

# **INFO5990:** **Professional** **Practice in IT**

## **Week 10:** **Communication**

School of Computer  
Science

The University of Sydney

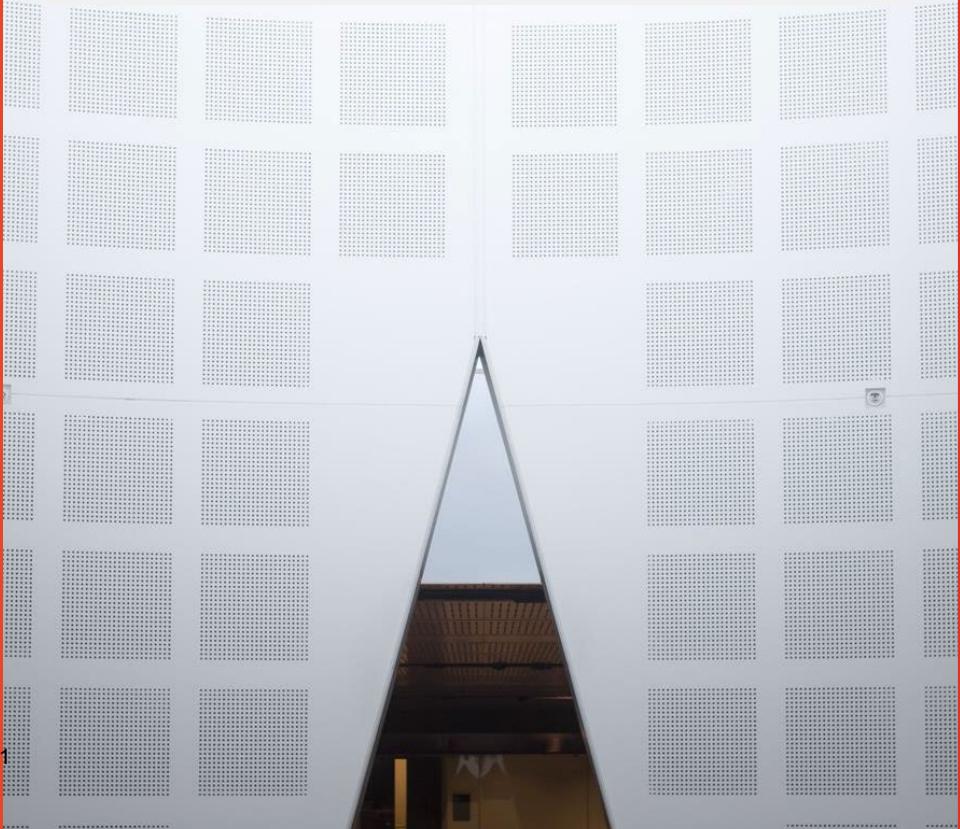


“The single biggest problem in communication is the illusion that it has taken place”.

*George Bernard Shaw*

“We have two ears and one mouth so that we can listen twice as much as we speak”.

*Epictetus*

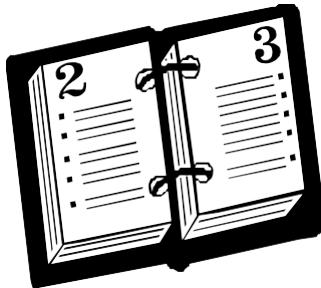


# Overview

- Part A
  - Appreciate the value of good writing / presenting
  - Understand some of the basics of good writing
  - Recognise correct paragraph structure
  - Avoid common pitfalls in writing / speech's
- Part B
  - Q&A Session

# This weeks focus: Communication

- Writing & Presenting
  - To convince and persuade
  - For IT Professionals
- Your Project
  - Who is your audience?
  - What information will they want?
  - What key messages do you want them to understand?



The University of Sydney



# Good writing skills are essential for professionals in IT



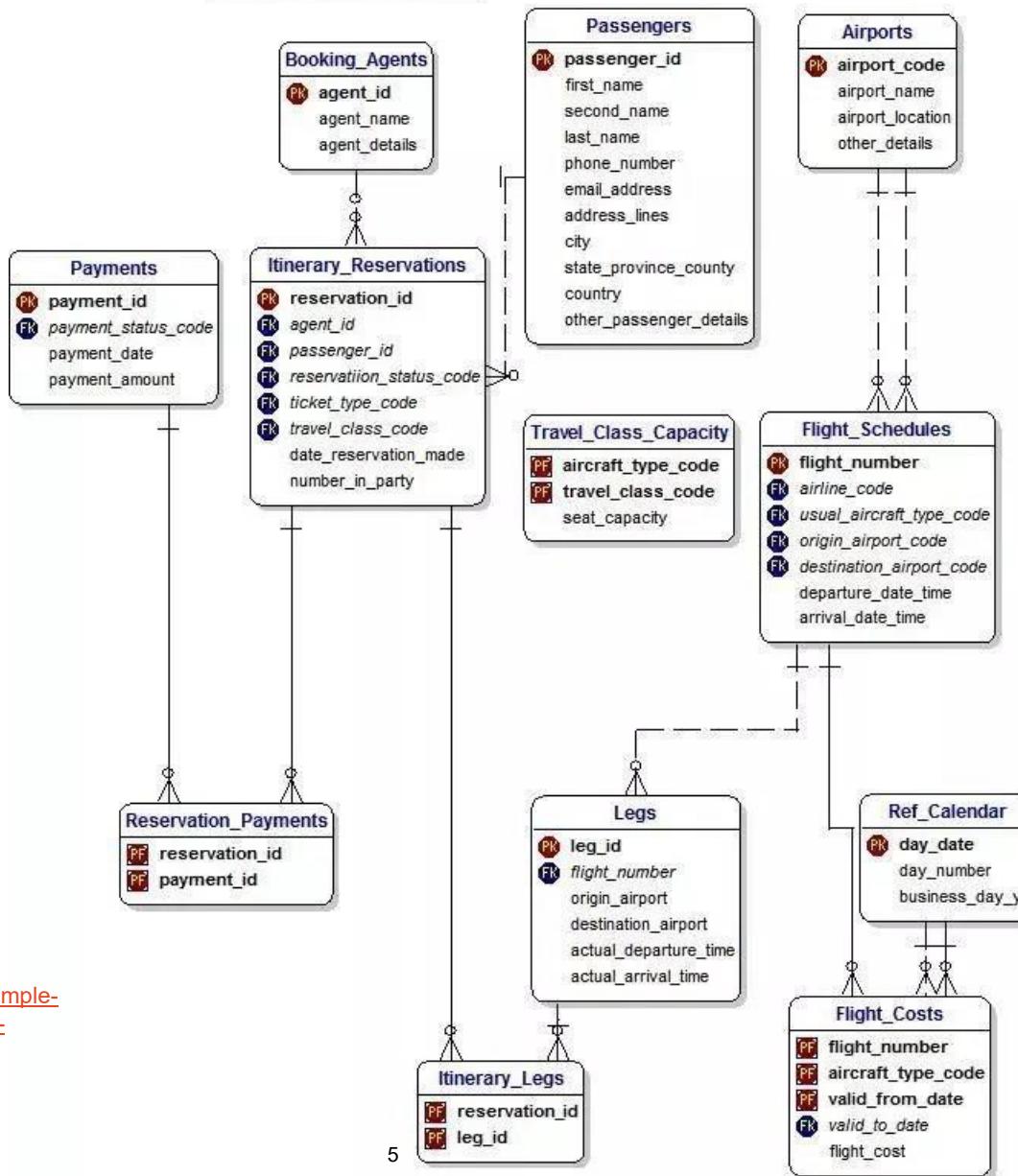
Writing is part of being a professional

- project proposals,
- requests for funding,
- progress reports,
- user documentation,
- legal procedures,
- job applications,
- requests for promotion



# Example

Airline Reservations Data Model  
 Barry Williams  
 DataBaseAnswers.org  
 November 20th. 2008



See: <https://krazytech.com/projects/sample-software-requirements-specificationsrs-report-airline-database>

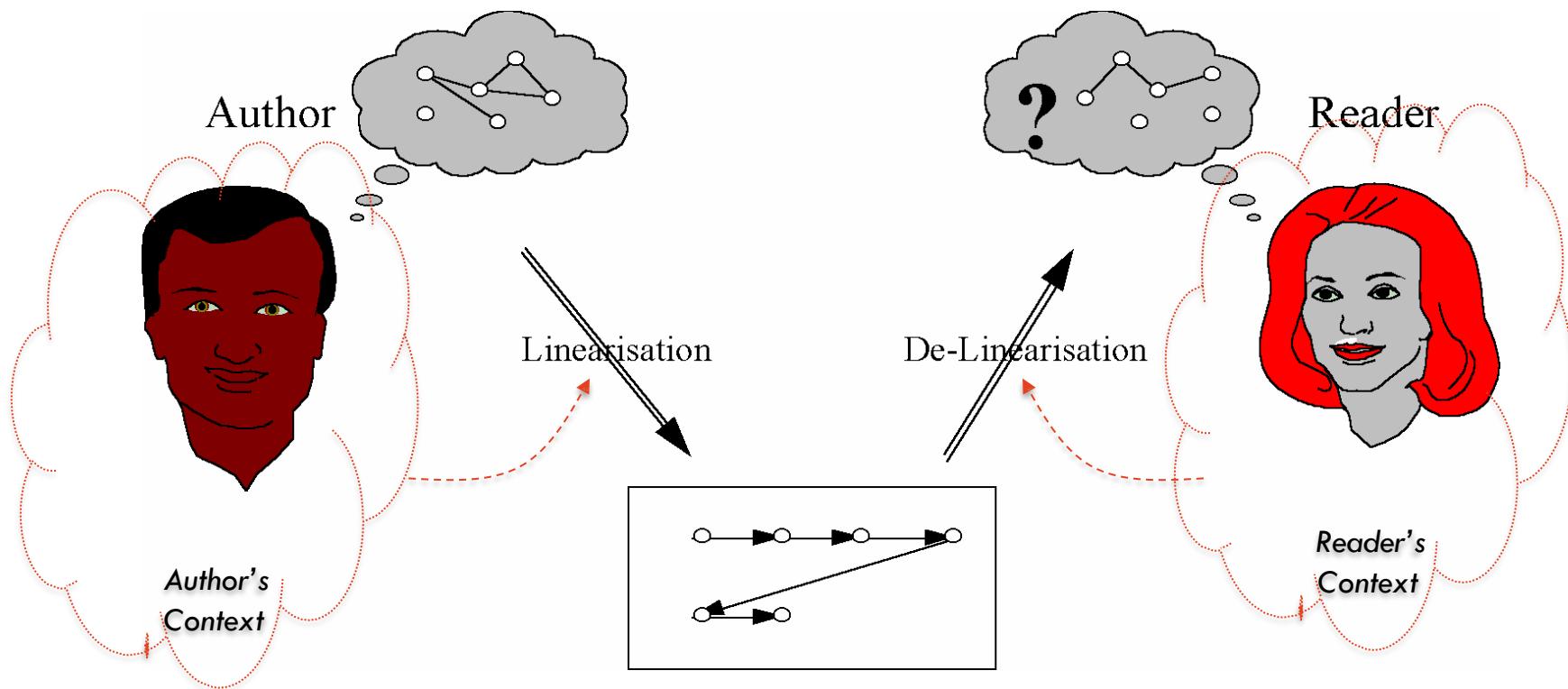
# Poor writing can hurt you!



- Your message may be misunderstood
  - A badly written specification can lead to flawed outcomes
  - A badly written report won't convince its audience and will be rejected or ignored
  - If your application, request or proposal is poorly expressed it won't succeed

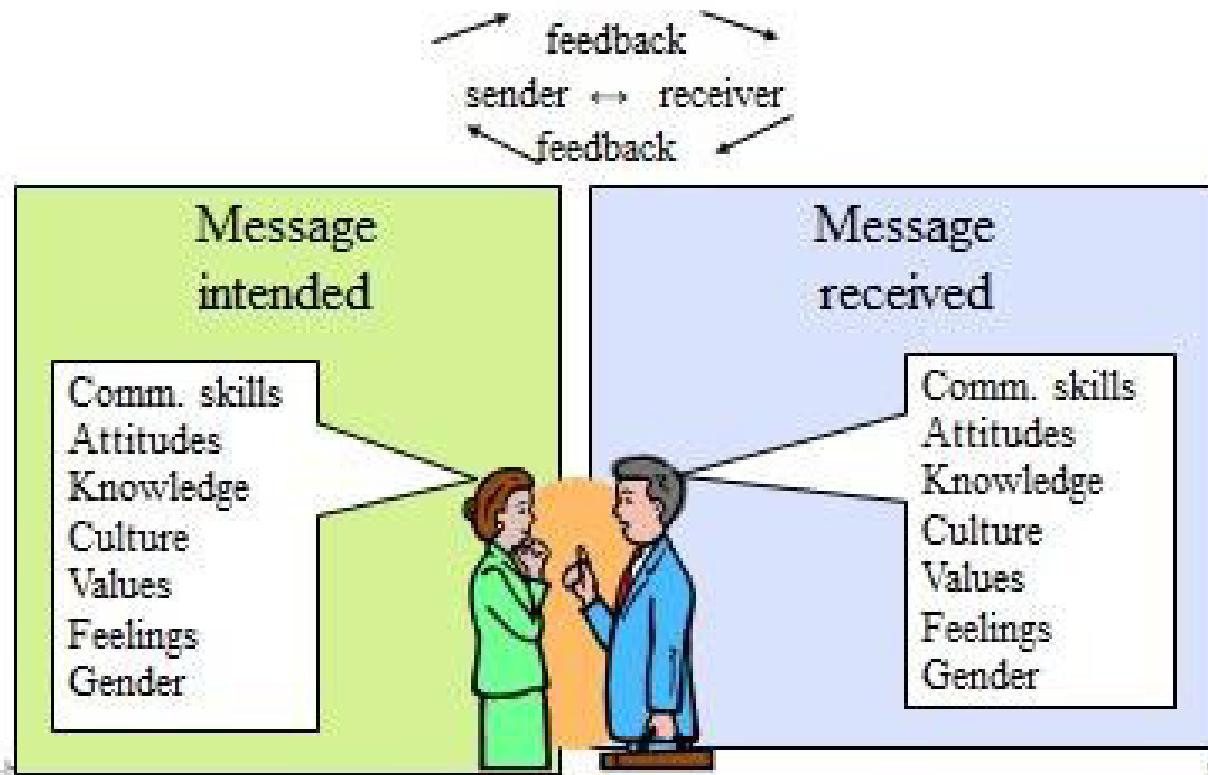


# Why is writing difficult?



# Interpersonal communication

Two-way dynamic and complex process



# Interpersonal communication

- Mistake: Saying what you want to say, rather than what the other person needs to hear!
  - Think about what the other person already knows?
  - Think about what the other person might be interested in?

# **Two things that help make writing clear**

## **Structure**

the organization of ideas



## **Cohesion**

the presence of a clear and logical flow of ideas



# Characteristics of professional writing

- Clarity
  - Clear structure. Logical argument
  - Simple but complete explanations
- Precision
  - No ambiguity or confusion
  - Uses words with precise meaning
- Objectivity
  - Statements supported by evidence
  - Avoids exaggeration or emotive statements
- Brevity
  - Effective and efficient
  - Avoids being ‘longwinded’, stating the obvious



$$E = mc^2$$



- Clarity

How to identify: The message is easy to understand. No ambiguity. The structure follows logical flow — even for complex topics.

**Example:**

The risk response plan includes assigning one owner per risk, creating contingency budgets, and scheduling weekly monitoring reviews.

- Precision

How to identify: Uses exact terms, not vague language. Numbers, specifics, and defined terms replace generalities.

**Example:**

A delay in steel delivery by more than three days will cause a 7% increase in project cost due to labor rescheduling and storage fees.”

- Objectivity

How to identify: Statements are based on evidence, not personal opinion or emotion. Neutral tone, factual language.

**Example:**

“Based on the last three project audits, the average defect rate in software modules exceeded 4%, indicating the need for additional testing phases.”

- Brevity

How to identify: The idea is expressed concisely, without unnecessary words, repetition, or filler.

**Example:**

“Submit the revised draft by Monday to begin stakeholder review.”

Writing Quality	What to Look For	Quick Example
Clarity	Easy to follow, no confusion	"Each team member reports to one supervisor."
Precision	Specific terms, numbers, definitions	"The budget exceeded by 12.5% in Q3."
Objectivity	Fact-based, neutral tone	"Survey results indicate 78% customer satisfaction."
Brevity	No fluff or filler	"Schedule finalized. Implementation begins Friday."

# Structuring each paragraph

COMPONENT of Paragraph	FUNCTION of Component
First sentence: Topic sentence	<p>Introduces and clearly states the idea that you will develop in the rest of the paragraph so that the reader can easily follow your writing.</p> <p><i>(You must make sure that every item of information in the rest of the paragraph relates to what your topic sentence says, and that nothing else is included in the paragraph - check this after you have written each paragraph or when proof-reading your final work).</i></p>
Development section (or body)	<p>Elaborates the idea that you have introduced with sentences that all relate to the idea in the topic sentence by, e.g.</p> <ul style="list-style-type: none"><li>- describing or explaining - presenting more information about the idea in the topic sentence</li><li>- exemplifying - using examples to illustrate the idea with evidence</li><li>- analysing – comparing, and contrasting concepts associated with the idea</li></ul>
Concluding sentence(s) (OPTIONAL)	<p>E.g.</p> <ul style="list-style-type: none"><li>- Rounds off what you have said in your paragraph</li><li>- Qualifies what you have said</li><li>- Links to the next paragraph</li></ul>

—

Topic Sentence:

Effective risk communication is essential for successful project management.

Body Sentences:

It ensures that all stakeholders understand the potential threats to the project and how they are being managed. Without clear communication, stakeholders may misjudge the severity of certain risks or assume that nothing is being done to address them. Risk communication also builds trust between project managers and team members, as it demonstrates transparency and proactive planning. Tools such as risk registers, dashboards, and status reports help convey this information consistently throughout the project lifecycle.

Conclusion Sentence:

Ultimately, by keeping all parties informed, risk communication enhances decision-making and contributes to overall project success.

# **How do I know when my paragraph is right?**

**Everything in the paragraph should relate to the same idea, the one spelt out in the topic sentence.**

- Is my paragraph too short?
  - Is there a significant new idea introduced?
  - Is the idea continued in the next paragraph?
- Is my paragraph too long?
  - Several ideas crammed into one paragraph?
  - Too much information all together?
  - Break the paragraph into two or more distinct ideas.
  - Decompose information into series of ideas

# Using the ‘right’ word helps

- Don’t use ‘vague’ words,
  - fairly, roughly, approximate, lots of
- Don’t exaggerate
  - huge, massive, minute, infinitesimal, enormous, earth shattering, fabulous
- Avoid words that aren’t exact
  - many, several, hardly any, mostly
- Find the word that is **exactly right** for the idea you are wanting to express
  - Use a thesaurus

## Get rid of distractions

- Spelling errors, Wrong grammar
- Bad *typography* (layout or font choice)
- Unusual, or little known words, (**balkanization**), or jargon (**periapse**)
- Inflammatory or biased statements,  
e.g. ‘any student from the University of Sydney would know that ...’

# Avoid Acronyms and Initialisms (1)

- Abbreviations formed from the initial components of a phrase or word

**ATM machine:** Automated Teller Machine machine

**PIN number:** Personal Identification Number number

- You can find out what an acronym means at  
<http://www.acronymfinder.com/>

Defined but never used again!

ent thesis

What is BOINC?  
Maybe defined somewhere else?

Most existing scheduling policies that are used to distribute work-units (**WUs**) in **VC** (Volunteer Computing) environments are based on simple heuristics. Up to now there are two different policies: the **First-Come-First-Serve (FCFS)** policy commonly used in **BOINC** projects and the fixed threshold-based policy. Both policies use Homogeneous Redundancy (**HR**) for the distribution of multiple work-unit instances (**WUIs**). **HR** distributes instances of the same **WU** to volunteer computers that are computationally equivalent, meaning that they have the same operating system and processor vendor (e.g. Intel or **AMD**). This yields bit-identical successful results for

Why not **MWUIs**? ons.

Usually stands for  
“Human Resources”

# Summary - Remember the 3 Cs

- **Clarity**
  - Good structure, straight forward language, precise words
- **Coherence**
  - Topic sentences tell the reader what to expect
  - Links between paragraphs give flow
  - Logical progression of content (argument)
- **Consistency**
  - language level, typography

# Oral communication



- Making your point
- Hints for your oral presentation



The University of Sydney



# Giving a talk is a commitment!

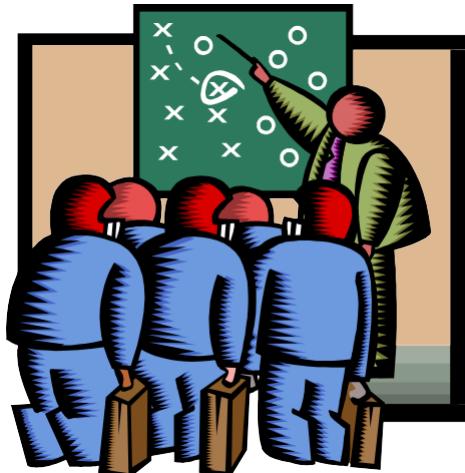
“A speech is a solemn responsibility. The man who makes a **bad thirty-minute** speech to two hundred people **wastes only half an hour of his own time**. But he **wastes one hundred hours** of the audience's time - more than **four days** - which should be a hanging offense”.

Jenkin Lloyd Jones, a Unitarian minister and the Secretary of the World Congress of Faiths held in 1993



# Why might we want to give a talk?

- To amuse
- To inform
- To convince other people
- To change other peoples' minds
- To demand action / investment
- To request additional resources
- To beg for help or funding



Communicate Information



## Example 1: Conference talks

- Used by academics to swap ideas and to keep up to date
  - Publishing in a journal often takes too long, particularly in IT
  - 5 – 30 minutes to get the message across



## Example 2: Presentations to peers or management

- Keeping colleagues up to date
- Reporting on progress
- Initiating a new project
- Securing sponsorship
- Introducing a new program, procedure
- Requesting additional resources



## Unfortunately ...

- Talks are too often boring, uninspiring
  - Audience switches off
  - Message is not communicated
  - Purpose of talk not achieved
- 
- So, whose fault is it?
    - The audience?
    - The presenter?
- 
- Its about gauging the audience, facial / questions, responses



# We want to help you improve your oral communication skills

To achieve this, we will

- Analyse the elements of a presentation
- Identify what makes a presentation ‘good’
- Suggest guidelines to help make your presentations better, and
- Give you an opportunity to practise
  
- Any one think they are a good presenter ?

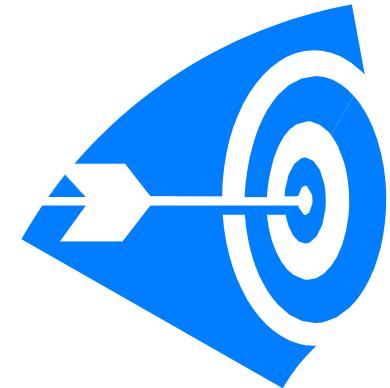
# Anatomy of a presentation

1. The Message
2. Structure
3. Timing
4. Physical factors
5. Personal factors
6. Visuals - Powerpoint



# 1. Message - Be sure of the message you want to communicate

- Decide what information, question or problem you want to present
- **First formulate your conclusion**
  - Yes, this gives you an aiming point!
- Collect supporting evidence or data
  - Find suitable references
  - Images and ‘Clip art’ can enhance
  - Word documents and Excel spreadsheets can be imported into PowerPoint



## 2. Construct your presentation systematically

1. Formulate your **conclusion with impact**
2. Determine a strong opening
3. Prepare slides containing the **main points** of the message
4. Add supporting material
  - data
  - visuals, graphs
  - quotations

### 3. Timing is everything

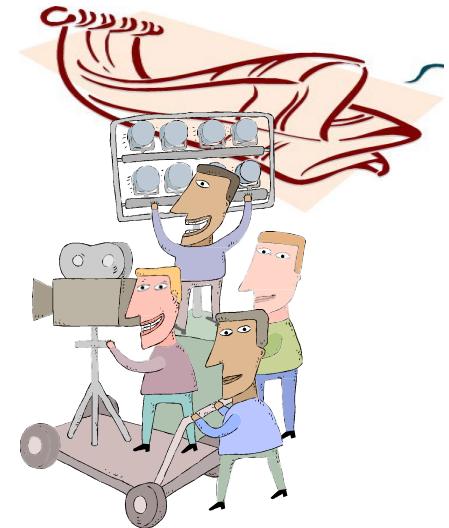
- Work out your timing
  - Allow time to present key points
  - Leave time for conclusion
- Practise with a stopwatch
- Running overtime is unacceptable
  - It is very bad form
  - It can affect others, e.g. at conference or meeting
  - It can disorientate the rest of the function
- **"Be sincere; be brief; be seated."**

*Franklin D. Roosevelt*



## 4. Physical factors

- Is your audience comfortable?
  - Ensure that lighting is OK
  - Check that ventilation is OK
- Don't obstruct their view
- Don't stand with the light in your eyes
- If there is a microphone use it properly
  - Check volume
  - Not too close
  - Avoid feedback



## 5. Know your audience

- How many in the group?
  - Are they experts in your field?
  - Are there non-experts as well?
  - What are their interests and educational level?
  - Why are they here?
- 
- What are they hoping to get out of it?



# Know yourself

- Believe in what you are saying
- Be confident
  - 55% communication comes from facial expressions
  - 38% comes from vocal quality
  - 7% comes from the meaning of the words
- Talk to your audience
  - Look them in the eye
  - Look at each individual in turn
- Speak up, speak clearly, not too fast



# Things to avoid

- Don't read your talk
  - Use brief notes if necessary
- Don't turn around to read your slides (except for in lecture !)
- Don't walk about or jangle keys
- Avoid 'um', and 'ah' – prefer silence
- Curb irritating habits
  - "You know", "sort of", "like", "right?", "OK"

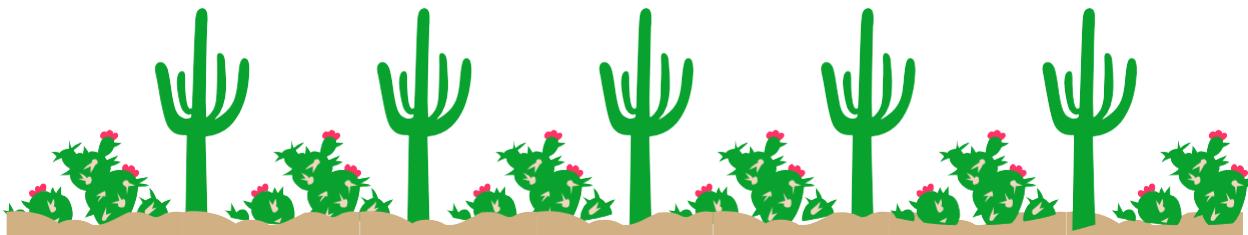


## 6. Why use PowerPoint?



# Keep slides SIMPLE

- Support just one idea at a time
- Uncluttered layout
- Simple colours
- Not overloaded with information



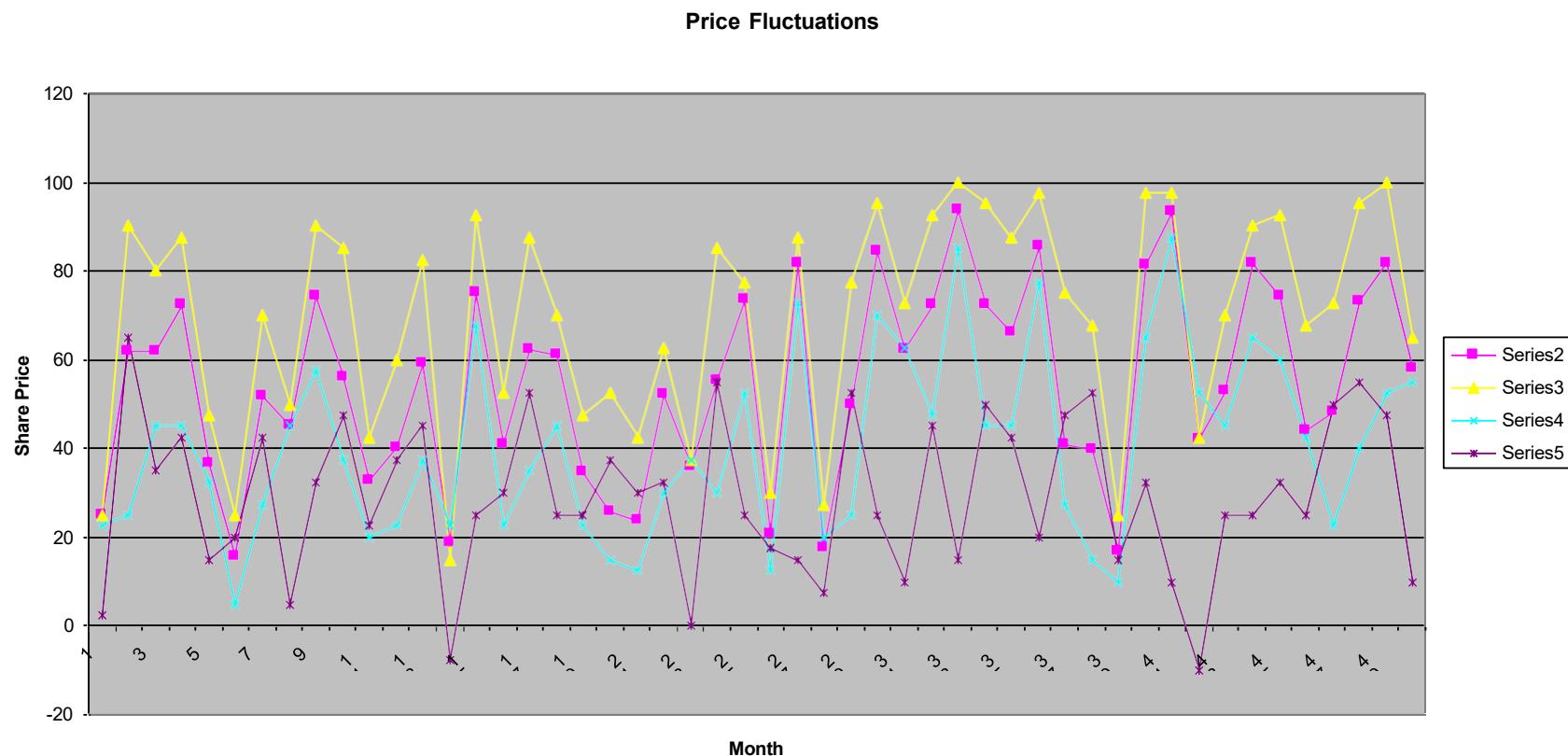
# Too much information

<b><i>Unit</i></b>	<b><i>HD%</i></b>	<b><i>D+%</i></b>	<b><i>CR+%</i></b>	<b><i>P%</i></b>	<b><i>Enrolment</i></b>
<b><i>Faculty Targets</i></b>	<b><i>4%</i></b>	<b><i>18%</i></b>	<b><i>50%</i></b>		
<b><i>Year 2</i></b>					
INFO2120		11%	42%	58%	90
SOFT2130	2%	14%	39%	61%	147

## ***Year 3***

BINF3101			17%	83%	6
COMP3310	6%	22%	44%	56%	18
COMP3456	100%	100%	100%		1
COMP3457	100%	100%	100%		1
INFO3404	1%	12%	36%	64%	74
INFO3600	17%	83%	100%		6
ISYS3400		3%	35%	65%	40
MULT3307		15%	55%	45%	40
NETS3304	3%	26%	49%	51%	61
SOFT3300		8%	43%	58%	40
SOFT3302	1%	15%	53%	47%	81
<b><i>Grand Total</i></b>	<b><i>2%</i></b>	<b><i>15%</i></b>	<b><i>44%</i></b>	<b><i>56%</i></b>	<b><i>605</i></b>

# So has this one



## This one too

### University of Sydney Graduate Attributes

The University of Sydney categorises Graduate Attributes[1] under three broad headings: Scholarship, Global Citizenship and Lifelong Learning. Each of these overarching attributes can be understood as a combination of five overlapping clusters of skills and abilities which must be developed in disciplinary contexts:

*Research and Inquiry:* Graduates of the University will be able to create new knowledge and understanding through the process of research and inquiry.

*Information Literacy:* Graduates of the University will be able to use information effectively in a range of contexts.

*Personal and Intellectual Autonomy:* Graduates of the University will be able to work independently and sustainably, in a way that is informed by openness, curiosity and a desire to meet new challenges.

*Ethical, Social and Professional Understanding:* Graduates of the University will hold personal values and beliefs consistent with their role as responsible members of local, national, international and professional communities.

*Communication:* Graduates of the University will use and value communication as a tool for negotiating and creating new understanding, interacting with others, and furthering their own learning.

[1] for more detail see <http://www.itl.usyd.edu.au/GraduateAttributes>

# Make sure slides are READABLE

- Use appropriate FONT
  - Use san serif font (e.g. **Arial** not Times Roman)
  - Use font size at least 24 points
- Choose COLOUR thoughtfully
  - Too much colour can distract
  - Good contrast for text
  - Avoid heavy background
- Effective LAYOUT
  - Make good use of white space
  - Columns, indenting
  - Capitalization – mixed case is best

## Fonts

Times New Roman is a serif font

Arial is a non-serif font (sans serif)

Microsoft sans serif a variable width font

Courier New is a fixed width font

## Readability 2: Colour and contrast

A paragraph is  
A paragraph is  
A paragraph is  
A paragraph is terminated by  
A paragraph is terminated by a ¶ mark

A paragraph is  
A paragraph is  
A paragraph is  
A paragraph is terminated by  
A paragraph is terminated by a ¶ mark

A paragraph is  
A paragraph is  
A paragraph is  
A paragraph is terminated by

A paragraph is  
A paragraph is  
A paragraph is  
A paragraph is terminated by

With slide background colour that varies across the slide ...

- contrast is going to be poor somewhere on the slide

no matter what colour lettering you choose

Better to keep to simple, sure options like black on white!

# Designing a slide – Template 1

- Three or four information points per slide. Fewer if complex points.
- Use simple animation to build up a more complicated image.
- Use colour sparingly for emphasis.
  - Use good contrasting colours. Avoid blue - orange, green - yellow, red - purple
  - Avoid ‘fancy’ templates as supplied

## Designing a slide – Template 2

- Three or four information points per slide. Fewer if complex points.
- Use simple animation to build up a more complicated image.
- Use colour sparingly for emphasis.
  - Use good contrasting colours. Avoid blue - orange, green - yellow, red - purple
  - Avoid ‘fancy’ templates as supplied

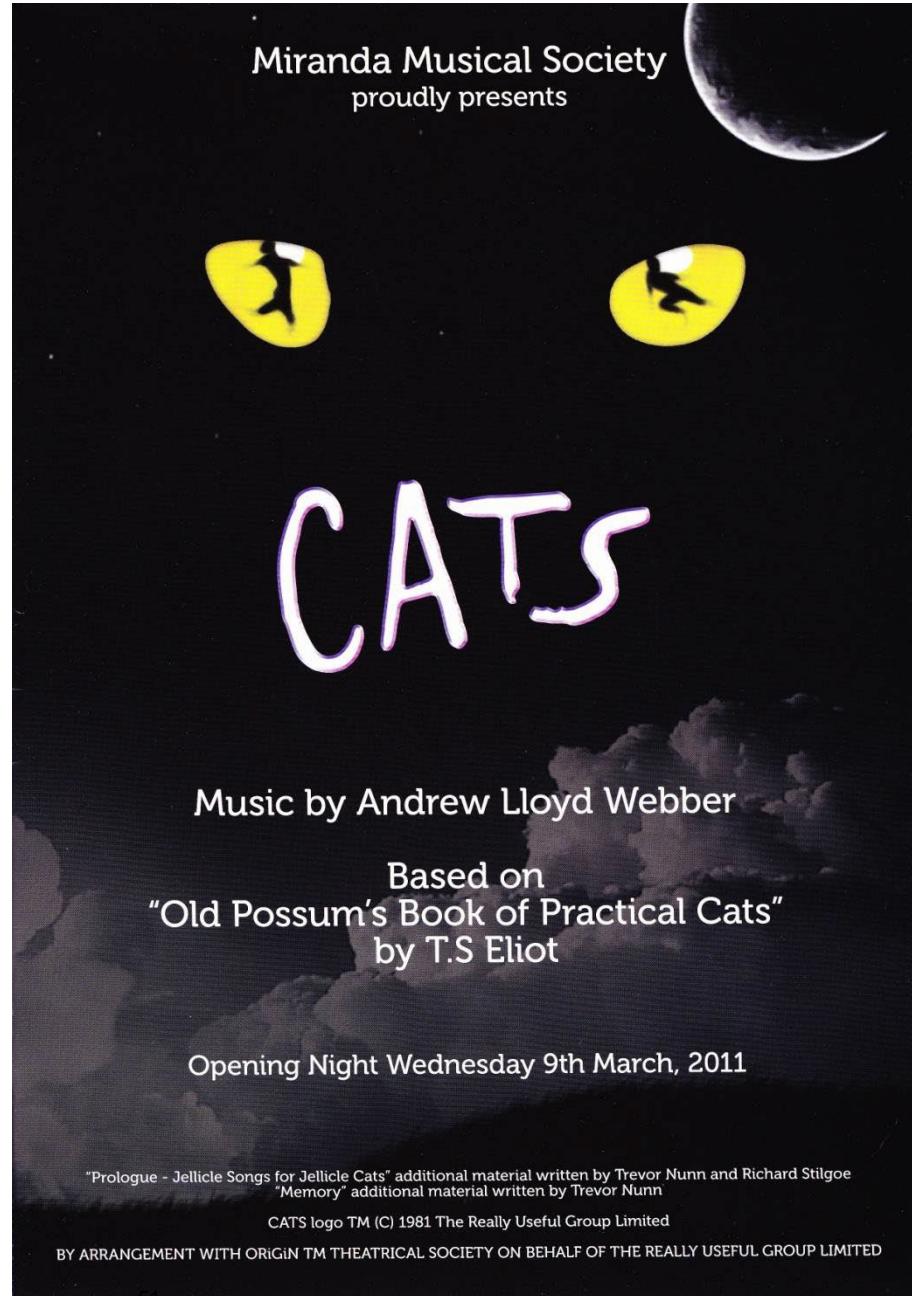
## Designing a slide – Template 3

- Three or four information points per slide. Fewer if complex points.
- Use simple animation to build up a more complicated image.
- Use colour sparingly for emphasis.
  - Use good contrasting colours. Avoid blue - orange, green - yellow, red - purple
  - Avoid ‘fancy’ templates as supplied

# Designing a slide – Template 4

- Three or four information points per slide. Fewer if complex points.
- Use simple animation to build up a more complicated image.
- Use colour sparingly for emphasis.
  - Use good contrasting colours. Avoid blue - orange, green - yellow, red - purple
  - Avoid ‘fancy’ templates as supplied

**Design can be  
more ‘graphic’  
than effective**



**Design can be  
more ‘graphic’  
than effective**

Bankstown Theatrical Society  
Presents



A musical by ALAIN BOUBLIL &  
CLAUDE-MICHEL SCHÖNBERG

Music by CLAUDE-MICHEL SCHÖNBERG

Lyrics by RICHARD MALTBY Jr. and ALAIN BOUBLIL

Additional Material by  
RICHARD MALTBY Jr.

Originally Produced on the stage by  
CAMERON MACKINTOSH

MISS SAIGON is presented through special arrangement with  
Cameron Macintosh Limited,  
Music Theatre International (NY) and Hal Leonard Australia.

**Design can be  
more 'graphic'  
than effective**

Rockdale Musical Society's  
Australian Amateur Premiere



MISS  
Saigon

DIRECTOR  
Simon Greer

MUSICAL DIRECTOR  
Greg Jones

CHOREOGRAPHER  
Joanne Gilmour

13 - 21 MARCH 2003

ROCKDALE TOWN HALL  
111 BRYANT ST AND PRINCES HWY, ROCKDALE

Your donations to the Victorian Bushfire Appeal are greatly appreciated

A musical by Alain Boublil & Claude-Michel Schönberg  
Music by Claude-Michel Schönberg. Lyrics by Richard Maltby Jr. & Alain Boublil  
Additional Material by Richard Maltby Jr.  
Originally Produced on the stage by Cameron Mackintosh  
Orchestrations by William David Brohn  
'Miss Saigon' is presented through special arrangement with Cameron Mackintosh Ltd  
Music Theatre International (NY) and Hal Leonard Australia

53

# Design can be more 'graphic' than effective

**W**ith one in three marriages ending in the law courts, and celeb splits hitting headlines almost every day, divorce can look like a breeze. Well, news just in: it's not. It turns out, splitting from your spouse can be far more complicated and painful than many people think. Here are a few things that may not have occurred to you about untying the knot.

**1 YOU CAN BE SEPARATED WHILE COHABITING** As long as you don't cook each other's favourite nasi goreng, you can apply for a divorce after a year even if living under the same roof. You can't sneak in a quickie in a weak moment, but you can move into the spare room and call it separation. Nudity and arguments over the dishwasher are optional.

**2 YOU CAN'T REMARRY UNTIL YOU'RE DIVORCED** Some people don't look into divorce until they want to wed again, but beware the spurned spouse. "My ex wanted to make a joint application," says Nick, an IT specialist. "Then I told her I'd proposed to my girlfriend and she started dragging her feet. It was stressful as we were keen to set a date."

**3 THERE'S NO DIVORCE FAST TRACK** It can take years to decide to divorce but, once you've reached splitsville, you must be separated for 12 months before you apply. Then there's a six- to eight-week wait for a court hearing. Even when a divorce is granted, you're not officially single until a month and a day later, says Sydney-based family lawyer Mary Poliatis.

**4 TELL IT TO THE JUDGE** For your wedding, you're the boss, but marriage is a legally binding contract, so a judge decides when and how it's dismantled.

**5 IT'S NOT ALL ABOUT YOU** If the grown-ups act like grown-ups, no one gets hurt, right? Wrong. "In a divorce, children find a way of blaming themselves," says Melbourne

**6 PRE-NUPS DON'T JUST EXIST IN HOLLYWOOD** In Australia, we call them Financial Agreements - financial because they cost a lot (upward of \$4000) and 'agreements' because lawyers like to be ironic. Who would 'agree' not to stake a claim on a spouse's private jet? Knock it up any time - before, during or after the wedding - but earlier is better if you fear he might run off with your bestie.

**7 YOU MIGHT BE DIVORCING FRIENDS TOO** Mates can be collateral damage, as Ita Buttrose says in her new book, *A Guide to Australian Etiquette*: "Sometimes, people you thought of as friends don't want to know you as a single person, as their interest in you was the shared interest of being part of a couple. Others might be afraid you'll steal their partner."

**8 IT DOESN'T HAVE TO BREAK THE BANK** There are two truths in life: love hurts and divorce costs, but you can DIY for as little as \$550 with an Application for Divorce, and file online at Comcourts.gov.au.

**9 PETS FEEL YOUR PAIN** No one wants to walk Rover, but mention the 'D' word and both parties want custody. Still, it's about what's best for them. Melbourne vet Dr Karen Budd warns: "Cats and dogs are finely tuned to emotions. When you're upset, they suffer, too." So find a shoulder - not a paw - to cry on.

**10 IT'S GOING TO HURT FOR A WHILE** 'No-fault' divorces have done away with blame, but they can't erase pain. Even if it's mutual, recognise what part you may have played in the marriage breakdown and seek counselling if needed. McCormack points out: "It's the death of a marriage - you have to give yourself time to grieve." ■

**STORY ANGELA MOLLARD**

clinical psychologist Sally-Anne McCormack. "Tell them there will never be a time when you won't love them and that it's not their fault." Remember, you changed everything, not them

**10 HURDLES ON THE ROCKY ROAD TO DIVORCE**

# **Simple is good, so, keep it simple**

- Three or four information points per slide. Fewer if complex points.
- Use simple animation to build up a more complicated image.
- Use colour sparingly for emphasis
  - Use good contrasting colours. Avoid blue - orange, green - yellow, red - purple
  - Avoid ‘fancy’ templates as supplied

## Make each slide COUNT

- The moment a slide is presented, the audience's attention is drawn to it ... so use it!
- Allow time for audience to read and absorb it
- Use every word on your slide
  - If you can simply 'skim over it' then leave it out
- Do not have too many slides
  - It's an ORAL PRESENTATION, not a picture show
  - Rule of thumb: no more than **about 1 slide per minute**. For 10 minutes, no more than 15 slides.

**Sometimes it is necessary to use numerical data, graphs, or equations ...**



**... if so, slow down, and talk your audience through each equation or table of data**

# Use animation to build up a complex slide



Work performed on site



Timesheet filled in



Data written

Timesheet data entered



Data read

Details checked



New data written



Batch allocation process



Labour hours appear in job details

## Example:

### Timesheet processing

**You can even include video clips**



# Group Assignment :

## Timing for your talk

1. What		1 minute
2. Purpose		1 minute
3. Key information		6 minutes
4. Summary		2 minutes

10 minutes = 10 slides

10 minutes Q&A

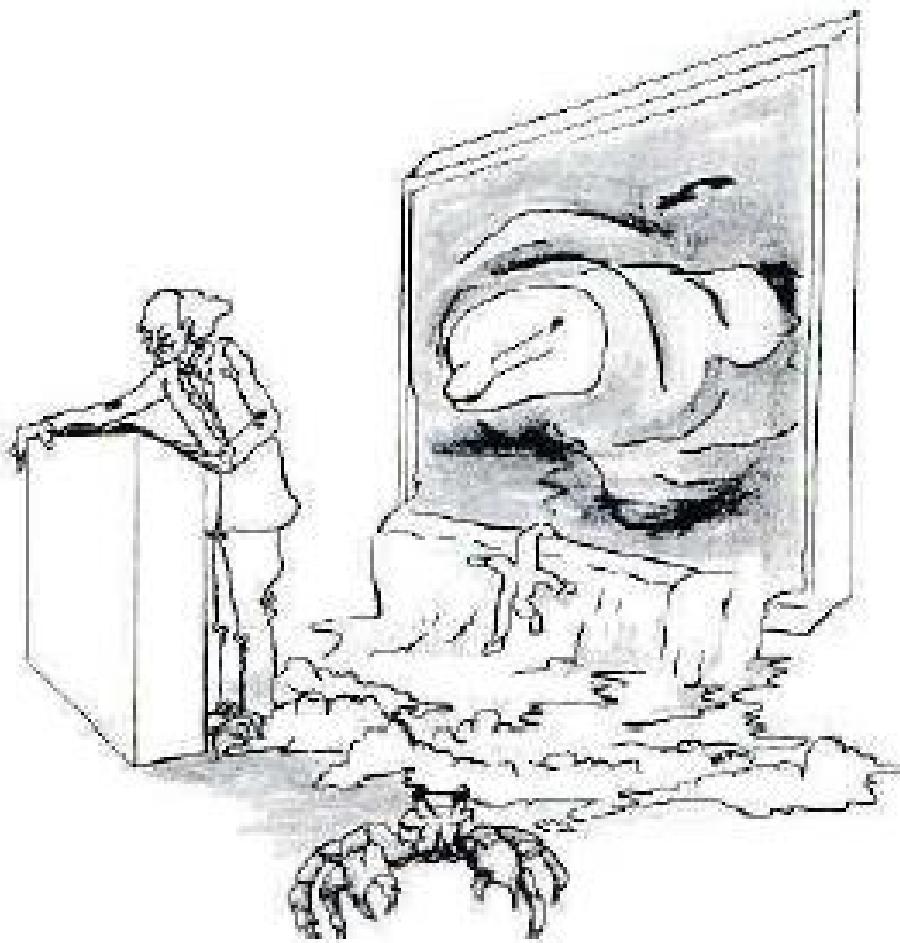


# What if English is not your first language?

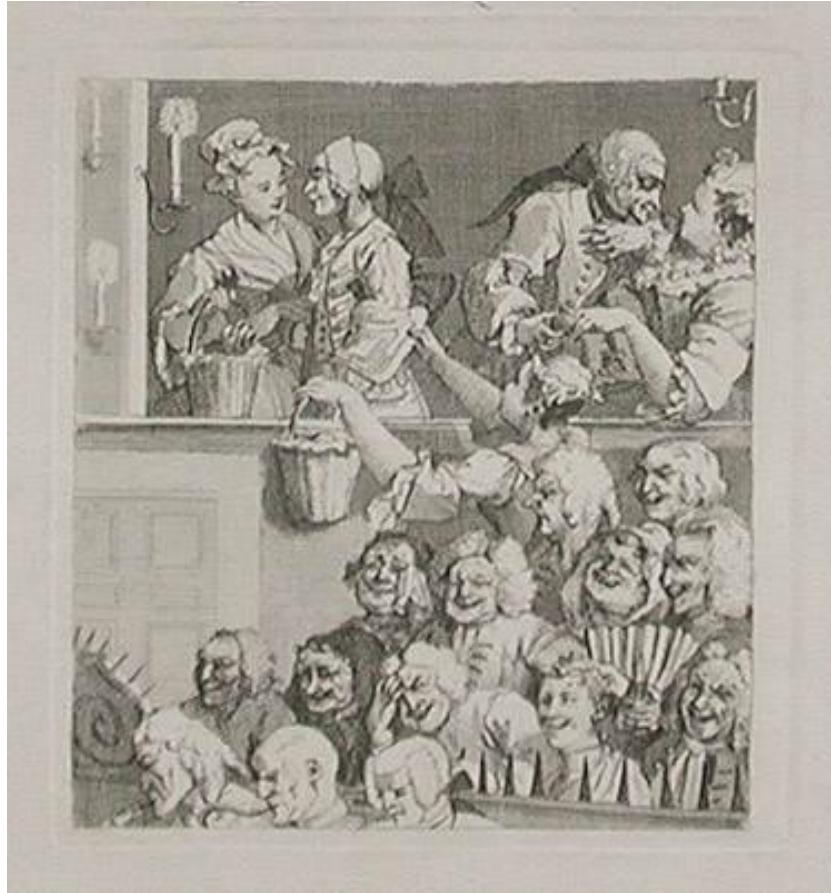
- Don't worry
- SLOW DOWN
- Check the pronunciation and meaning of any words you are not sure about
- Practise
- Try your presentation out on friend or relative



# Bring your subject to LIFE!



# ENTERTAIN your audience



## SPEAK UP and don't rush

# Try to make an IMPACT!



**ENJOY the experience!**



Above all

# PRACTISE!

