

# **Making Technical Presentations**

**Born public speakers do not exist.  
Yet business, social and personal  
success depends heavily on a  
person's ability to communicate.  
*(Dale Carnegie)***

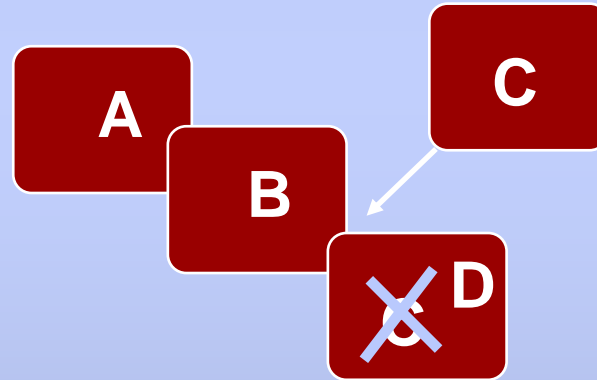
# **Presentations have several advantages over documents**

**Work can come alive for the audience**

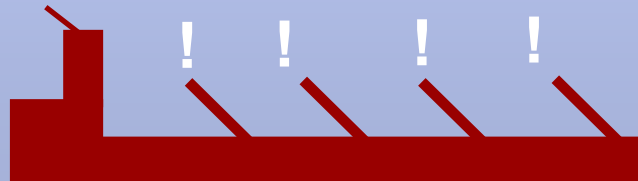
*Work* →



**Presenter can talk  
audience can react**

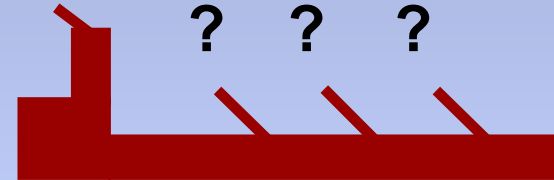


**Presenter can  
highlight main focus**



# **Presentations also have several disadvantages**

**Speaker has limited time and chance to present important data**



**Audience cannot reread text**

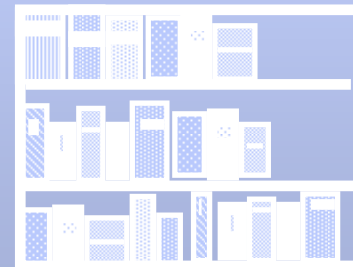
**audience**

**has one**

**chance**

**to hear**

**Audience cannot look up background material**

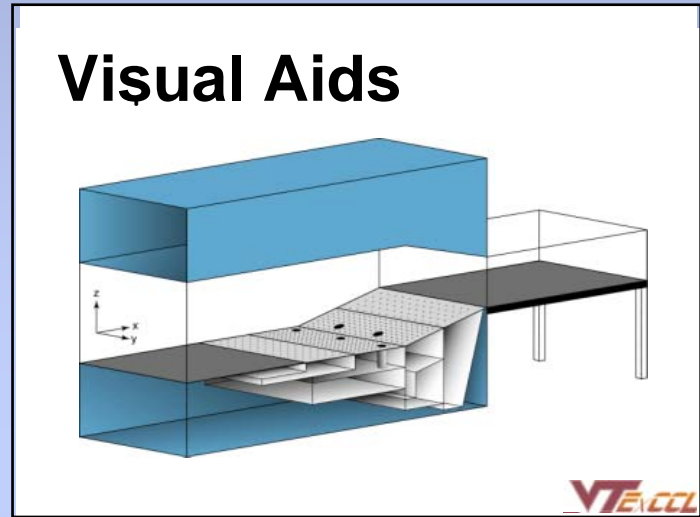


# In technical presentation, you have to work on four issues

## Structure



## Visual Aids

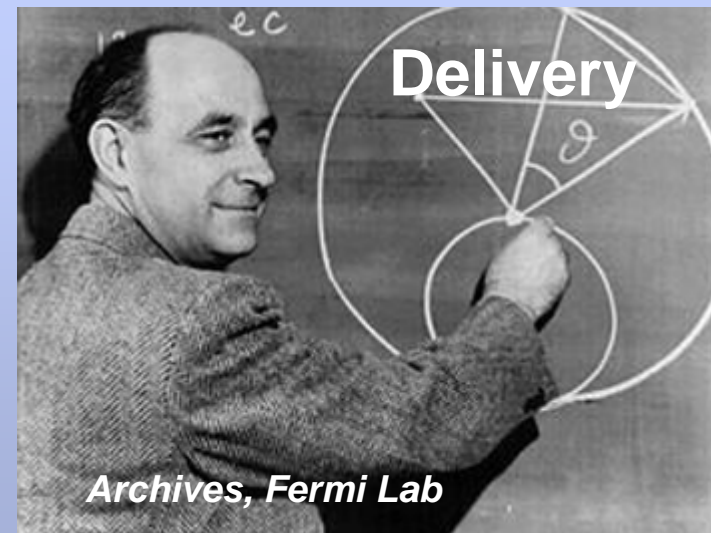


AIP

## Speech



## Delivery



# **Presentation structure includes four aspects**

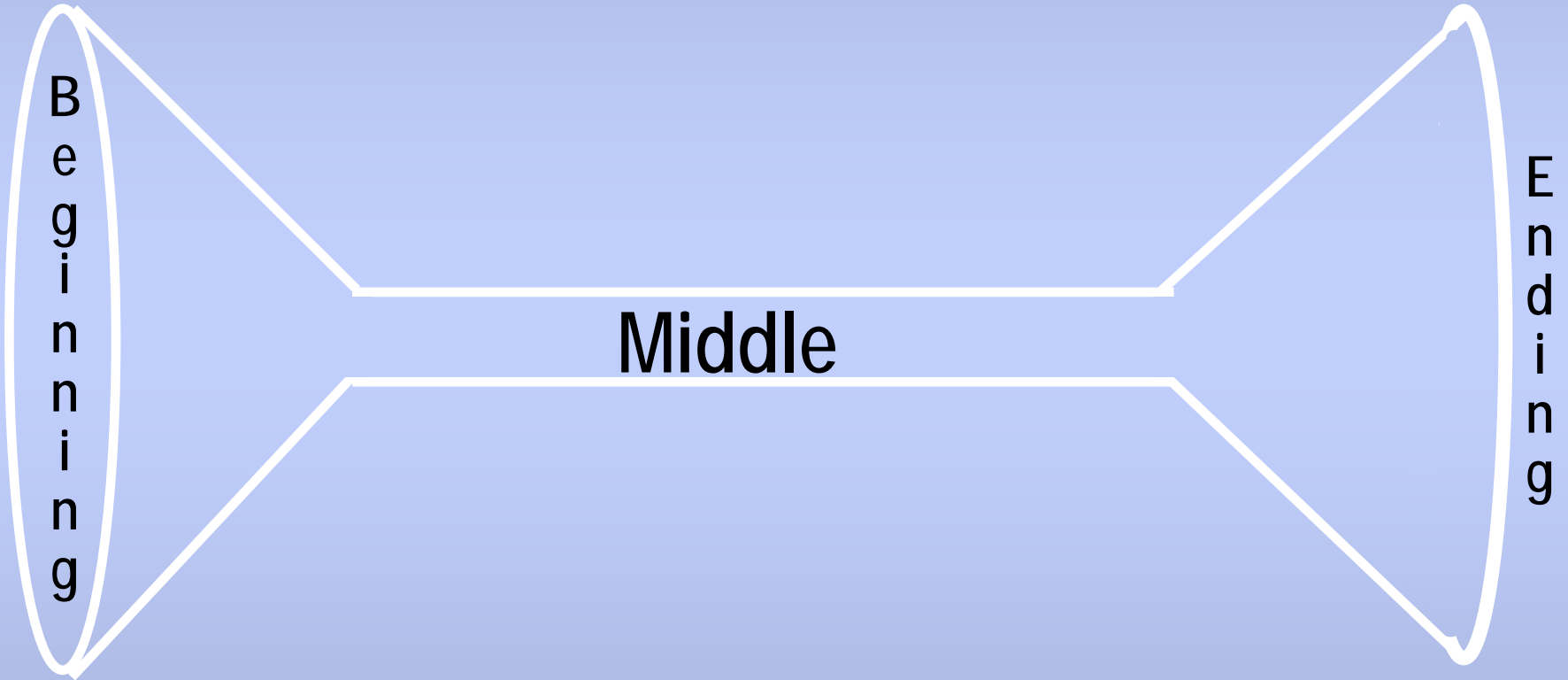
**Organization: provide a clear overview**

**Depth: identify main focus of presentation**

**Emphasis: present main focus early, emphasize it, repeat it**

**Transition: use clear sentences to signal move from topics**

**Like documents, the structure of presentations should have clear beginnings, middles, and ends**

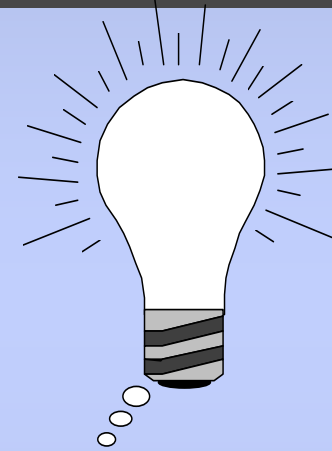


# Beginnings prepare the audience for the work to be presented

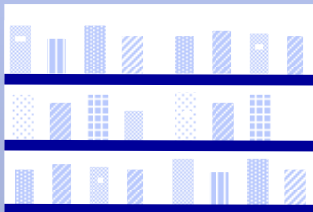
**Defines work**

*Work* = *A* + *B*

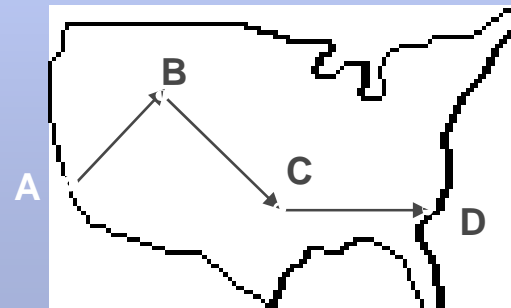
**Shows importance/ sparks interest**



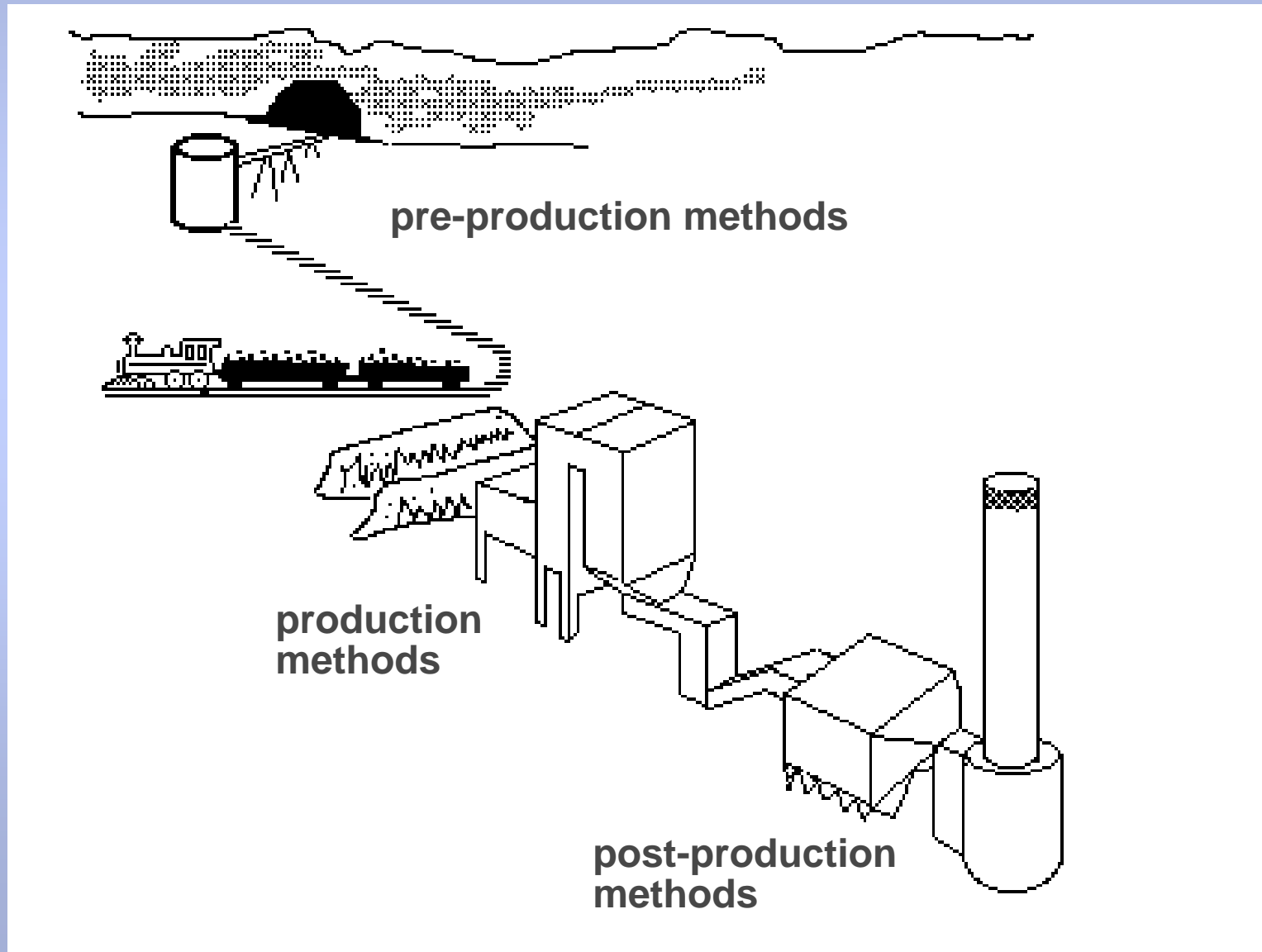
**Gives background**



**Maps presentation**

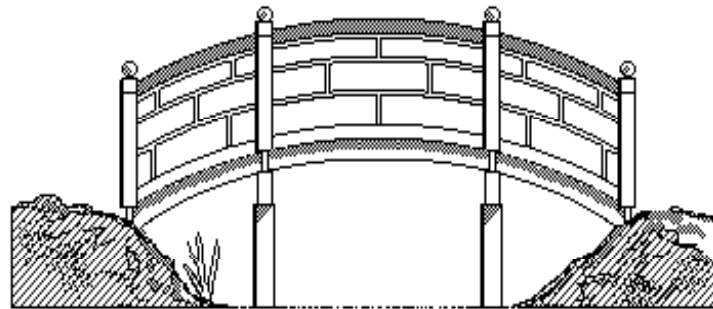


# The middle presents the work in a logical order



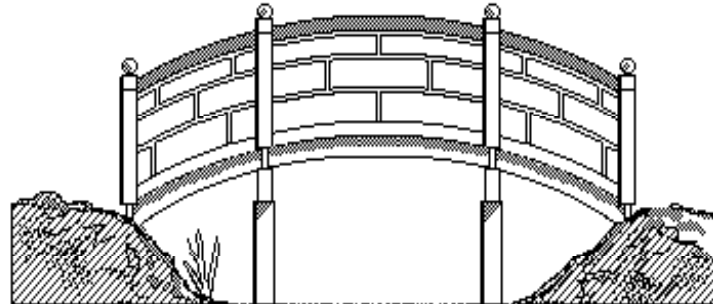
# In the middle, you make smooth transitions between major points

**pre-production  
methods**



**production  
methods**

**production  
methods**



**post-production  
methods**

# The ending summarizes main points and places them in the big picture

point 1  
point 2  
point 3  
point 4

point 5  
point 6  
point 7  
point 8



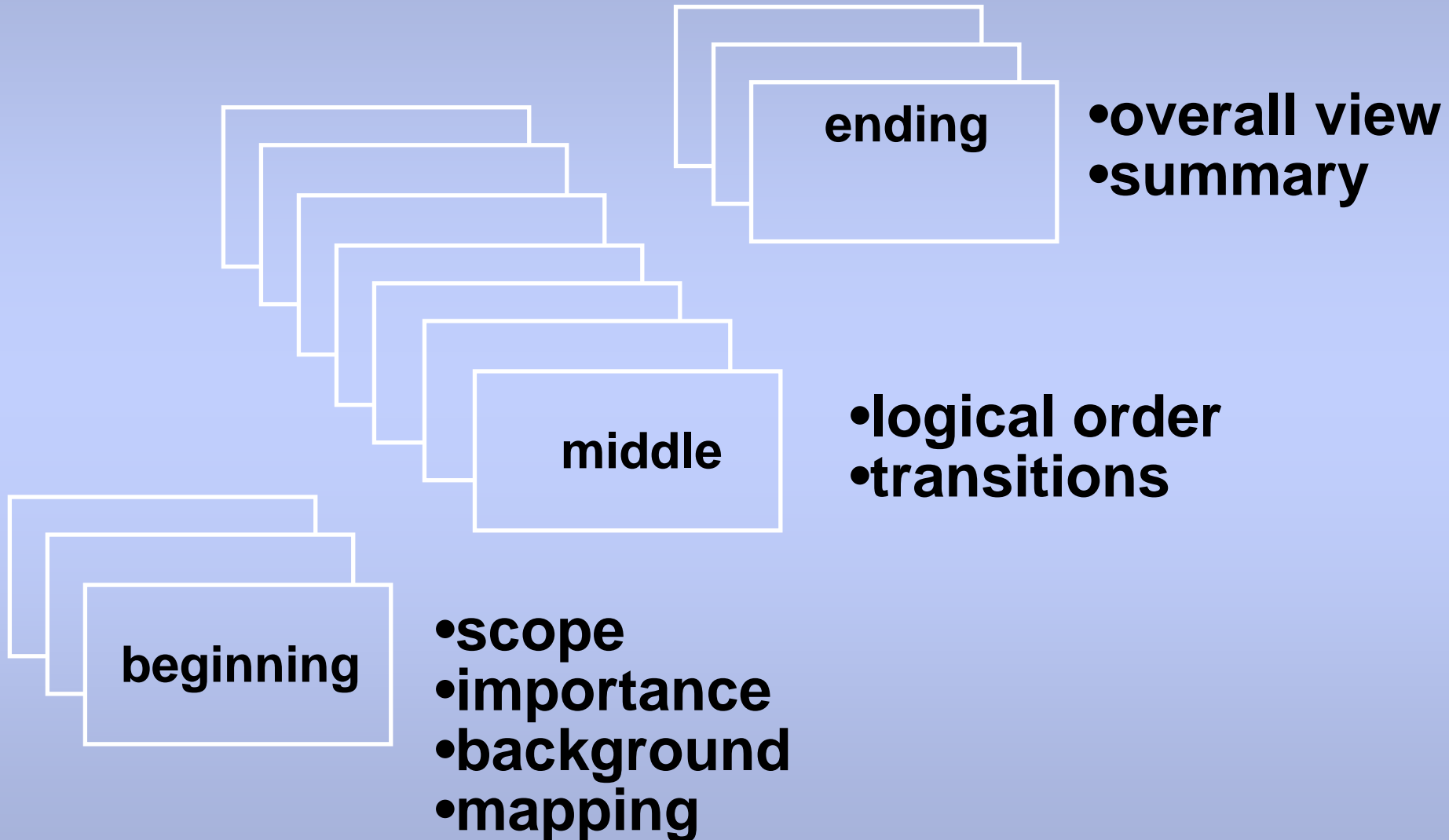
**points 1**  
**points 8**

summary

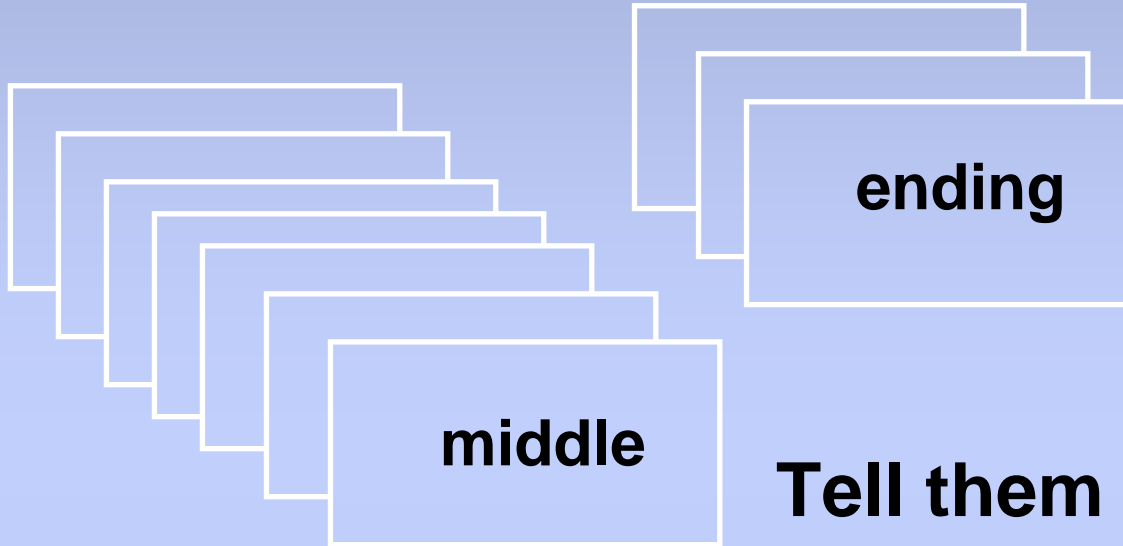


big picture

# In a formal presentation, the slides reflect the structure



# Each stage has an objective



**beginning**

**Tell them what you're  
going to tell them**

**middle**

**Tell them**

**ending**

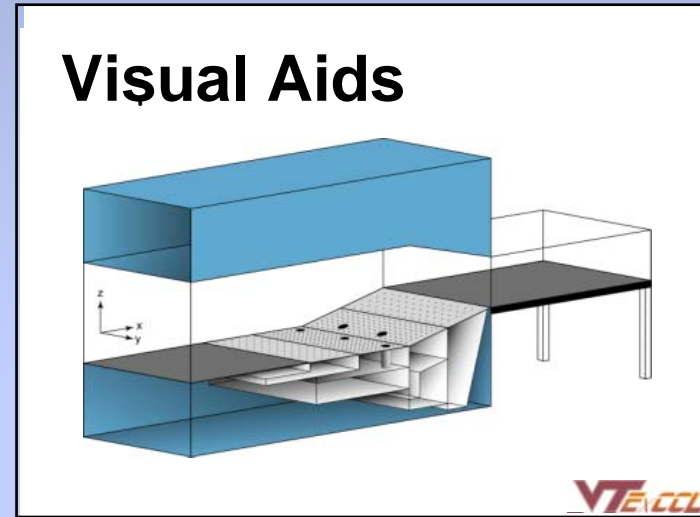
**Tell them  
what you've  
already told  
them**

# In technical presentation, you have to work on four issues

## Structure



## Visual Aids

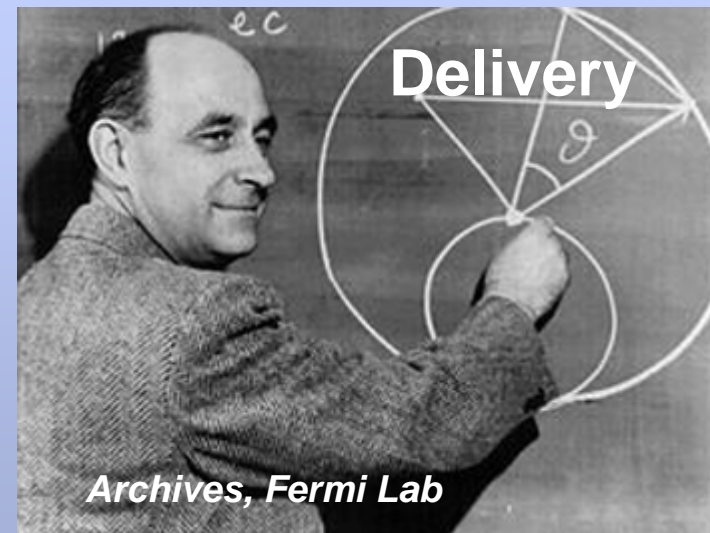


AIP

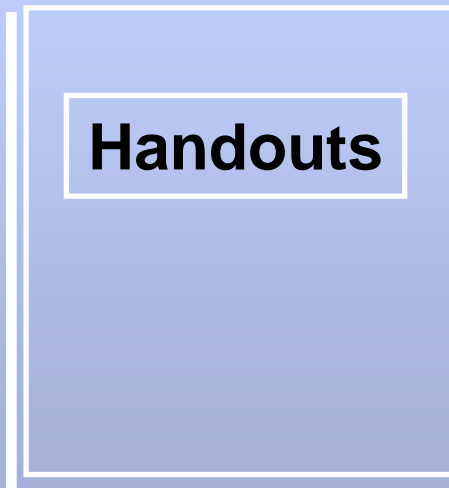
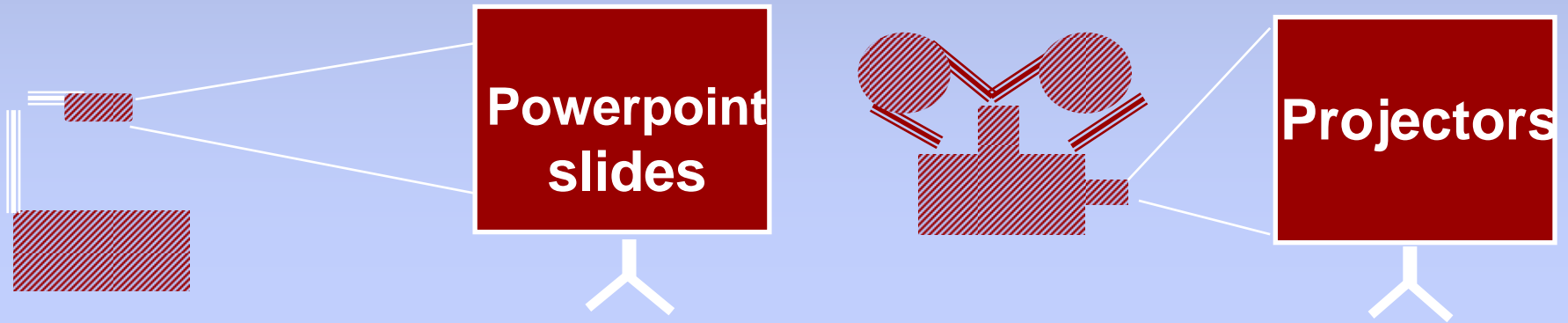
## Speech



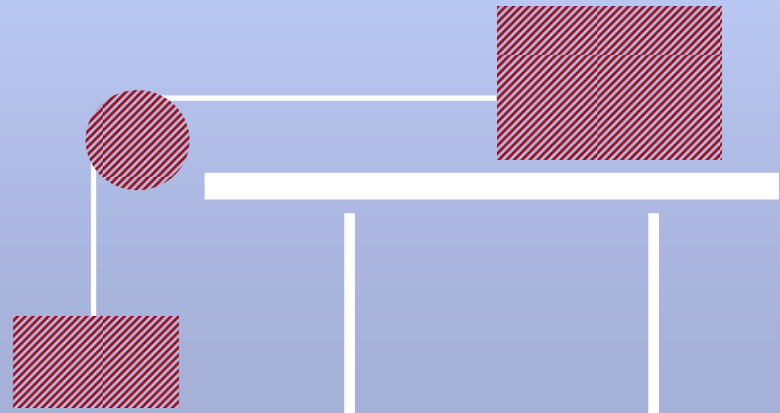
## Delivery



# Technology and equipments support your presentation



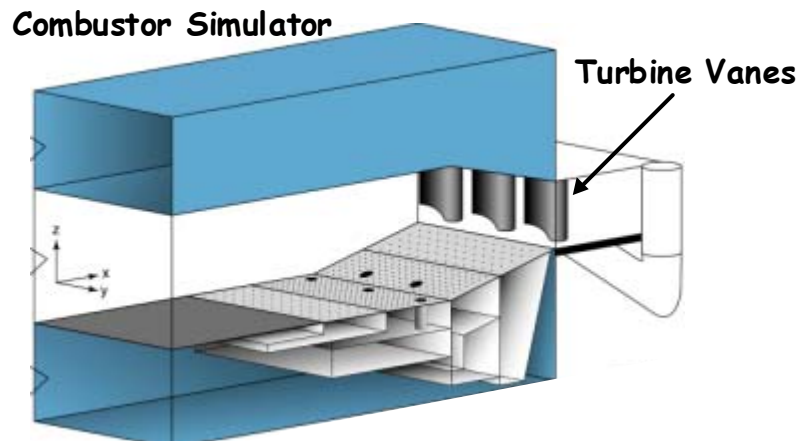
## Demonstrations



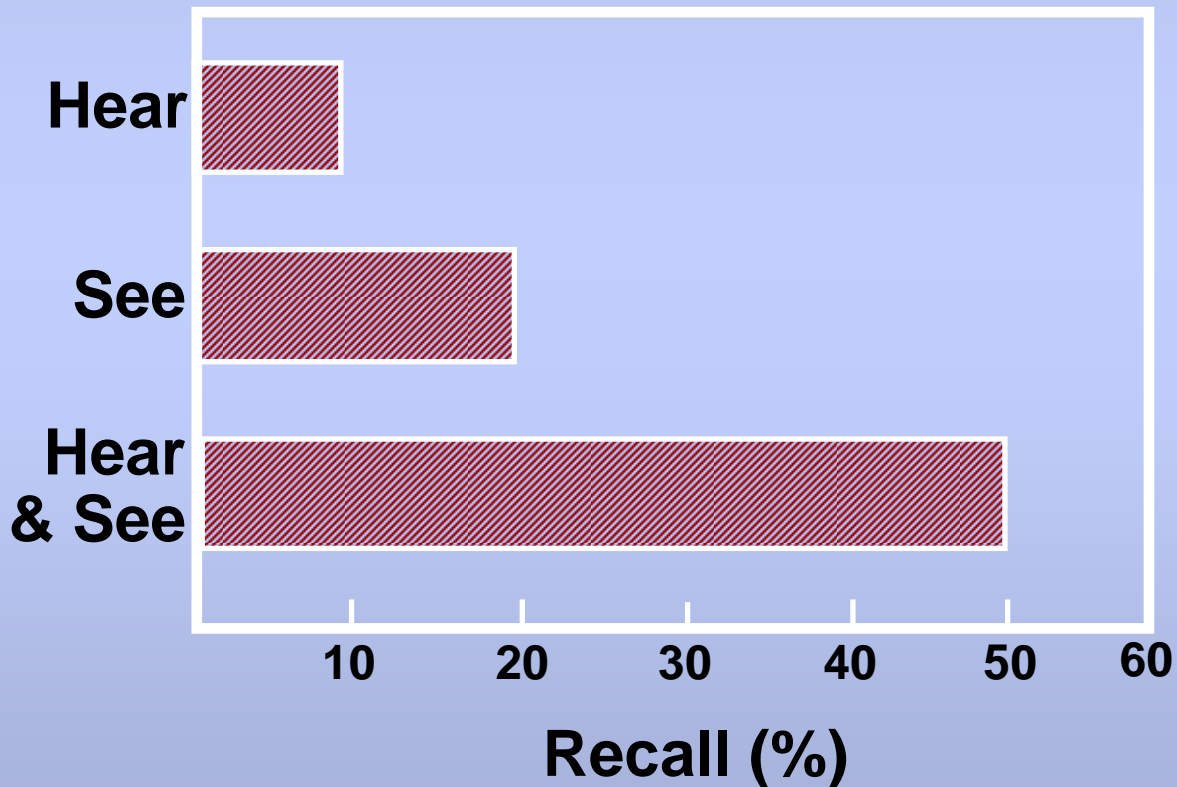
# Making Effective Slides –

## Good slides should complement your presentation and not distract the audience

Downstream of the combustor simulator is a section to test turbine vanes



# Audiences remember more when you use simple, clear and well-designed slides



**The layout of each slide makes it easier for the audience to follow - headlines/body formats guide the audience**

***Headline***

**Use a headline that clearly states the idea of the slide**

***Body***

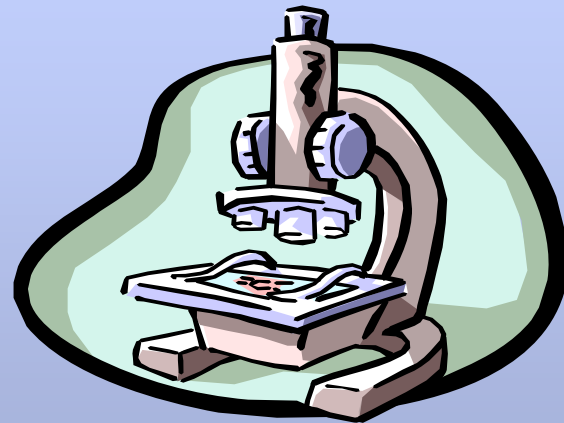
**Use words to support main topic**

**Use images to support main topic**

*words*

*words*

*words*



# Choose a format that is professional

## Choose legible type



Arial



*PMINGLIU*

## Avoid too many words



words  
words  
words

words  
words  
words  
words

# **Color affects how fast the audience can read**

**Combinations of red, green, and brown are  
difficult for many people to read**

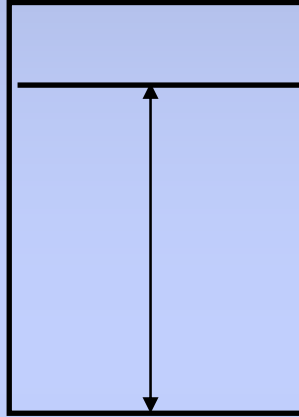
# Color affects the emotions of the audience

**Avoid having a hot color such as red or orange as your background color.**

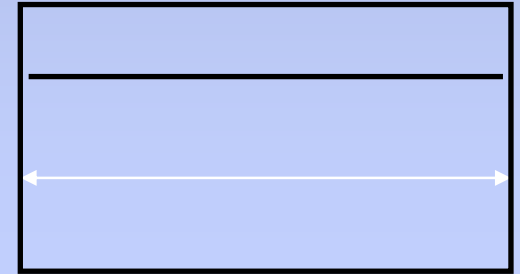
# You need to decide about formats & what information to include

What format  
to choose?

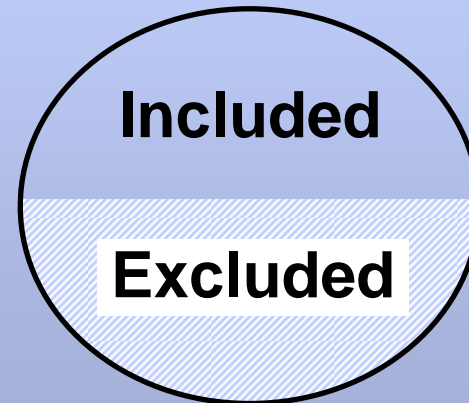
P  
o  
r  
t  
r  
a  
i  
t



Landscape



What information  
to include?



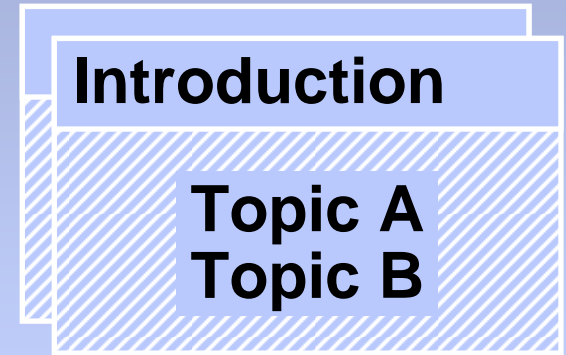
**Include slides that highlight important details**

**Results/  
Findings**

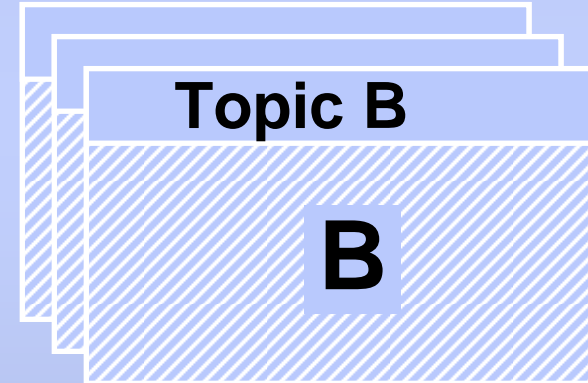
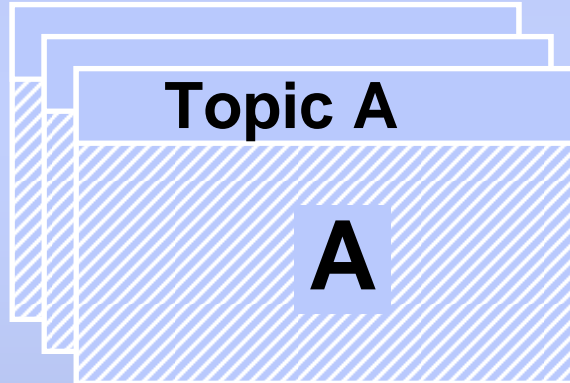
<b>Distribution Channel</b>	<b>Questionnaires returned</b>
Website	264 (54.2%)
Newsgroup	68 (14.0%)
Tel. Interview	35 (7.3%)
At HKUST	100 (20.5%)
<b>Total</b>	487 (464 valid) 500 were sent out

# Include slides that show organization

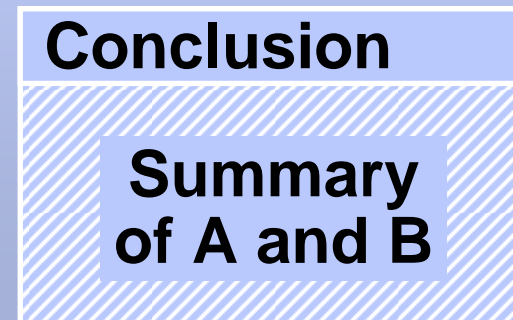
**Beginning**



**Middle**



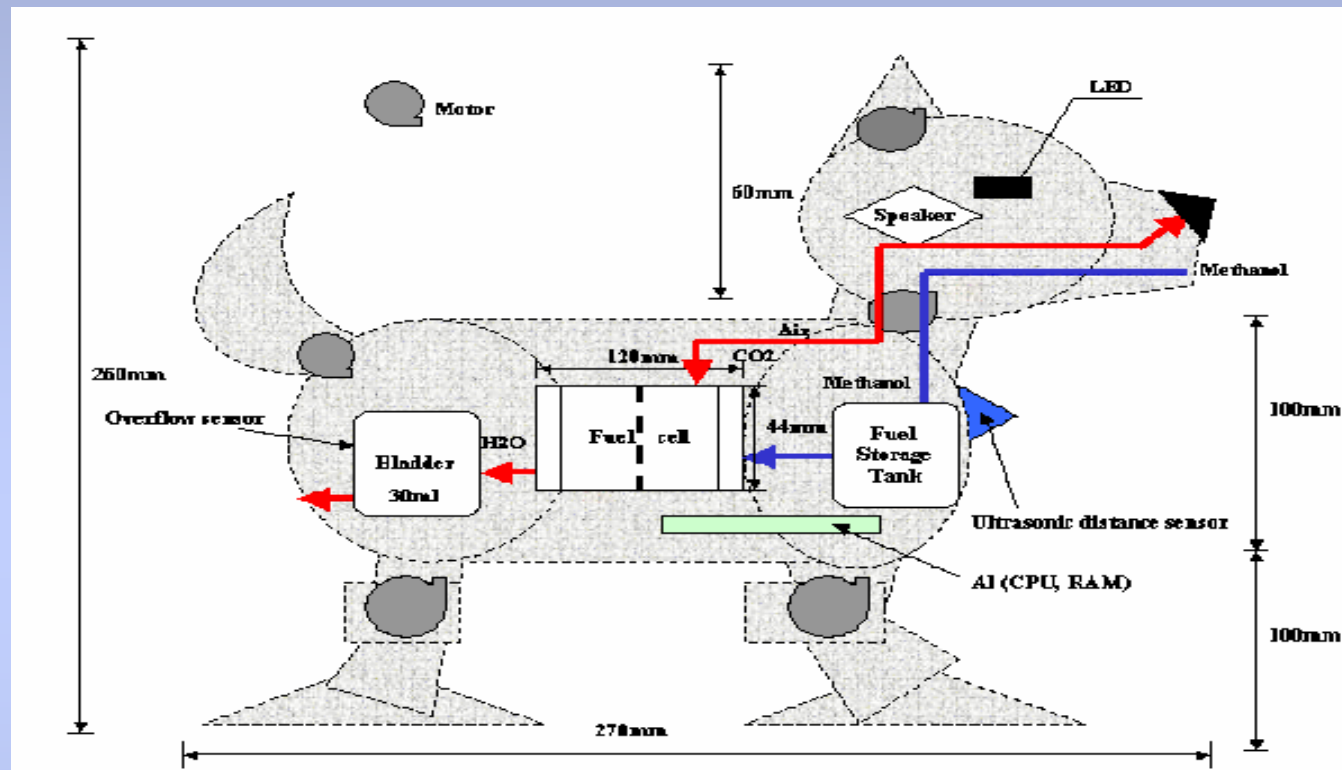
**Ending**



**Don't include details the audience  
does not need or cannot remember**



# Avoid complex pictures or graphs - simplify



Cell Type	$E$ (V)	$i$ (mA/cm <sup>2</sup> )	$\varphi$ (Wh/kg)
Ni/Cd battery	1.2	$10^{-1}$	60
Ni/metal hydride battery	1.2	$10^{-1}$	65
Li/Li <sub>x</sub> Mn <sub>2</sub> O <sub>4</sub> battery	3.0	$10^{-1}$	130
LiC <sub>6</sub> /Li <sub>x</sub> CoO <sub>2</sub> battery	3.6	$10^{-1}$	90
CH <sub>3</sub> OH/O <sub>2</sub> m-PEFC	0.4	$10^2$	921

# Avoid complicated equations

$$P_k(\beta) = \sum_j \sum_i F_{ij} S_i(\beta) B_{jk}(\beta) + \sum_j [1 - S_k(\beta)] F_{kj}$$

# **Avoid presenting information in sentences**

**The fuel cell system does not only enhance the power performance of our robotic dogs, but it can also add some fantastic features and these features are feeding, breathing and excreting.**

## **Summary: Present clear and concise messages**

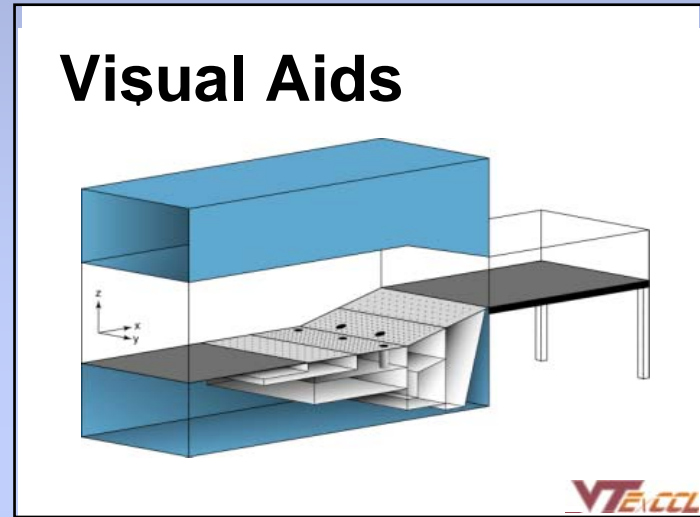
- **Use professional fonts and styles**
- **Use only a few contrasting colours**
- **Limit the amount of details on each slide**
- **Identify the main focus of each slide**
- **Present drawings or diagrams as support**
- **Avoid complicated drawings or graphs**

# In technical presentation, you have to work on four issues

## Structure



## Visual Aids

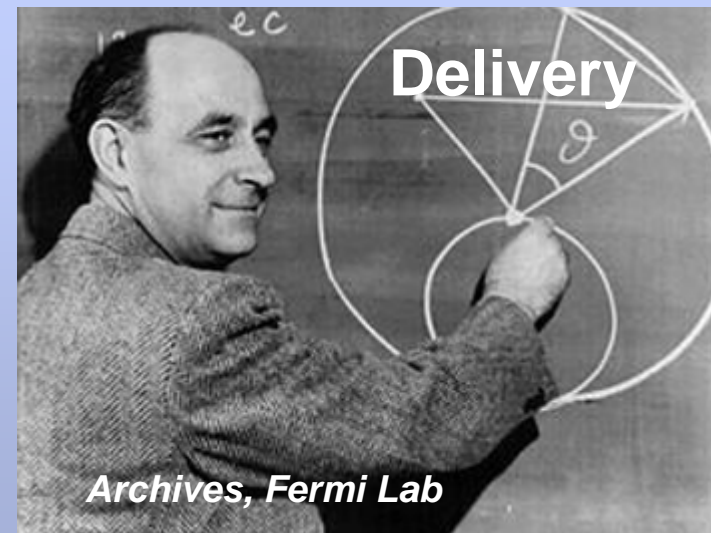


AIP

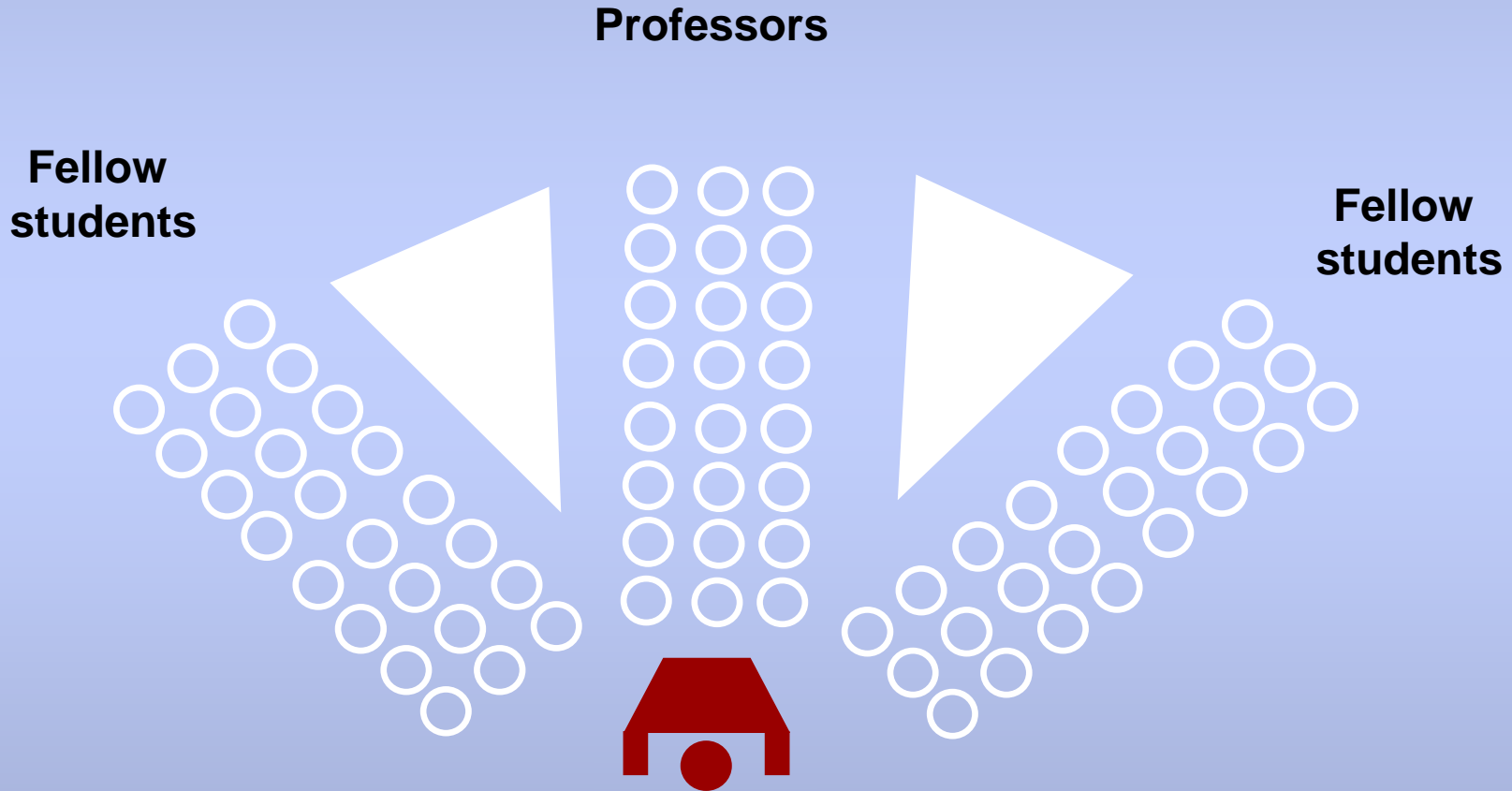
## Speech



## Delivery



# Audience, purpose, and occasion determine the appropriate speech to give



# You have several choices for how you can deliver your speech

## Memorizing the Speech

**+ allows eye contact**

- difficult for long speeches
- room for precision errors
- no room for improvising

## Reading From a Text

**+ ensures precision**

- does not sound natural
- no room for improvising
- limits eye contact

## Speaking freely

**+ sounds natural**

- has much room for error
- deviate from time limit

## Speaking From slides & notes

**+ insures organization**

**+ allows eye contact**

**+ allows improvising**

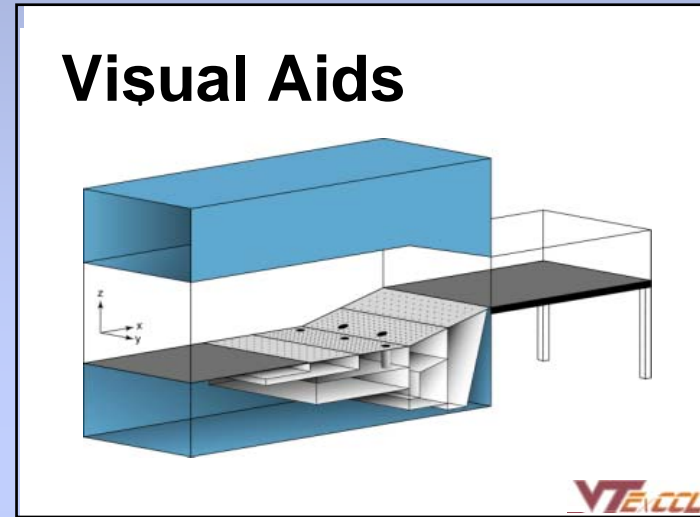
- some room for error

# In technical presentation, you have to work on four issues

## Structure



## Visual Aids

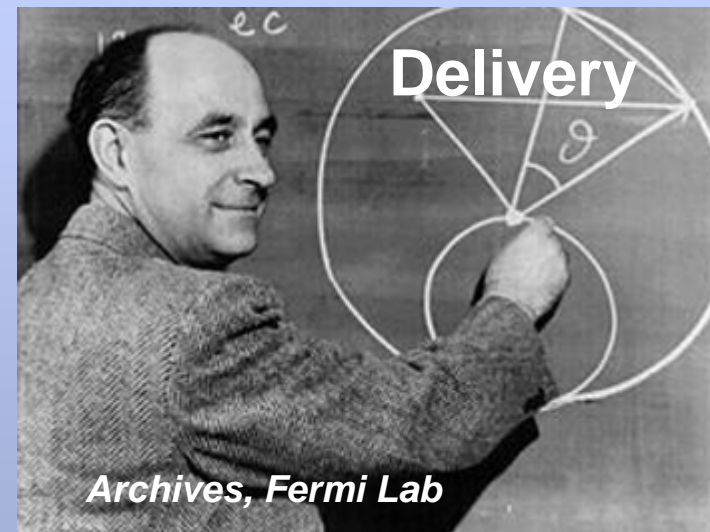


AIP

## Speech



## Delivery



# Delivery is the speaker's interaction with the audience

## Voice



## Movements



## Stage Presence



# **Make note of the time and identify the focus of your slides**

## **Timeframe?**

- Division of time**
- Concentration on each slide**
- Signaling time**
- Allow 1-2 minutes per slide**

## **Main points?**

- Focus on importance**
- Be selective**
- Avoid too much detail**

# **Post Presentation Question & Answers**

- **Brainstorm possible questions**
- **Assign who will answer certain areas & co-ordinate your responses**
- **It is acceptable to make certain assumptions, simplifications, or estimates in doing your project**

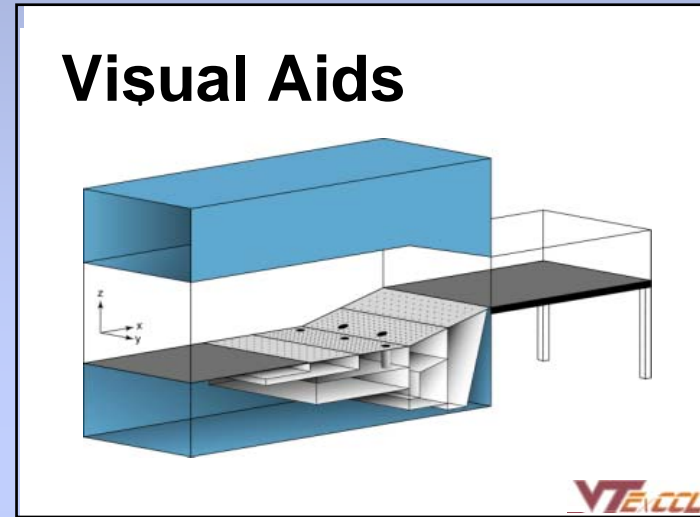
***“Remember: if you do not know how to answer a question, do not pretend that you know. Admit ignorance and ask the examiner(s) for help on how you might find out more on the subject being questioned. ” Professor PLYue***

# In technical presentation, you have to work on four issues

## Structure



## Visual Aids



AIP

## Speech



## Delivery

