table>

**Feedback**
Rough drafts are especially crucial in deciding whether you need to cut/add text or resize figures or fonts, decisions that can entail many hours of fussing and gnashing of teeth.

You should produce a rough draft and then bribe a number of people (friends, strangers, etc.) to look at it when you are not present.

**Software**

**More poster examples to critique**
Vitae Yorkshire and NE Hub poster competition gallery

Postgraduate Toolbox gallery
http://www.postgraduatetoolbox.net/posters/gallery

University of Leeds SHOWCASE poster gallery
http://www.pgrconference.leeds.ac.uk/
Images

Before including images in webpages, presentations or posters, you must have the permission of the rights owner - unless you know the image is out of copyright or covered by a licence held by the University of Leeds.

When using material available for free or licensed for reuse, you must always credit the creator and the source.

For guidance on using other people’s images in your work
Go to the University of Leeds Library website and type ‘images’ into the search box
http://library.leeds.ac.uk/

The image databases on this page are either subscribed to by Leeds University Library or freely available on the web:
http://library.leeds.ac.uk/image-databases

Using digital images in Higher Education
JISC Digital Media exists to help the UK’s FE and HE communities embrace and maximise the use of digital media - and to achieve solutions that are innovative, practical and cost effective:
http://www.jiscdigitalmedia.ac.uk/

Advice - Finding and Using Images from JISC Digital Media:
http://www.vtstutorials.ac.uk/he/tutorial/imagesearching/

MS Office On-line - Clip Art (clipart, photos, animations and sounds)

Microstock image sites
Read the terms and conditions of use of the image carefully and ensure you are following any requirements

1) morgueFile – free images
http://www.morguefile.com/

2) Stock.XCHNG – free images
http://www.sxc.hu/
3) Image*After – free images
http://www.imageafter.com/

4) dreamstime – free photos section
http://www.dreamstime.com/free-photos

Be careful to search the ‘Free stock images’ only

Flickr - Photo sharing site
You'll need to create an account (free and only takes a couple of minutes) to become a member. As a member of Flickr, you'll find a "Send [screen name] a message" link available on every member profile in the right-hand column so that you can request use of the photograph.

When contacting the photographer, it's best to include as much info as possible. At a minimum supply your name, how you would like to use the photograph and the URL of the photo you're interested in. Also, remember to ask them how they would like to be acknowledged if they give you permission to use the photo.
http://www.flickr.com/

Flickr Commons project
where cultural institutions make photographs with no known copyright restrictions available.

http://www.flickr.com/commons

Wellcome Images
World's leading source of images of medicine and its history, from ancient civilisation and social history to contemporary healthcare, biomedical science and clinical medicine. Over 180 000 images ranging from manuscripts, rare books, archives and paintings to X-rays, clinical photography and scanning electron micrographs are available online.
http://images.wellcome.ac.uk/

Higher Education Academy Centre for Bioscience Imagebank
The user is required to acknowledge the contributor, the copyright holder and the Centre for Bioscience ImageBank on every use of the image(s). Browse the comprehensive links to other evaluated bioscience image collections.
http://www.bioscience.heacademy.ac.uk/imagebank/
Poster Sizes and Conversion Tables

Standard ‘A’ range of paper sizes.

A5 is half the size of A4.
A1 is half the size of A0.

Remember – big posters are expensive both in terms of money and terms of file sizes.

‘A’ Size Conversion Chart

<table>
<thead>
<tr>
<th>Size</th>
<th>Millimetres</th>
<th>Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5</td>
<td>148.5 x 210</td>
<td>5.8” x 8.3”</td>
</tr>
<tr>
<td>A4</td>
<td>210 x 297</td>
<td>8.3” x 11.7”</td>
</tr>
<tr>
<td>A3</td>
<td>297 x 420</td>
<td>11.7 x 16.5”</td>
</tr>
<tr>
<td>A2</td>
<td>420 x 594</td>
<td>16.5” x 23.4”</td>
</tr>
<tr>
<td>A1</td>
<td>594 x 841</td>
<td>23.4” x 33.1”</td>
</tr>
<tr>
<td>A0</td>
<td>841 x 1189</td>
<td>33.1” x 46.8”</td>
</tr>
</tbody>
</table>
4. Presentation

Imagine that a viewer will be considering your application for a job ten years into the future, or will be your PhD examiner.

Presenting your poster – your display
• Poster kit: drawing/map pins; Blu-tack® / Velcro® (hook and loop); scissors
• Business cards
• A4 handouts of your poster – additional detail can be on the other side
• Manuscripts and reprints
• If you must leave your poster, affix a note alerting any viewers to your expected time of return or telling them where you can be found.

Presenting your poster – your talk
• Presenting your poster - your talk
• Find out why they are interested in your poster BEFORE you launch into your talk
• Speak to your viewers as you explain
• Carefully walk your viewer through your figures. Avoid vagueness such as "this figure shows our main result."
• If more viewers arrive halfway into your talk, finish the tour for the earlier arrivals first
• Poster presentation example - Mike Turner presents his poster: 
  http://www.scivee.tv/node/5798

And finally...

.....enjoy your poster!

Its main purpose is to advertise you, your work and your department

Make the most of the opportunity to attract the people that it will be most valuable for you to meet