

# Convincing Scientific Presentations

With Natalie Wilkins

## Day 1 - Workbook

Name: \_\_\_\_\_



## DAY 1 AGENDA

AM	Introduction and learning objectives  Icebreaker  Pre-Course Work Q&A  Yes, And  Giving & Receiving Feedback  BREAK  Peer review of draft presentations  LUNCH
PM	Presentation flow  Balancing logic and emotion  Persuasive presentation titles  BREAK  Creating data-driven presentations: visualizing data vs. presenting data  Assignment briefing & individual editing of slides  Learning objectives review  FINISH

## LEARNING OBJECTIVES

Structure and prepare clear and concise content and messages required for scientific presentations	<b>Preparation</b>
Develop and design visual aids (PPT or posters) which convey key and/or complex messages in a concise manner	<b>Visual Mastery</b>
Gain practical experience on how to deliver your message whilst maintaining audience attention and engagement	<b>Delivery</b>

# Presentation Evaluation Checklist

SLIDE & CONTENT review:

- Tailored to the specific audience and their needs—the presentation is so unique that it would need to be revised to present to another audience.
- Title length short and to the point
- Clear structure - e.g. intro, overview, intro to work, problem definition, chosen solution, model, results, lessons learnt, conclusion
- Reasonable number of slides (anticipate 1 slide per 1-2 minutes of presentation)
- Good use of slide space, not cluttered
- Good balance of images and text
- Text size readable
- Clear axis and legends, units are represented
- Page numbers included

<b>Areas of strength</b>	<b>Areas of improvement</b>

# PLANNING YOUR PRESENTATION

When planning a scientific presentation, the first thing you should consider is ‘What do I want to achieve from this?’

All too often we forget the key reasons that we have been asked to make a presentation in the first place.

We get so caught up in ‘How can I make it look good?’ and ‘What if they don’t like me?’ and forget that the true reason behind the presentation is usually to provide the audience with information that they did not know before you started!

To help you, there are several elements you should consider prior to every presentation. These are as follows:

- Why are you speaking?
- Who will be in the audience?
- How long do you have to speak?
- Clear objective
- Plan the content: introduction, middle, summary
- Prepare visual aids
- Prepare briefing notes
- Rehearse

Typically, a new presentation can take anything **between 2-3 days** to design and prepare, including rehearsals.

# ANALYSE YOUR AUDIENCE'S NEEDS

The audience is the key part of any presentation. We should consider...

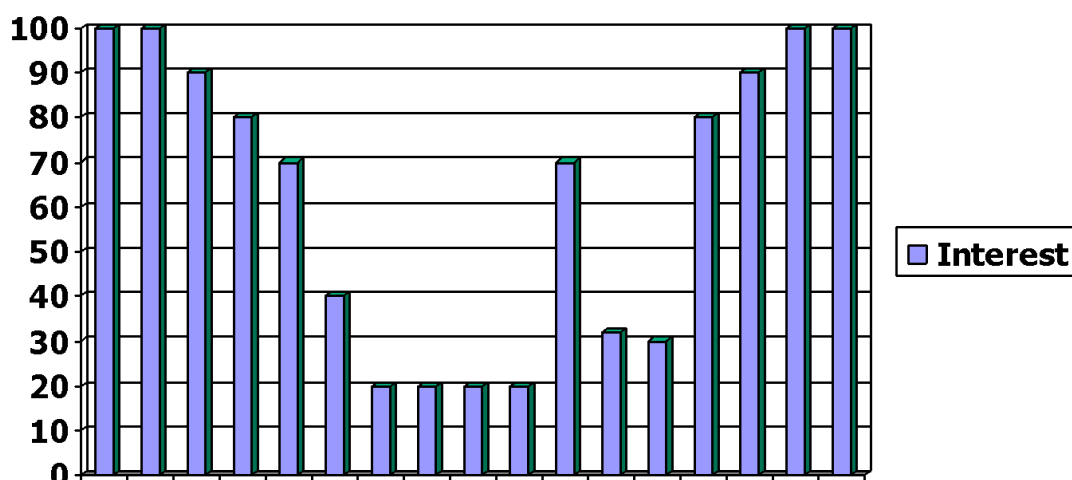
- What are they expecting to hear?
- What do they know already?
- Will they have strong opinions?
- Will it be clear why the subject should matter to them?
- Do I have support or opposition from particular people?

## Preparation with the audience in mind

How many?	
What are their expectations?	
Are they willing to change or are they resistant?	
Do you have any supporters?	
Any particular 'problem' people?	
What objections will they raise?	
Do you have a good response to their objections?	
Better still, can you eliminate objections altogether? Do you understand their needs well enough to frame things in a way that brings them with you?	
What style of presentation or approach do they like?	
What else have they seen or experienced on this subject? Is it new ground for them?	
Are they all at the same level of knowledge?	

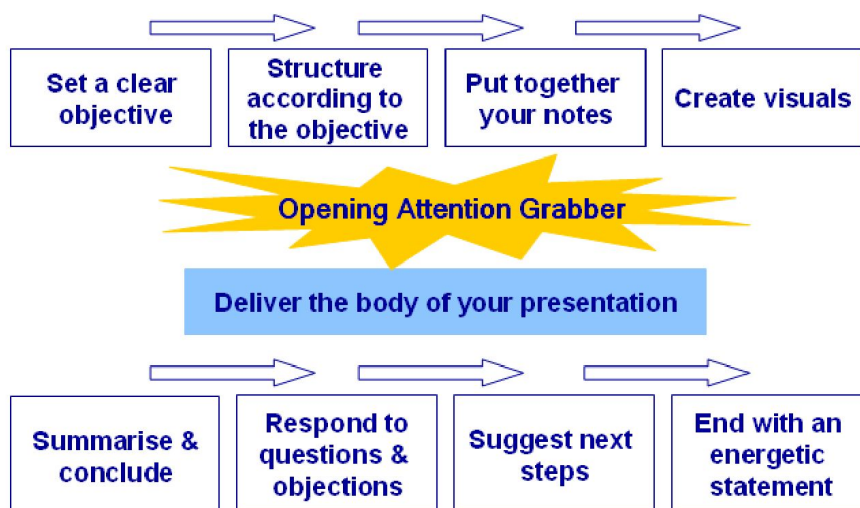
# STRUCTURING YOUR PRESENTATION

In any presentation there is a beginning, middle and end. I'm sure you have had the experience of sitting through a presentation and feeling your mind wandering off. This chart demonstrates what goes on during a typical presentation.



This chart shows the attention span of an audience over 20 minutes. To conquer the fact that people pay most attention to the start and end of a presentation we use the old adage: 'Tell them what you are going to tell them, tell them, then tell them what you told them'. This way we ensure they hear the message at least once!

With this in mind, you should use the following structure as a guide.





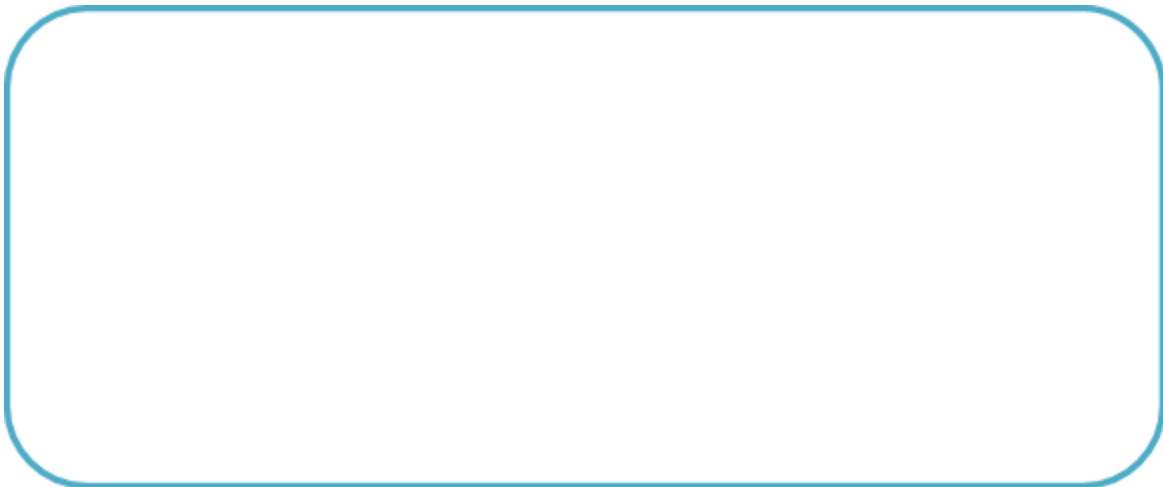
# SETTING A CLEAR OBJECTIVE

With every presentation, we have to ask one simple question, 'What is the point?'

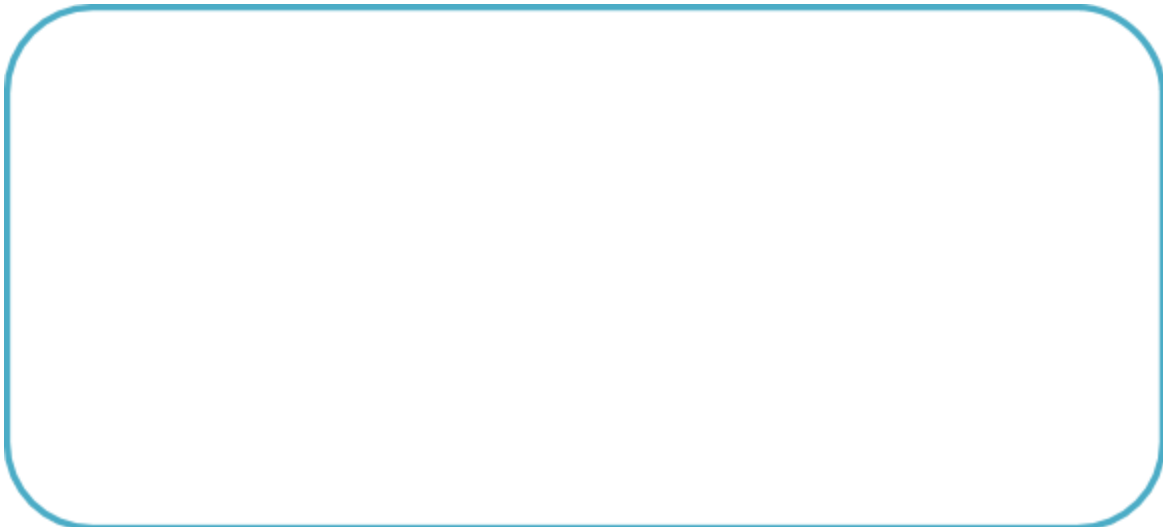
If we don't ask this question then we can't really expect anyone to listen to our message. We must be sure of what we are trying to achieve from our presentation. Are we simply sharing information, or is there more to our message? In order to identify our objective, it is useful to ask ourselves some key questions.

Think about a presentation you may do in the future, or one that you have done in the past. Write down your reasons for doing it.

**My objective:**



**What do you expect your audience to do differently as a result? How should they think, behave, act differently?**



# OPENING ATTENTION GRABBERS

When you set out your objective to the audience at the start of your presentation it is useful to use an 'attention grabber'. This is a statement that will get people interested in your presentation from the off.

Rowan Atkinson the famous British comedian once started a presentation by saying. "Before I left home this morning, I said to myself, 'The last thing I want to do before I leave is forget my speech' and sure enough, the last thing I did before I left, was forget my speech."

As you can imagine, an opening like this would get everyone laughing and once you have received a laugh at the start of your presentation, it sure helps to relax!

The following methods can be used to grab attention at the start of a presentation.

- **Arresting statements** – This approach will ensure a reason to listen to you is created by capturing the audience interest e.g. "Very few researchers have tried this approach...."
- **Facts** – Similar to the above; facts can have a major impact on an audience, particularly if they are shocking e.g. "We can save 10 hours a week of our people's time with a couple of admin changes."
- **Quotes** – People tend to like quotes and they can help ease you into a topic by enlightening the audience and perhaps raising a laugh, but make sure they're relevant and not inappropriate
- **Short anecdotes or stories** – People love a story and quite often storytellers! A well-developed story can hold an audience attention simply because of their desire to get to the end message! E.g. "I read a fascinating paper in ....."
- **A statement of your objectives** – A bit like the rhetorical question, you are setting yourself up too easily lead into your presentation. It sets a clear identification of what you will cover, so the audience is left in no doubt e.g. "I wanted to talk to you today in order to set out my vision for the future of..."

# BUILD YOUR CREDIBILITY

1. Brainstorm at least three ways you can build rapport and trust with your audience right away.

- o
- o
- o

2. List three ways you can continue to build rapport and trust after your initial contact (especially if you are an outsider to the organization):

- o
- o
- o

3. List two content experts that can provide you with valuable feedback:

- o
- o
- o

5. List ways in which you can demonstrate excellent credibility during your presentation:

Things you can do -

Things you can say -

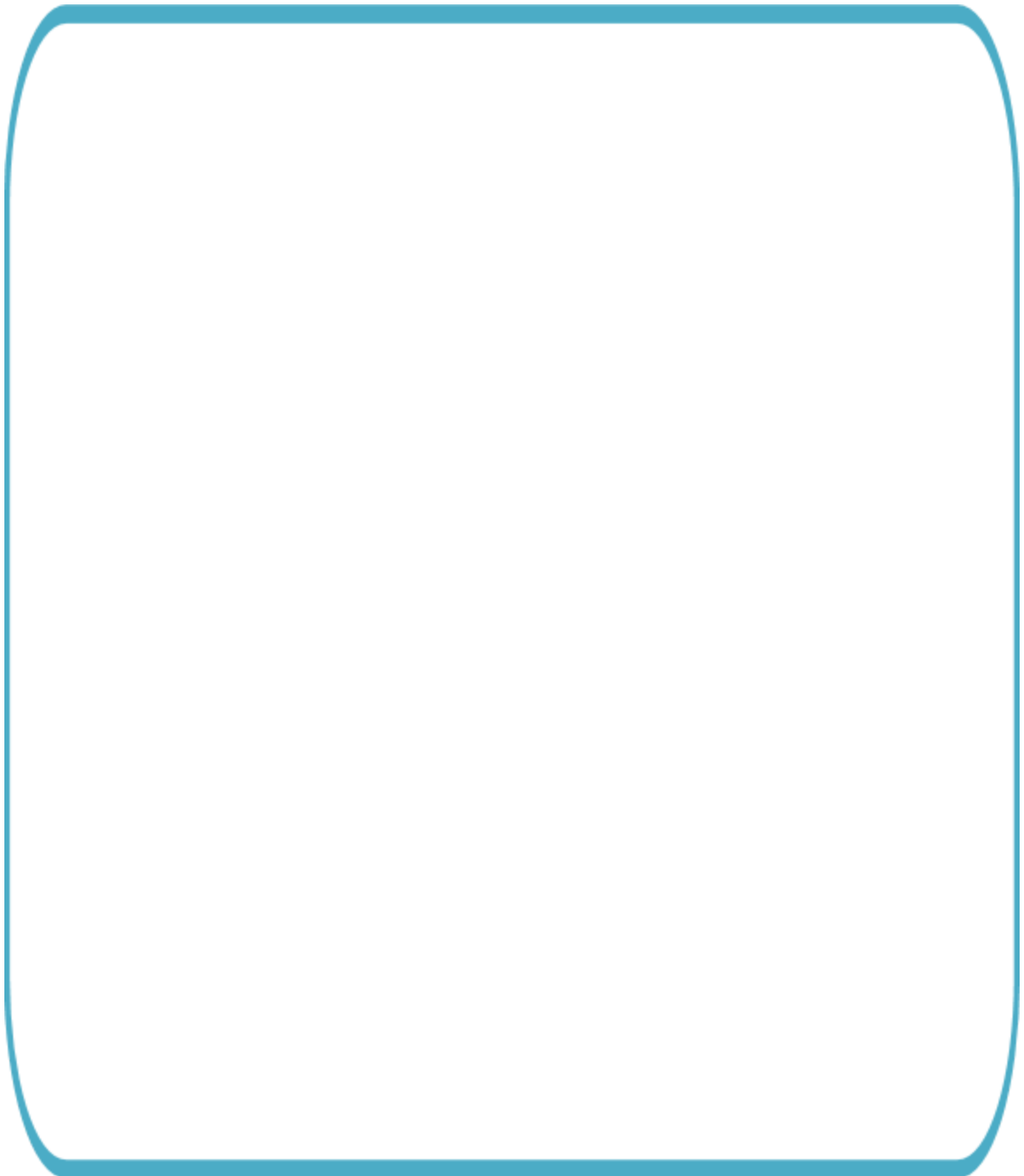
Things you can show -

6. Audience perceptions of you or the topic that will work to your advantage. How will you manage them?

7. Any behaviors of your own that can diminish your credibility on your speaking day? How will you overcome them?

# PRESENTATION TITLES

- Keep it under 10 words
- Leave out filler words
- Don't use a question
- Mention what is being studied
- Use words that people will search for
- VERB + NOUN + SOMETHING SPECIAL



## Word Translation Exercise

Statement	Translation
Short timescale	
Large-aperture magnet	
High ramp rate magnets	
High sampling rate	
Accurate measurements have been undertaken	
Our systems shows improved performance	
A novel (new) methodology has been applied	
Better results have been obtained	
Compared to previous methods our system shows ....	
It is well known that ..	
Approximately in the range of about 5 tesla	
It is not the good way to obtain	
This corresponds not to the previously mentioned data	
The dipole was measured by the wire technique	
The additional background field	
Considering the weak mechanical structure the material must be as strong as possible	

# VISUAL AIDS

Visual aids can be a great way of enhancing a presentation. Studies show that if you use more sensory involvement you will gain more interest and retention on the audience's part. What we know is that hearing is not a human's best form of receiving information, whereas seeing is.

## Of the information that is remembered:

- **85%** is through seeing
- **11%** is through hearing
- **4%** is through the other senses

## Researchers have found that:

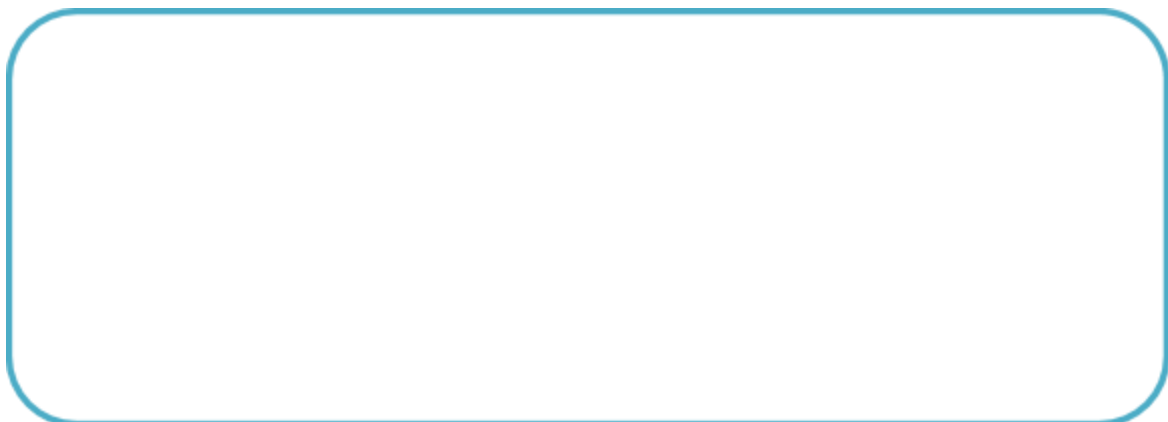
- Only **10%** of presentation is remembered
- Increases to **50%** if visual aids are used
- **70%** if both visual aids and participation is used

As you can see, it can be really useful to use visual aids or even gain involvement from the people you are presenting to. Another reason this is valuable is that it can take pressure off you as presenter.

If you are using PowerPoint to present your topic you need to be careful how you present the slides. Putting too much information up can have a real negative impact on your message.

You must always make sure that any form of visual aid you use during a presentation is relevant and does not overshadow the message you are trying to get across.

There have been many fantastic presentations that do not use PowerPoint at all, in fact I know of several trainers who all but refuse to use it. There are many alternatives methods for creating impact in a presentation.



# USING EQUIPMENT AND MATERIALS - CHECKLIST

## Audio / Video

- Check equipment, always preview any material
- Point out things to watch out for in advance
- Maximum 20 minute concentration span

**Make sure the right visual appears at the right time!**

## Projector

- Check equipment
- Check visibility
- Practise using a projector
- Cover additional information, uncover as appropriate
- Consider amount of information contained on each slide

## Flipcharts

- Check you have enough paper
- Check visibility
- Do you have enough pens?
- Do they work?
- Are they the correct colours (some colours can be hard to see from distance)

**Place headings on each flipchart to ensure people know what you are referring to.**

## Handouts

- Consider the format and the presentation of the handout
- Ensure the information contained is well structured, organised, logical
- Think about the readability, legibility, concise bullet format
- Decide when the handouts should be issued, beginning, middle, end



**Some colours don't photocopy well when using handouts!**



# Using PowerPoint

## Presenting Clear Information

### ✓ Use your slides to visually punctuate your message

Your slides should help your audience focus on the main points. Make sure each word and image helps convey your message in the strongest possible way.

### ✓ Limit how much information you provide on each slide

Use the slides for emphasis, but don't try to include all of the information on your slides.

- Include only one main idea per slide.
- Use keywords to help the audience focus on your message.
- Use active, visual language.
- Cut unnecessary words: Take a look at a written copy of your presentation. Cut paragraphs down to sentences, sentences into phrases, and phrases into key words.

### ✓ Give each slide a title

Titles will help the audience quickly understand the main themes of your talk.

### ✓ Organise your presentation into a logical sequence

Make sure that your presentation is easy for the audience to follow by checking the sequence of your slides. The main point of each of the slides should flow logically from one to another.

## Presenting Clear Visuals

### ✓ **Make your text large**

Small text is hard for audience members to read.

- Use at least 32 point font size for titles.
- Use at least 20 point font size for body text.

### ✓ **Keep the text slides brief**

Too much information can overwhelm your audience.

- Choose brief, simple statements instead of full sentences.
- Try to use no more than eight to ten words per line of text.
- Try to use no more than eight to ten lines of text on each slide.

### ✓ **Use an easy to read, colour format**

- Pick a colour combination that offers a strong contrast between the background and the text. Dark backgrounds with light coloured text or light backgrounds with dark coloured text work best. If you know you will be presenting in a poorly-lit room, use a light background. Conversely, if you know you will be presenting in a well-lit room, use a dark background.
- Limit the number of colours you use to no more than three. Colour can help add interest and can be used to emphasise key points. However, too much colour can be distracting.

### ✓ **Keep images simple**

Images (such as graphs, tables, and pictures) can help strengthen your presentation by conveying your message in an interesting and often easy-to-understand format. Before using art, ask yourself whether the art enhances or clarifies your message.

- Unnecessary art and animation can create visual clutter and distract from your message.
- Some art, especially photos and other high-resolution images, can also greatly increase the amount of memory needed to run the slide show.