

# INS5004

## RESEARCH METHODS AND SCIENTIFIC ETHICS

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## Outline

# Presentation Skills and Techniques

# The Time Sequence of Activities in a Science Presentation

1. **Greet the audience**, say who you are and what you are going to talk about.
2. If needed, provide an **“Overview/Summary” slide** of the whole talk.
3. **Introduction**: Should contain very brief outlines of the **context**, the **motivation** and **objective** of your work:
  - \* **Context**: Overall view of the field.
  - \* **Motivation**: Why you are doing this work.
  - \* **Objective**: What you are aiming to achieve, the purpose of your work.

# The Time Sequence of Activities in a Science Presentation

4. Describe your **method of approach**.
5. What your **results** were.
6. How you **interpret** your **results**.
7. The final few minutes, **give your conclusions** from your work in a brief list.
8. **Thank your audience** in very few words.
9. **Stop. Remain standing.** Don't ask for questions if it's at a conference.

# Structuring Your Presentation

Plan these features:

**1.Start by deciding the main points of your talk.**  
Be very selective.

**Common mistake:** Trying to present too much information causing you to almost run out of time and probably confuse the audience.



# Structuring Your Presentation

Plan these features:

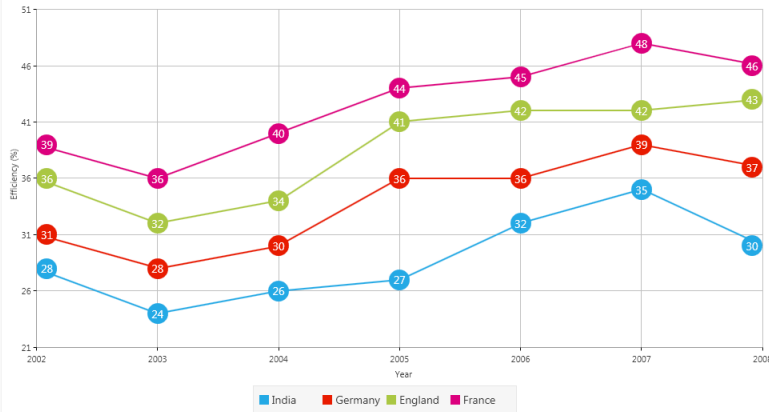
2. **The illustrations you're going to include:** Schematics, photographs, graphs, etc. Plan the storyline of your presentation around them.

**Common mistake:** Far too much text on the slides. Scientific and technical audiences do not like slides that are crammed with text.



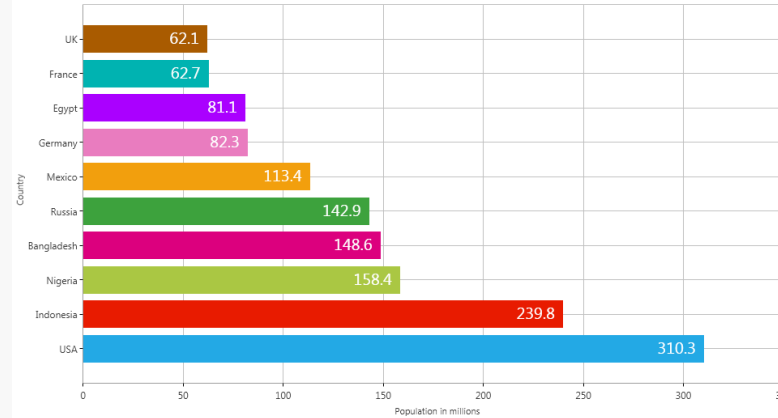
Line Chart

Efficiency of oil-fired power production



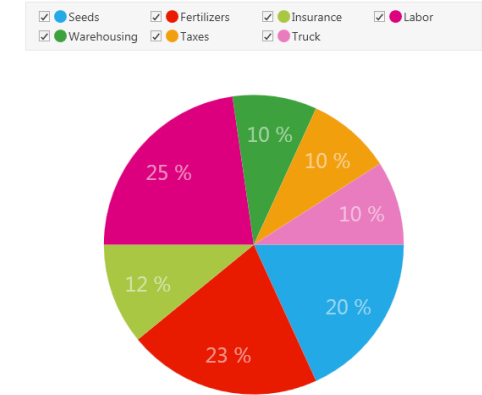
Bar Chart

Population Growth Comparison FY2010



Pie Chart

Agriculture Expenses Comparison



Choose the most suitable graphic type that express your message

# Structuring Your Presentation

Plan these features:

**3. Structure your presentation as a diamond** with the concise material at the beginning and at the end. Present material in the order shown below:

**1. Title**

**2. Definition of the problem**

**3. Why is the problem important?**

**4. Aim**

→ INTRODUCTION



# Structuring Your Presentation

## 5. Your contribution to solving the problem?

- Are previous studies enough? If not, why?
- What is the contribution of your study to current literature?
- Technology you developed and innovation

## 6. Your research method

- why do you choose this method?
- Which data are required?
- Analysis process??

EXPANSION

## 7. Results

## 8. Discussion

## 9. Future studies

CONCLUSION

# Structuring Your Presentation

## Title Slayt:

- Make sure your title-slide shows your name, title of the presentation, your institution and city. Include your country if it's an international conference.
- Look directly at the audience (not at the title-slide), and then say who you are and what you are going to talk about.

# Structuring Your Presentation

You should plan your presentation flow well.



# Designing Your Slides

- How many slides?

Use as many as you think appropriate to the subject matter and length of the presentation.

Some sources say one slide per 1 min. This can be misleading because more slides can be used provided, they are used effectively.

**Common mistake:** Far too many slides, therefore running out of time; hurrying through the remaining slides.



# Designing Your Slides

- Slides should not be overcrowded and cluttered with information.

**Common mistake:** Far too much on one slide.

## WORST PRESENTATION DESIGN MISTAKES

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### TOO MUCH TEXT.

Stocks tumbled Tuesday -- with the Nasdaq taking a pounding -- as the political standoff in Washington continued and the partial government shutdown stretched into its eighth day.

The Dow Jones industrial average fell 159.71 points, or 1.1%, to 14,776.53 and the Standard & Poor's 500 index dropped 20.67 points, or 1.2% to 1,655.45. It was the 11th loss in the last 14 days, and the S&P 500's biggest drop in six weeks.

The Nasdaq composite plunged 75.54 points, or 2%, to 3,694.83.

Anxiety over an Oct. 17 deadline to raise the nation's debt ceiling is starting to eat away at investor sentiment as compromise in Washington remains absent, says Pat Adams, a portfolio manager at Choice Investment Management.

- Aside from the theatrics in Washington, investors will also be paying close attention Tuesday to the unofficial start of the third-quarter earnings season.
- After the closing bell, aluminum maker Alcoa and fast-food chain Yum Brands will report.
- Analysts are expecting companies in the S&P 500 to grow their earnings 4.3% vs. the same quarter a year ago.

On Saturday, he signed several such bills, most prominently legislation stopping local law officers from detaining immigrants and transferring them to federal authorities unless they have committed certain serious crimes. And he agreed in August to let non-citizens monitor polls for elections.

Some legal scholars had said that the measure raised profound questions about what rights and responsibilities belonged to citizens alone, and a number of newspapers published editorials urging the governor to veto the bill after the Democratic-controlled Legislature passed it, with most Republicans opposing it.

# Designing Your Slides

- Do not use too much text.

Science and technical audiences respond far better to illustrations than to reading a mass of text.

**Common mistake:** Too much text, full sentences and not enough schematics and illustrations.

- Any text should be in the form of brief points, not full sentences.

**Common mistake:** Long, complete sentences.

— = +

less is more

# Simple design rules



Less text.

More imagery.

**Wild** imagery.

- ❑ One point per slide
- ❑ Few matching colours
- ❑ Very few fonts
- ❑ Photos, not clipart



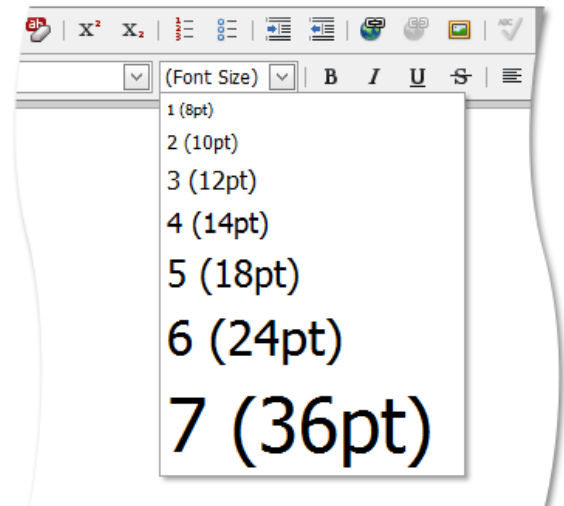
# Designing Your Slides



- The font size should be large enough for the audience to be able to read it easily.

**Common mistake:** Font is far too small for the audience to read.

Font should be at least 25 point, even for a small seminar room. The maximum font size of the heading should be 32.





# Designing Your Slides

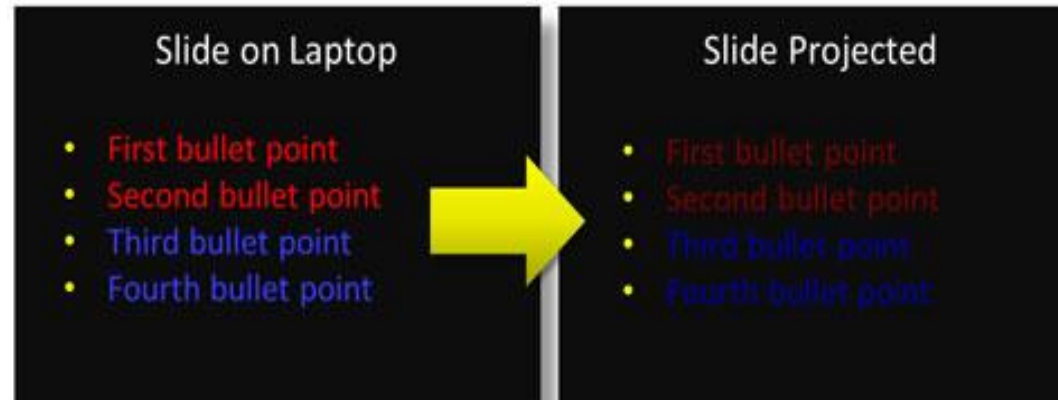
- Make sure that at any point in the talk, you reinforce what you are saying by showing the relevant text and illustrations on the screen.

**Common mistake:** Speaking a lot of detail with nothing on the screen to reinforce it.

# Designing Your Slides

- Use a simple, uncluttered background or template. Aim for maximum contrast with the background: very dark on very light.

**Common mistake:** The contrast is often not enough to enable the audience to see the material clearly. What looks clear on a good monitor can look quite different when projected.



# Designing Your Slides

- Make sure you are not speaking lots of critical detail while showing only general points on the screen.

Every slide should be informative.

**Common mistake:** Showing general points on the screen and speaking the detail, particularly when describing what a graph shows.

# Designing Your Slides

- Use abbreviated citations to other people's work and proofread your slides.

If you don't use citations, you are implying that it's your own work. As long as the citations are shown on screen, you can use very small font, e.g. 14 point.

# Designing Your Slides

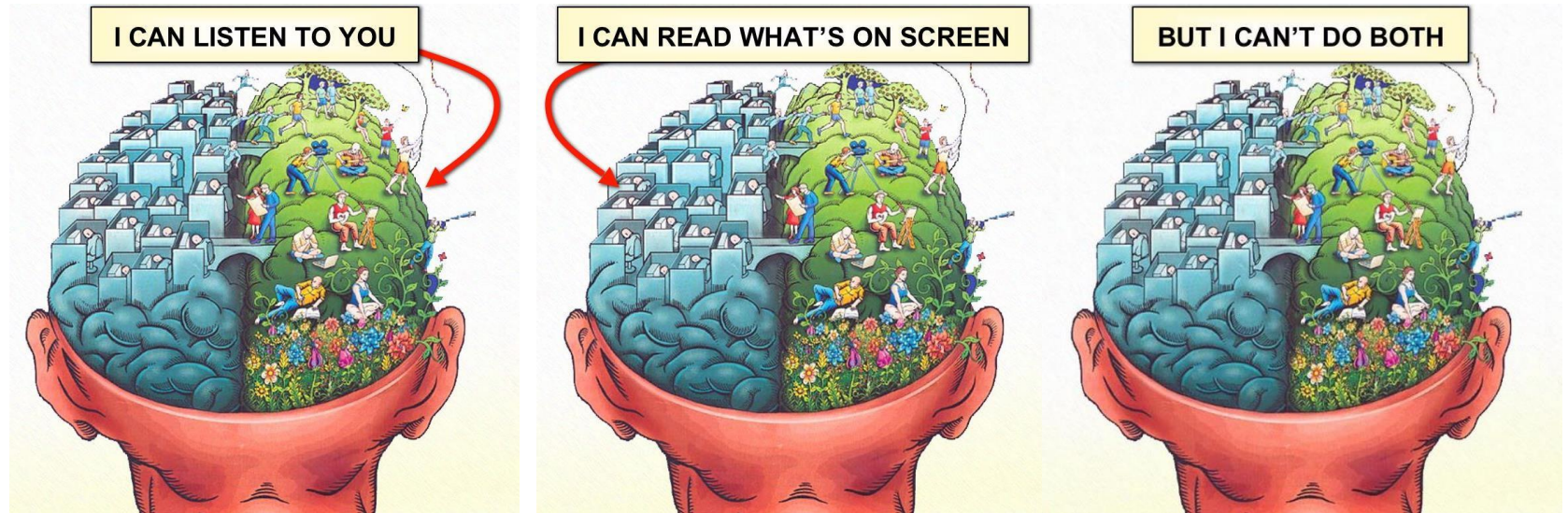
- One slide should contain utmost 60 words.
- Maximum 6 clauses should be used in a slide which has no figure or photo.
- You should set your speech to keep the listener's interest alive.

**“A picture paints a thousand words”**

## The Power Of Visuals



# Features that Audience Members most Dislike in Presentations



## Features that Audience Members most Dislike in Presentations

1. Too much text on the slides (always the most greatly disliked feature).
2. Text is too small to be read.
3. Text is made up of full sentences instead of brief points.
4. Illustrations are too small, too complicated or not labelled informatively.
5. Material is not presented logically.
6. Poor background and/or colour choices: interference with the text and illustrations.



## Features that Audience Members most Dislike in Presentations

7. Inappropriate animation effects, e.g. zooming bullet points, unneeded transitions between slides.
8. Reading too much: from either notes, the monitor or the screen.
9. Speaking too quickly and/or too quietly.
10. Standing so that part of the audience's view of the screen is blocked (i.e., closing the screen and turning back to audience).
11. Not looking at the audience, looking at only one part of the audience or looking at only one person.
12. Continuously swooping the laser pointer over the screen.

# Delivering a Good Presentation

## Common Rules

WHO? Academicians?



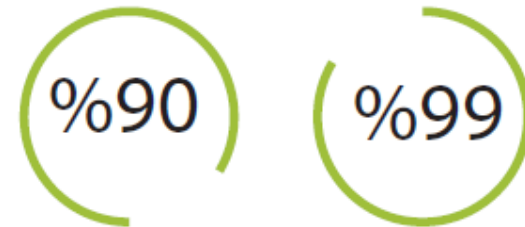
1. Presentation should be **listener-driven**
2. Presentation is for **audience**. You should be able to leave your own frame and look through the eyes of the audience.
3. Your presentation should have a main message, all your other contents should support your main message.

## Delivering a Good Presentation Common Rules

4. Don't fall into the **Presenter's Paradox** and pass all the information you have on the presentation.

Add information that is critical only to the audience, which can change his life, perception, or behaviour.

5. 99% of listeners should be able to understand 90% of your presentation.



# Delivering a Good Presentation Common Rules

## 6. Grab the **listener's attention**

The listener's interest drops rapidly after 10 minutes.

If your presentation exceeds 10 minutes, you should set up your presentation in such a way that the attention is relieved at the points of interest.

### How:

- Make audience laugh
- Encourage them to use their imagination
- Make stunning comparisons
- Give interesting anecdotes

# Delivering a Good Presentation Common Rules

7. Always make **eye contact** with the audience.
8. Do not underestimate the **importance of body language and tone**.
9. Be yourself. |

You may not have an impressive tone or body language, but sincerity is more important than natural abilities.

# Delivering a Good Presentation Common Rules |

10. Where you stand on the stage is important.

Stand at a point where the audience can see you and you can see the audience easily.

11. Highlight, link and repeat your important points

12. Keep it simple >>> Say what you're going to say !...

13. Finish effectively !...

# Delivering a Good Presentation Common Rules

## 14. Visual Properties of the presenter

- Appearance – Clothes
- Body movements
- Hands
- Gestures

15. While delivering your speech, your sentences should be **simple and short**. Avoid using jargon.

# Delivering a Good Presentation Common Rules |

## 16. While showing your slayts;

- give the audience the opportunity to digest the information.
- Quick change of the slides is confusing.
- The ideal time is 30 seconds.
- do not read the text in the slides as is. Rephrase them with newer words/sentences in a creative style.
- wait 2-3 seconds before every slide and maybe even before every important item in a bulleted list. This was the audience will find the time to read the slides/bulleted items before you start explaining them.



## Delivering a Good Presentation Common Rules

17. Be Prepared for **questions and answers** section.



18. Definitely make a **rehearsal of the presentation**.

This will take ~30 minutes of your time, and will make your actual presentation much more fluent and accessible.

# Delivering a Good Presentation Common Rules

**19.** Never ever exceed the time limit of your presentation.



# Delivering a Good Presentation Common Rules

- 20.** When making your presentation, EVERY MEMBER of your project group should be present at the location of presentation.
- 21.** When you begin the presentation, introduce yourself and your group members one by one, also mentioning your affiliations.
- 22.** When a member of the group is presenting, the other group members should not be looking around, and should not be moving much. They should listen to the presenter.
- 23.** During the presentation, do not tie your arms in front of you. Keep your arms open in hugging position, welcoming the audience.
- 24.** In the presentation it is typically expected that everyone presents his/her part.

