



# AN INTRODUCTION TO EFFECTIVE POSTER DESIGN AND PRODUCTION

## Focus on Four Points...

- The Message
- The Design
  - Size Matters (landscape vs portrait)
  - Choosing Colour and Graphics
- The Production
  - Lamination, Mounted, Double side sticky tape, Blue tack, Velcro tags goo!
- Revisions & Awareness
  - Accessibility
  - Time and Tinkering...

### 1. THE MESSAGE

#### One Key Concept

Begin by writing an abstract, be clear and precise about the theme, do not over complicate, keep to one main thesis, question or hypothesis. Often the simpler the message the more effective the poster, it needs to be understood at a glance. Additional details can be provided in an accompanying paper.

The message is often conveyed in a myriad of ways; it may include the design of the poster, the chosen font face, the colour scheme, the graphics – treat the creation of the poster as one process i.e. to deliver the chosen message.

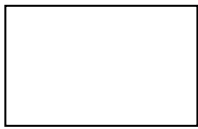
### 2. THE DESIGN

#### Sketch Out A Plan, Sub-Divide Poster Into Component Parts

Take an A4 page, write out the keywords or themes of the abstract. How many are there? Sub-divide the page into the relevant amount. These compartments will form the 'guiding boundaries' of each area to be presented.

Decide what orientation your poster will be - \*can you make this choice? (Does the venue require a certain format? Is there a Conference Template? A School Template?)

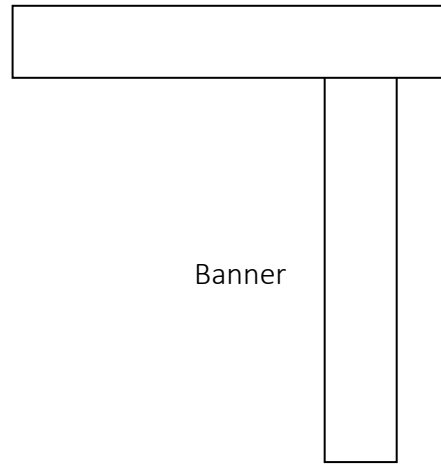
Decide the size you require (once again take note of the venue/conference requirements).



Landscape



Portrait



Banner

#### Common Paper Sizes

A0 paper	841 x 1189 mm
A1 paper	594 x 841 mm
A4 paper	210 x 297 mm

## TITLE IMPACT

This will be the focal point of your poster, it needs to be succinct, catchy, or colourful, clear and possibly LARGE. This may well provide the hook that draws in the audience, be it a relevant discipline or field, in vogue or newsworthy terminology or simply an arresting design.

# least

The title text should be at least five times bigger than the body font. Try to

use Sans Serif Font for titles and headers, this increases readability e.g. [Helvetica](#), [Verdana](#).

If necessary (i.e. where large amounts of text are required) use Serif fonts, it is easier on the eye and helps guide one through large bodies of text e.g. [Times New Roman](#), [Palatino](#).

### Sequence Content – Use Of Numbers And Colour

Having divided the poster canvas into relevant areas (per theme, keyword, problem etc) decide on a logical way to link each item. By the inclusion of graphics and other design materials you need to be sure that a reader is able follow the poster content. The simplest and most effective way is to number each area. Alternatively colour or graphics may be used to indicate a 'path' through the texts.

### Less Text More Graphics – Self Explanatory

Remember a poster is a 'visual' display. You wish to encapsulate your thesis in a demonstrable and effective manner, do not be afraid to edit out large amounts of text. Think how a graphic or chart may convey the same content. Attempt to write in an abridged and colloquial manner. Allow headers to provide the key point.

The use of graphics can often enhance understanding of what may be a complicated process or concept. They may also catch the attention of passers by, and often will aid in remembering the actual poster/abstract on display.

If required a paper may always be provided as a supplement to the visual representation that is the poster.

## WHICH GRAPHICS?

There are many places to 'find' images and graphics on the Internet – the question arises do you have permission to use them? Do you own the copyright? Or is there a licence agreement of use?

Copyright protects creative or artistic works - You should only copy or use a copyrighted work with the copyright owner's permission<sup>1</sup>

*Image Copyright:* You may use any photographic image that you have taken and own. You are not allowed to use images from other sources (books, magazines, websites etc) without first gaining written permission. You may also not use images derived from other original sources e.g. tracings of OS maps, copies of book illustrations.

## SECTION HEADERS IMPACT

After the sequencing the next most effective target for attracting and maintaining the audience are the section headers or sub-titles. Try to encapsulate the key message in these, let them act as guides to move the reader through a poster, make them positive and arresting in nature.

## THE PSYCHOLOGY AND PRACTICE OF COLOUR

The choice of colours one uses in a presentation will have an impact on the audience. Here are a few key points to remember:

- One can use colours to convey warmth and tone
- Select one background colour (try to avoid solid colours and textures)
- Try not to use too many text colours (c.12% of males suffer a colour deficiency),
- (If possible) use a colour wheel to select appropriate contrasting and complementary colours,
- Use colours as a navigation aid,
- (If possible) scout and/or enquire about the venue (one needs to take into account the setting, mounting and lighting facilities) these may differ vastly from one place to the next.

## 3. Production

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<sup>1</sup> Ireland: Copyright and Related Rights Act 2000  
<http://www.irishstatutebook.ie/eli/2000/act/28/enacted/en/html>

## POSTER PRINTING AND FINISHING

Having completed your poster (and after numerous edits) you will need to print the finished product. If you have local access to a large format printer, be sure to check that the paper-weight and finish is suitable for posters e.g. medium to heavy (60-100gsm) and a semi-matt or gloss finish.

If providing the file to a print agency, ideally save it as a PDF (Adobe's<sup>2</sup> Portable Document File Format), this will lock down all fonts, graphics and colours you have chosen to use and ideally provide an 'easy' print run.

Often print agencies will offer to 'lamine' the final poster print, this will make them more robust and last longer, however this may be quite expensive and mean that they are less easy to 'roll' for travelling (perhaps after your presentation, you may wish to laminate or mount the poster (on light board) so that it may be suitable for framing).

Whatever finish you choose be aware of the local venue and its display procedures; will they be mounted on fuzzy boards (thus requiring velcro pads (always remember to bring positive and negative stickers); will they be wall mounted (requiring tape, or blue tack); will they be virtual (requiring a PDF file or .jpeg image).

## PLANNING – THE COUNT DOWN

Although posters may appear effortless, they require a great deal of planning, preparation and production. Be sure to factor in enough time to produce the poster you envisioned.

When	What
4 weeks out	Write an abstract, define message Create poster plan, subdivide and section
3 weeks out	Create first draft of poster, identify possible graphics Create graphics, charts, acquire suitable images Edit the draft ruthlessly
2 weeks out	Distribute draft for peer review (round 1) Make amendments & edits suggested by peers
1 week to go	Distribute draft for peer review (round 2) Apply final edits save as PDF Make backup to CD or USB key Produce final print Pack poster in travel tube, pack 'sticking materials'
0	Present poster, take plaudits, questions and queries
<i>Start thinking about the next one...</i>	

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<sup>2</sup> <http://www.adobe.com>

## 4. Revisions & Awareness

### ACCESSIBILITY ISSUES

- Ensure there is a high level of contrast between the background and text - dark text on a light background is preferable.
- Avoid textured backgrounds that make the text difficult to read.
- If photographic backgrounds are used, adjust the transparency.
- Include a textual description of any images you use (similar to 'alt' tags in web pages).

### BACKGROUNDS

- A background should not distract from the main text in the foreground.
- A plain solid and light colour is recommended.
- One may also wish to add in UCD logos and graphics.

\* Consider the possibility of a 'virtual poster' utilising an LCD/Plasma screen to display an 'animated' version of your work e.g. live creation of charts, talking heads, experimental sequences etc.

### GRAPHICS ISSUES

Providing good quality graphics (e.g. diagrams, drawings, and photographs) for use on posters is essential. To achieve the best results (maintaining definition and colour balance) one must understand the difference in formats that may be used. There are two main types: bitmaps and vector images.

### UNDERSTANDING FILE FORMATS

Bitmap images.

- Bitmap images are graphics defined as a collection or "map" of individual dots or pixels. Photographs and other scanned pictures are always rendered this way.
- Bitmap formats supported by Microsoft PowerPoint include: CompuServe GIF (only in PowerPoint 97 and over), Tagged Image File Format (.TIF), and Joint Photographic Experts Group or JPEG (.jpg).
- Adobe Photoshop allows one to edit bitmap images and save them in a format of your choice.

Vector images.

- The majority of vector images are created in drawing/art packages. Each image is defined as a series of lines and fill, because of this vector images may be resized very easily with little or no loss of quality.

- Vector formats supported by PowerPoint include: Windows Metafile (.wmf), and Enhanced Metafile (.emf).
- One can draw (vector) objects with PowerPoint's own drawing tools, import them from external drawing packages e.g. Adobe Illustrator or access the clip art galleries in Microsoft.

## MOST COMMON GRAPHIC FILE FORMATS

### .BMP - Windows Bitmap

- Does not lose any information
- Can be compressed but not 24 bit colours. Very LARGE file sizes
- Very fast to load and display in PowerPoint

### .JPG (also .JPEG)- Joint Photographic Expert Group.

- Works on 'lossy' compression therefore loses information
- A highly compressed file (very small file size)
- Longer to de-compress in PowerPoint than .PNGs, also puts a higher load onto the processor to de-compress

### .GIF - Graphics Interchange Format

- Loses information as it can only have a maximum of 256 colours
- Only works with 256 colours
- Compressed format
- Takes no time to de-compress (as it is not compressed)

## Online Resources: (Accessed 1.20)

### GENERAL RESOURCES

[http://www.kumc.edu/SAH/OTEd/jradel/Poster\\_Presentations/PstrStart.html](http://www.kumc.edu/SAH/OTEd/jradel/Poster_Presentations/PstrStart.html)

Effective poster design

<http://www.people.eku.edu/ritchisong/posterpres.html>

Creating Posters with LaTeX

<http://nxg.me.uk/docs/posters/>

Creating Effective Poster Presentations

<https://projects.ncsu.edu/project/posters/>

Powerpoint Templates

[http://www.posterpresentations.com/html/free\\_poster\\_templates.html](http://www.posterpresentations.com/html/free_poster_templates.html)

### ONLINE TUTORIALS AND GUIDES

Preparing graphics for use in PowerPoint.

<http://www.cbtcafe.com/powerpoint/index.html>

Scientific Poster Parts

<http://www.makesigns.com/tutorials/scientific-poster-parts.aspx>

### OTHER RESOURCES:

Support notes and tutorials available on PhotoShop.

[www.adobe.com](http://www.adobe.com)

Paper sizes

<http://www.papersizes.org/a-paper-sizes.htm>

### SEARCHING FOR IMAGES...

Link to UCD Media Services Image database

<https://www.ucd.ie/itservices/ourservices/educationaltechnologies/multimediacontentdevelopment/ucdimagecatalogue/>

<http://search.creativecommons.org>

Search tool for 'anything' under open (creative commons) license

### CONCEPT MAPPING SOFTWARE FOR ALTERNATIVE POSTER DESIGNS

Freemind

[http://freemind.sourceforge.net/wiki/index.php/Main\\_Page](http://freemind.sourceforge.net/wiki/index.php/Main_Page)

Vue Project tool

<http://vue.tufts.edu/about/>

CMap

<http://cmap.ihmc.us/conceptmap.html>

Gliffy

<http://www.gliffy.com/>