Designing and giving an engaging and clear presentation on your research

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To obtain a copy of the PowerPoint:
Email: d.rowland@uq.edu.au
Subject: research presentations
Workshop ID: 06979
Goals of this workshop

• To identify:
  – the key content components of a good research presentation
  – how to grab your audience’s attention with a powerful opening
  – some of the things that make some presenters easier to follow and more interesting to listen to than others
  – the features of effective slide and poster presentation designs

• To learn how to deconstruct good examples

• To get some guided practice
Preparation, characterization, and optimization of pancreas-targeted 5-Fu loaded magnetic bovine serum albumin microspheres

W. J. Jia, J. G. Liu, Y. D. Zhang, …
State Key Laboratory of Biotherapy, …
Outline

Background
Theory of microsphere drug delivery
Production method of microspheres
Results of *in vivo* studies with rats
Conclusions

Cf. where do most journal articles put the outline and why do they do that?
Mistakes to avoid

• Introducing yourself and the title of your talk
  – Audience has already read these on your slide
  – Session chair has probably already done this as well
  – Wastes valuable seconds in a 3MT presentation

• Giving an outline of your talk at the very beginning
  – Not necessary for a 3 minute talk
  – For longer talks, as with journal articles, best to engage audience first and give outline at end of intro
Learning from top presentations: Reverse engineering top 3MT talks

What makes this talk so good?

Sandra Garrido: “The paradox of listening to sad music”

http://www.youtube.com/watch?v=alTyXweZnm4

See also: Thesis Whisperer prezi on giving a good 3MT talk:
http://prezi.com/jwhwyydfzqxo/how-to-talk-about-your-thesis-in-3-minutes/
What are some things that made that presentation so good? (1)

• Engaged the audience from the very start:
  – Made it personal: “You and I all want the same thing: We want to be happy.”
  – Engaged our curiosity with a puzzle: “Given this human preoccupation with the pursuit of happiness, it seems unlikely the people would deliberately seek out things they know will make them sad – and yet we do.”

• Didn’t speak too fast …

• … but did stress important points for emphasis and to be engaging both verbally and with hand gestures (got out from behind the podium)
What are some things that made that presentation so good? (2)

- Looked around the audience (made eye contact) to engage with them
- Used brief pauses effectively:
  - before and after things she wanted to stress / highlight
  - after key ideas to allow a moment for them to sink in
  - and to signal transitions to a new part of the talk

“Music is the space between the notes.”

Claude Debussy
3MT talk had this classic structure:

1. Started with what **motivated** the research

2. Stated **aim** of research explicitly and clearly

3. Explained **method**

4. Stated main **findings**

5. Discussed **implications** of findings

6. Finished with takeaway thought for the audience

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1. “Given this human preoccupation with the pursuit of happiness, it seems unlikely the people would deliberately seek out things they know will make them sad – and yet we do.”

2. “So my research addressed the **interesting question**: Why do people listen to sad music?”

3. “My research is one of the first to conduct an empirical investigation ... and to consider the role of certain personality differences. ... In a series of 3 studies I tested over 200 people ...”

4. Discovered co-relation between absorption & music empathy with a liking for sad music. May help some purge negative emotions but for those with mood disorders, may be attractive but make things worse.

5. “My research not only addresses a fascinating philosophical question, but can also help us better understand human emotion, the function of music in society and the potential for music to help people with mood disorders.

6. So the next time you have that favourite tragic love song on repeat ..., you may want to ask yourself if you’re benefiting from that, if ...
   - Thank you.

Longer talks follow same structure, just give more detail in each section.
What “more detail” could be given in a longer talk?

E.g. for the Sandra Garrido talk:

• “My research is one of the first to conduct an empirical investigation … and to consider the role of certain personality differences. … In a series of 3 studies I tested over 200 people …”
  – What personality differences and what are the theoretical underpinnings of these choices?
  – What exactly was tested in the 3 studies? How did each study complement or inform later studies?
  – What were the characteristics of the 200 people? How chosen and why?
  – How were the results analysed?
What “more detail” could be given in a longer talk?

E.g. for the Sandra Garrido talk:

• Discovered co-relation between absorption & music empathy with a liking for sad music. May help some purge negative emotions but for those with mood disorders, may be attractive but make things worse.
  – Explain more what “absorption” and “music empathy” mean and the theoretical underpinnings of these constructs.
  – Give more detail on the strength of the co-relation and how well negative emotions may be purged or how much worse things might get for those with mood disorders. (Define “worse” and how much of a difference on the measurement scale was observed.)
What makes that structure so logical and easy to follow?

- Because it was a idealised *narrative* of the research *journey*.
- Humans find “stories” more engaging and easier to follow than bunches of facts.
Motivating your talk

“The most important question to ask yourself in preparing your talk is why on earth [anyone] might be interested.”

N. D. Mermin

The key thing is to address a question or set of questions of interest in your field of study.
Having a “hook”: Some ideas on how to get your audience interested with your introduction

- Make it personal [“Imagine you ...” / “Who has ...?”]
  - “Imagine you ...”
  - A talk on the uses of quantum mechanics and cryptography might start getting the audience to think about what happens if you credit card gets stolen.
  - A talk on innovative solutions to traffic congestion in large cities might start by asking the audience: “Who thinks traffic congestion is getting worse and worse each year? Who was stuck in traffic coming to uni this morning? [Indicate to show hands]”

- Engage their curiosity (with a puzzle or a startling fact)
  - AI: “If the brain is considered to be a biological machine, then could a machine made of transistors and wires one day think like a human?”
  - Can be done by stating a surprising or startling fact. “Did you know that more deaths occur in the world each year due to X than to cancer?”

- Describe a problem
- But in all cases, end up with an engaging question
Starting with a problem

Sumaiya Ahmed: "The waiting game in the movie industry: Timing decisions for DVD release".

http://www.youtube.com/watch?v=SI8XOGubJyY

• Note that problem is explained in enough detail that a general audience could understand why the problem is a problem.

• Key conclusion is summed up simply at end with a play on a well known proverb.
Starting with a problem and making it personal

Suzie Ferrie: "Measuring Nutrition in ICU"

(Note that this is a “proposal”, the research had not been completed at the time of the talk.)

http://www.youtube.com/watch?v=uRujtX1MudQ

• Start: “I’d like you to take a moment to imagine … that this [picture of person in ICU] … is you. Some terrible …”

• *Note how she explains exactly why the problem is such a problem.*

• Finish: “… waiting until … is not good enough, as I think you’d agree if this was you. Thank you.”
Polling your audience can also sometimes be an effective way of getting them engaged

Miriam Sullivan, “What your pet fish would tell you (if he could talk)”

http://www.youtube.com/watch?v=Bk6aK8R0P-o
RECAP

• Tell a story:
  – What was your motivation for doing some research?
    – Puzzle? Problem?
    – Try where possible to make it personal for the audience.
    – Engage audience from very first word.
  – What was the aim of your research?
    – Frame as a question + identify novel contribution
  – How did you conduct your research?
  – What have been your key findings?
  – What are the implications for key stakeholders of your findings?
  – Final takeaway message in a nutshell?

• Use short pauses effectively:
  – To allow key points and new ideas to sink in
  – To mark the transition from one part of your talk to the next
  – Before and after key points to highlight key points

• Be engaging:
  – Make eye contact around audience
  – Use hand gestures for emphasis
  – Be conversational but passionately interested in your own talk
    (have a “twinkle in your eye”)
Exercise

• For the research project you will be presenting on (or a recent written assignment otherwise)

• Take turns answering the following two questions with a neighbour (2 mins each):
  1. What is your research / assignment question?
  2. How would you start a talk on your question in a way that would get the audience engaged? (Partner to give feedback and alternative suggestions.)

Remember:
  – Make it personal
  – Engage curiosity
  – Describe a problem and its significance
At what level should I pitch the talk?

- Depends on the audience and the length and purpose of the talk.
- However, it is hard to digest a plethora of highly technical ideas in a short time frame, even for experts.
- Thus, aim to give a general, conceptual overview of your work rather than an in-depth understanding.
- Ask yourself: “What do I / most people hope to get out of a 15 minute conference presentation?
  “Why do they get students to give a talk as part of their confirmation?”

“Never have I heard anybody complain about a talk on the grounds that ‘I understood everything in it.’”

N. D. Mermin
Making technical talks comprehensible, especially to a general audience

• Use analogies

• Relate new concepts / ideas to things the audience can be expected to know about

Example: Jennifer Campbell, “Nanocantilevers: a new tool for medical diagnostics.”
http://www.youtube.com/watch?v=kuRw_4VSp44

• “It works like a human nose, sniffing out human breath for the presence of certain molecules.”

• “Now nanocantilevers are like tiny little diving boards. …”

• “They’re really tiny, about 100 times smaller than a human hair.”
Making technical talks comprehensible, especially to a general audience (2)

**Example:** Balarka Banerjee, “Lung Transplants – Making the Second Chance Count.”

http://www.youtube.com/watch?v=tJAO-zPoamY

- Helps you understand by relating new ideas to things you would probably be familiar with
  - “… lungs fill with a thick, fibrous tissue similar to what is found in scar tissue or a tumour.”
  - “Now acute rejection, which you are probably more familiar with, is when … In contrast, chronic rejection …”
Presenting Your Research

Making technical talks comprehensible (3)

Example

• A general audience can’t be expected to know what Molybdenum (Mo) is and why it is of interest, so spending a few seconds explaining is worth doing:
  – “Molybdenum is a metal [people know what metals are!] which is useful for making high strength alloys and super alloys with steel.” [people know well enough what steel is]

• This phrasing would be “dumbing down” too much for an engineering audience, but if you incorporate the background into your argument, it won’t seem like dumbing down and will help those who have forgotten or work in a different area:
  – “Because of Molybdenum’s importance in the manufacturing of high strength alloys and super alloys, it is important to …”
Further Examples

- Using analogies to help the audience understand: Curtis McEwan, Uncertainty Propagation in Nuclear Reactor Physics Calculations: https://www.youtube.com/watch?v=QdQIs4ZRzqc

- BUT, DON’T OVERDO IT! Especially to a specialist audience, though many conference talks are too technical, even for a specialist audience.

- The challenge is to find the “happy medium”: Learn from the specialist talks you listen to:
  - are they too technical?
  - what would you have liked to have had explained?
  - Try then to give a talk that you would appreciate.
Preparation tips

• All talks require a lot of preparation and rehearsal if they are to be effective.

• The less time you have, the harder it is to cover everything clearly and well.

• For a 3MT presentation, may find memorising a prepared script is useful to ensure you keep to time – but work on “performance” so you don’t seem like a robot! … and remember those pauses.

• For longer talks, it is better to practise improvising around the dot points on your slides as this will lead to a more natural presentation. [Usually have a Q&A time as well, so can go a little over time. E.g. nominal 10+2 → 11+1 okay.]
Preparation tips (2)

• May make additional notes to remind yourself of additional things to say.

• Have several rehearsal sessions across several days in the lead up to your presentation.

• Do a live rehearsal – *mental rehearsals go much faster than the real thing!* – and get feedback from colleagues.

• If you can anticipate questions or criticisms, prepare your answers to these as well … and prepare how you will respond if you get asked a question you don’t know the answer to.
Preparation and stress levels

- If you are well rehearsed then you are likely to start well and stress levels ↓

- If you are not well rehearsed and you fluff some lines, your stress levels ↑

- You also need to be well rehearsed so that you can focus on your performance more than simply remembering your lines.
Preparation: Designing an effective title

3MT Comp Title (to a general audience):

“Lung Transplants – Making the Second Chance Count”

This title is designed to get you curious and it is made personal.


Why not use this title for his talk title? Why use it for his thesis title?
Preparation: How much can I say?

- About 150-170 words per minute is a good pace for a short, highly polished talk (e.g. 3MT)
- Longer, less polished talks with many slide transitions would probably average 100-150 words per minute.
- 1 slide per 1 to 2 minutes. (Only allowed 1 slide in 3MT competition.)
- As a general rule, if you have more content slides than there are minutes for your talk then you are in trouble!
- A mental rehearsal goes much faster than does the real thing, so to check your timing you have to do a “live rehearsal”.

Preparation

How to hear how your talk will sound to others … and to check the timing:

1. Put (palm card) notes onto PowerPoint slides.
2. Go to the “Slide Show” tab and click on “Record Slide Show”.
3. After you click on “Start Recording”, wait until the clock counter starts ticking over to start speaking or you’ll cut off the start of your talk.
4. Use mouse clicks to progress through slides as per normal.
5. Hit “esc” or “enter” to stop recording. Again, wait a second after you stop speaking to do this.
Reviewing your presentation

• Going to “Slide Show” will play back your presentation.

• Some things to check:
  – Did you keep to time? (PowerPoint times your talk for you.) If your talk is overlong, think about cutting content or making your presentation more efficient (i.e. using fewer words to say the same thing) rather than speaking faster.
  – Did you use pauses effectively? If not, try putting pause marks on your notes or use line breaks to facilitate pausing at appropriate points.
  – Did energy or enthusiasm come across in your voice?
  – Could the audience read your slides and listen to you at the same time? This is also a good way to check if your slides have too much content on them.
Some Other Things to Think Through

Where and how will you stand?

• Try not to block peoples’ views
• Try not to read from screen

Override automatic lighting settings when using PowerPoint – 50% fluoros at UQ is fine to see the projection, you the presenter, and the audience!

• (Plus the audience is less likely to go to sleep!)
PowerPoint Slides—Some Nuts and Bolts

- Use a large font size
  - This is 24 pt Arial
  - This is 20 pt Arial
  - This is 18 Point Arial

- Compare a sans serif font like Arial with a serif font like Times New Roman

- Keep them simple
  - Use as prompts to talk around, not as scripts to be read (boring!)
  - Too much clutter and it can be hard for the audience to quickly grasp
  - Excessive animation and sound effects can be distracting
PowerPoint Slides—Some Nuts and Bolts

Walk audience through figures, tables and charts.

Fig. 2: UQ Enrolments by Faculty & Gender in Bachelor & Assoc. Dip. Courses - 2000

0%
25%
50%
75%
100%
Arts
BACS
BEL
EPSA
Health Sc
NRAVS
SBS
Male
Female
Figures prepared for books or journals or to be read on screen as you sit at your computer are rarely suitable for posters or oral presentations – no-one beyond the front row can read them!

You might be able to use a diagram that is of a good size other than the text by “walking” the audience through the picture.
But: Putting a text box with larger text in it over existing text which is too small to read can sometimes be a useful strategy.
Warning! Fancier is NOT always better. 3D bar charts may look impressive, but are much harder to read accurately than 2D graphs and so should NOT be used.
Graphics

What’s wrong with this?

Why better? How can it still be improved?

Check: Okay, you can read your figure labelling when sitting at your computer, but can you read it from the back of the room when it is projected?
For complex slides / slides with lots of ideas ...

... you can keep the audience with you by only bringing in graphics or text as you want the audience to look at it using “animation”.

but
don’t
be
a

Tease!

(You can overdo this idea.)

Test: Does clicking to get the next bit of text or graphic ruin the flow of your presentation, or does it provide a useful pause to absorb between segments?
A fun look at What NOT to do in a PowerPoint presentation:

Don McMillan: Life After Death by PowerPoint:

http://www.youtube.com/watch?v=lpvgfmEU2Ck
Help your audience by building up a complex picture gradually and explaining as you go

**Figure 3  Who earns what?**

- **Median, £18,800**
- **Mean, £23,000**

25th percentile: 25% of incomes below this value.

50th percentile (median): 50% of incomes below this value.

75th percentile

Interquartile range

Minimum

Usually maximum, but in this case maybe 95th percentile

Estimated only

25th percentile: 25% of incomes below this value.
Making slides more readable and engaging

- Note the use of alternating colours ...
- ... on many slides.
- Can also be used to highlight key points or concepts.
  - (note I have also underlined key words / concepts for highlighting when printed to greyscale)
- Indenting sub-points helps the audience see the hierarchical structure of ideas on a slide.

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- ... on many slides.
- Can also be used to highlight key points or concepts.
  - (note I have also underlined key words / concepts for highlighting when printed to greyscale)
- Indenting sub-points helps the audience see the hierarchical structure of ideas on a slide.
Slide design: titles and content

• Three common designs:
  – Topic title → Content
    • Very commonly used.
    • Content may lack focus: may appear to be just “information” without a clear purpose.
    • Can be quite short.
  – Question title → Answers content
    • Helps focus the content when preparing the slide.
    • Helps the audience understand the purpose of the slide.
    • May help keep the audience engaged – *hopefully they will be on the edge of their seats waiting for the answers!*
    • Can help the audience follow the overall structure of the talk more easily.
    • Can be a bit long.
  – Assertion title → Evidence content
    • Makes it clear *you are making an argument*
    • Having an argument is a critical part of a good academic talk.
    • May be a bit long.
  – Variety will probably help keep audience’s attention though.
Slide titles serve the same purpose as topic sentences and signposts in the paragraphs of written text.

**Topic title examples:**

- “Clarity in explaining”
- “‘Hooking’ your audience with your intro”
- “PowerPoint slides – some nuts and bolts”

**Question title examples:**

- “How much can I say?”
- “At what level should I pitch my talk?”
Example of an Assertion-Evidence Slide Design:

The best places to harness geothermal energy are at the plate boundaries.

Source: http://writing.engr.psu.edu/slide_templates.html

Iceland is almost entirely run on geothermal energy.
Designing your single slide for the 3MT competition

- Title and your name
- Simple graphics which tell a story
- Minimal text
Designing your single slide for the 3MT competition

The waiting game in the movie industry: Timing decisions for DVD release

- BO sales
  - >$25m
  - $25-50m
  - $50-75m
  - <=$75m

- DVD waiting period (Wks)
  - 0-10
  - 10-20
  - 20-30

- Time at the BO (Wks)
  - 0-5
  - 5-10
  - 10-15
  - 15-20
  - 20-25
  - 25-30

- 15wk wait
- 24wk wait
On the value of organising your talk around questions rather than topics

- Topics can be unfocussed, leading the presenter to just present information rather than an explanation / argument
- Questions provide better focus and justified answers = an argument

Example: Overall topic = Influences of colonial practices on inter-ethnic tension and violence in post-colonial times.
Topic heading: **German colonialism in Rwanda.**
Topic questions:
- How did the Germans divide up labour opportunities along ethnic lines?
- Why did they do this?
- What consequences did this have on access to political and economic power in the post-colonial period?
- How would that contribute to inter-ethnic tension / rivalry / violence?
Basic framework of questions for a research project

1. What was the motivation for doing some research?
   a. Why is the general area interesting / important?
   b. Why shouldn’t we be satisfied with existing knowledge / approaches?

2. What was the precise aim of your research (and why did you think that was likely to be a profitable way to go)? [For 3MT, may leave implicit or implicitly answer with your conclusions.]

3. How did you do your research?

4. What were your key findings?

5. What are the implications or significance of your findings?
Referencing in Oral Presentations – Example 1

Human cognition (Perkins, 1995)

- Pattern driven $\Rightarrow$ four default modes
  - Fuzzy thinking
  - Hasty thinking
  - Sprawling thinking
  - Narrow thinking

- Default modes generally useful

- Problematic in unfamiliar situations or familiar situations with a novel twist

+ Reference list at end.
A Bit of Cognitive Science Theory

Pattern driven nature of human cognition leads to four default modes of human thinking:

– Fuzzy thinking
– Hasty thinking
– Sprawling thinking
– Narrow thinking

These modes serve us well most of the time, but can lead us into trouble in unfamiliar situations or familiar situations with a novel twist.

Handling Questions and Answers

- Anticipate questions and prepare your answers.
- Repeat audience questions (when appropriate!):
  - so whole audience can hear the question.
  - to give you time to compose your response.
- Be honest if you don’t know the answer to a question. (But be prepared with a response.)
- If someone wants to get into an extended debate and you’ve run out of time, invite them to discuss the issue further with you at the next break.
- Think through and rehearse ways of responding to difficult situations.
Recap (oral presentations):

- Aim to answer the “five questions”
- Rehearse your talk and time yourself giving a “live presentation”. Remember the importance of brief pauses!
- If your talk is too long, examine the content and decide what can be removed without losing the main points or the flow rather than deciding to talk faster.
- Rehearsal leads to a more polished presentation and being well-prepared will help with nervousness.
Poster Presentations

http://www.ncsu.edu/project/posters
The key thing to keep in mind when designing your poster is the conditions under which people will be reading it:

- in a crowded room;
- at a distance of 1-2 m;
- with tight time constraints – conference delegates desire to see a few posters in a one hour time slot.

This means that:

- you need to have a large, informative title which grabs people’s attention:
  - If you have an interesting result, state it in the title:
  - E.g. “Information about the rules and penalties for plagiarism not enough to change student behaviour”;
- the main text needs to be very brief, in fairly large letters, and with lots of white space so that people can quickly grasp your message (dot points are good!)
  - note that it can take a lot of revisions to achieve this!
- large and clear section headings should be used to help the reader quickly navigate their way through your story.
- Since your text should be quite brief (think of it as being like a thesis abstract), there is no need to start with an abstract; just start with your introduction.
Southern Flounder Exhibit Temperature-Dependent Sex Determination
J. Adam Luckenbach, John Godwin and Russell Borski
Department of Zoology, Box 7617, North Carolina State University, Raleigh, NC 27695

Introduction
Southern flounder (Paralichthys lethostigma) support valuable fisheries and show great promise for aquaculture. Female flounder are known to grow faster and reach larger adult sizes than males. Therefore, information on sex determination that might increase the ratio of female flounder is important for aquaculture.

Objective
This study was conducted to determine whether southern flounder sex determination is temperature-dependent.

- Southern flounder are oviparous and spawn eggs and sperm via in vitro fertilization.
- Hatched larvae were weaned from a natural diet (rotifers: Artemia) to high protein, pelleted feed and fed until satiation at least twice daily.
- Upon reaching a mean total length of 40 mm, juvenile flounder were stocked at equal densities into one of three temperatures: 18, 23, or 28°C for 245 days.
- Gonads were preserved and later sectioned at 2-6 microns.
- Sex-distinguishing markers were used to distinguish males (spermatogenesis) from females (oogenesis).

Figure titles announce key result, not just say what is represented.

Cf. “Impact of temperature on sex determination.”


Results
- Sex was discernible in most fish greater than 120 mm long.
- High (28°C) temperature produced 4% females.
- Low (18°C) temperature produced 22% females.
- Mid-range (23°C) temperature produced 44% females.
- Fish raised at high or low temperatures showed reduced growth compared to those at the mid-range temperature.

- A mid-range rearing temperature (23°C) appears to maximize the number of females and promote better growth in young southern flounder.
- Although adult females are known to grow larger than males, no difference in growth between sexes occurred in age-0 (< 1 year) southern flounder.

Acknowledgements
The authors acknowledge the Saltonstall-Kennedy Program of the National Marine Fisheries Service and the University of North Carolina Sea Grant College Program for funding this research. Special thanks to Lina Ware and Beth Stamps for help with the work.
What makes the poster example on the previous slide effective?

- Plenty of white space – reader not overwhelmed by text.
- Dot points used to keep text brief – e.g. results readily absorbed.
- Balance of text and graphics – engaging.
- Results announced in Figure titles \(\Rightarrow\) no need for extra text to explain figures.
  - E.g. “Temperature affects sex determination”
  - “Growth does not differ by sex.”
- Headings flag structure.
- *Text size could have been larger though.*
Keys to an effective poster

David R. Rowland

The Learning Hub, Student Services, The University of Queensland

Introduction

The purpose of this poster is to give some guidelines on what makes for a successful conference poster, as well as provide tips on the more technical aspects of producing a poster for the novice poster maker.

Posters that get read

The key thing to keep in mind when designing your poster is the conditions under which people will be reading it:

• in a crowded room;
• at a distance of 1-2 m;
• with tight time constraints – conference delegates desire to see a few posters in a one hour time slot.

This means that:
• you need to have a large, informative title which grabs people’s attention:
  – If you have an interesting result, state it in the title:
    E.g. “Information about the rules and penalties for plagiarism not enough to change student behaviour”;
  – the main text needs to be very brief, in fairly large letters, and with lots of white space so that people can quickly grasp your message (dot points are good!)
    – note that it can take a lot of revisions to achieve this!
  – large and clear section headings should be used to help the reader quickly navigate their way through your story.

Since your text should be quite brief (think of it as being like a thesis abstract), there is no need to start with an abstract; just start with your introduction.

Key layout & design principles

• Focus your sections around the key questions readers want answered:
  – what is your poster about?
  – motivation?
  – method?
  – results?
  – implications?

• A layout using 3 or 4 columns is common and effective. As with newspaper layouts, keeping column widths relatively narrow makes them easier to read and seem less daunting to read.

• A clear column structure, as shown in Fig. 1, also means readers don’t have to keep walking back and forth to read your poster and the structure is more obvious to the reader.

Preparation

Preparing a poster

Printing on one sheet of paper

University printeries are set up to print directly onto poster size paper, and even full colour posters are reasonably inexpensive. If you print your poster directly to poster size paper, then Microsoft® PowerPoint is a good package to use to prepare your poster.

To set the size, select Design: Page Setup: Slides sized for: [custom] and type in the relevant sizes and page orientation.

A1 is 84.1 cm x 59.4 cm (the size of this poster)
A0 is 118.9 cm x 84.1 cm

Printing on multiple sheets of paper

It is also possible to make up a poster by printing on multiple sheets of A4 or A3 sheets of paper and then sticking these together. While resulting in a less professional looking product, it may be more economical, especially if the poster will only be displayed once, and slightly easier to transport.

Remember though, that desktop printers can’t print right to the edge of a sheet of paper, so there will be an unprinted upon margin on each sheet of paper.

Fig. 1. A typical poster structure

Fig. 2. Example of a low quality graphic printed at too large a size.

Fonts and font sizes

Remember that people will be reading your poster from a distance of 1-2 m, so you will need to use a font size which will seem large to you at arm’s length.

For this poster, Arial with the following font sizes have been used:
• Title: 72 pt
• Author name: 48 pt
• Affiliation: 40 pt
• Headings: 40 pt (10-12 mm high for capitals)
• Main text: 23 pt (5-6 mm high for capitals)

To maximise poster readability, use a plain sans serif font like Arial rather than a serif font like Times New Roman, and use black type on a pale background rather than white type on a black background.

“Life size” was found to be at a 80% zoom level on my computer screen (at 25% zoom, the page width was measured to be 26 cm as compared to 84.1 cm for full size), so viewing screen contents from a metre or two away at this zoom level gave a good indication of whether the sizing was good or not.

Printing drafts

When printing a draft to A4 or A3 from a PowerPoint file, make sure you check, “Scale to fit paper”, in the Print dialog box, otherwise only the middle part of your poster will get printed. (It’s probably also a good idea to click the “Preview” button before printing to make sure you have all the print settings are correct.)

Further reading

http://www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm

Acknowledgements

I’d like to thank David Hughes for Fig. 1 and some tips for this poster.
In conclusion

• In preparing a presentation or poster, ask yourself:
  – If I was in the audience, what would my questions be? And answer these in a logical order.
  – Make sure you answer this question: Why on earth would anyone be interested?
For further assistance ...

- You can rehearse or discuss any aspect of your presentation with a Learning Adviser at Student Services.
- Location: Relaxation Block (Bldg #21d), opposite the main refectory.
- To book, drop into reception or ring 3365 1704.

To obtain a copy of the PowerPoint:
Email: d.rowland@uq.edu.au
Subject: research presentations
Workshop ID: 06979
Other recommended 3MT presentations:

- [http://www.youtube.com/watch?v=tJAO-zPoamY](http://www.youtube.com/watch?v=tJAO-zPoamY) [Balarka Banerjee, chronic rejection of lung transplants]
- [http://www.youtube.com/watch?v=kuRw_4VSp44](http://www.youtube.com/watch?v=kuRw_4VSp44) [Nanocantilever talk: v. good]
- [http://www.youtube.com/watch?v=uRujtX1MudQ](http://www.youtube.com/watch?v=uRujtX1MudQ) [ICU dietician: Motivation only]
- [http://www.youtube.com/watch?v=qSJF0d6H4Lw](http://www.youtube.com/watch?v=qSJF0d6H4Lw) [Cultural studies thesis? Sociology?]
- [http://www.youtube.com/watch?v=aITyXweZnm4](http://www.youtube.com/watch?v=aITyXweZnm4) [sad music / psychology: School of English, Media and Performing Arts]
- [http://www.youtube.com/watch?v=Bk6aK8RO-P-o](http://www.youtube.com/watch?v=Bk6aK8RO-P-o) [Fish talk, mostly intro + methods = proposal with some early results]
- [http://www.youtube.com/watch?v=SI8XOGubJyY](http://www.youtube.com/watch?v=SI8XOGubJyY) [DVD release timing: School of Marketing, Australian School of Business]
- [http://www.youtube.com/watch?v=eXsYJRbXrj0](http://www.youtube.com/watch?v=eXsYJRbXrj0) [Sara Ciesielski 'Learning to be Sherpa: Children, language and culture on the roof of the world‘]
- [http://threeminutethesis.org/uq-winners](http://threeminutethesis.org/uq-winners)
Appendix


http://www.youtube.com/watch?v=tJAO-zPoamY
3MT talk had this classic structure:

1. Started with what motivated the research

2. Stated aim of research (and gap it would address)

3. Explained method

4. Stated main findings

5. Discussed implications of findings

6. More findings

7. More implications

1. “>80% probability that within the next 7 years the new lungs will fail as well. ... This is not well understood, not preventable and not curable.”

2. “The main aim of my thesis was to better understand this disease ...” (“... not many people have looked at these cells before because they are very difficult to collect.”)

3. Used novel brush to collect cells from lungs and grew in lab.

4. Discovered cellular transformations like those found in some cancers and in the foetus.

5. “Chronic ‘rejection’ is not rejection at all => why rejection drugs don’t work.”

6. Erythromycin can prevent this process.

7. Better drugs can really make that “second chance count”.

Longer talks follow same structure, just give more detail in each section.