

Presentation skills

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Goals

At the end of this morning, you should be able to:

- ▶ **Present** content in an engaging way
- ▶ Use a **teaching aid** to support your message

Programme

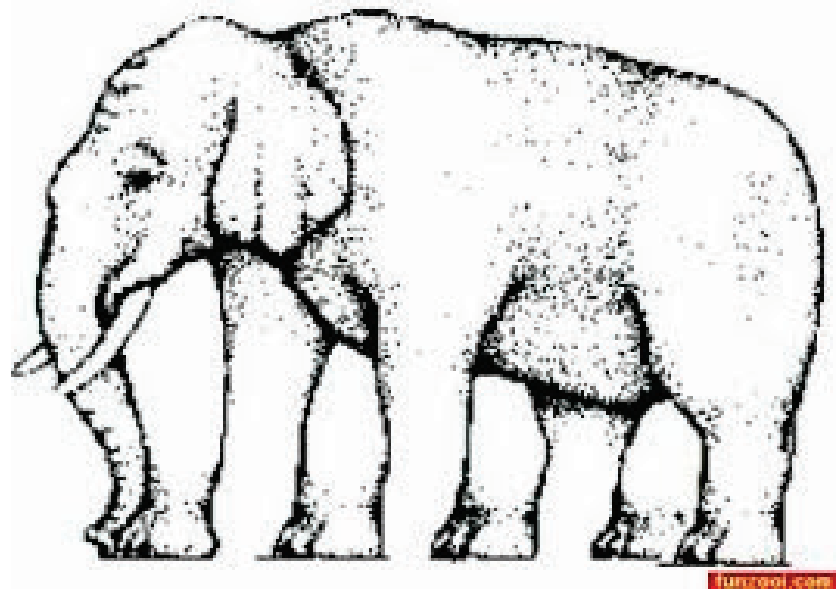
9h15	Present content in an engaging way
9h45	Mini-lessons (breakout groups)
<i>10h45</i>	<i>Break</i>
11h	Use a teaching aid to support your message
11h30	Mini-lessons (breakout groups)
12h45	Debriefing & Conclusion



**Presenting content
in an engaging way**

Perception

- ▶ depth
- ▶ contrast
- ▶ length





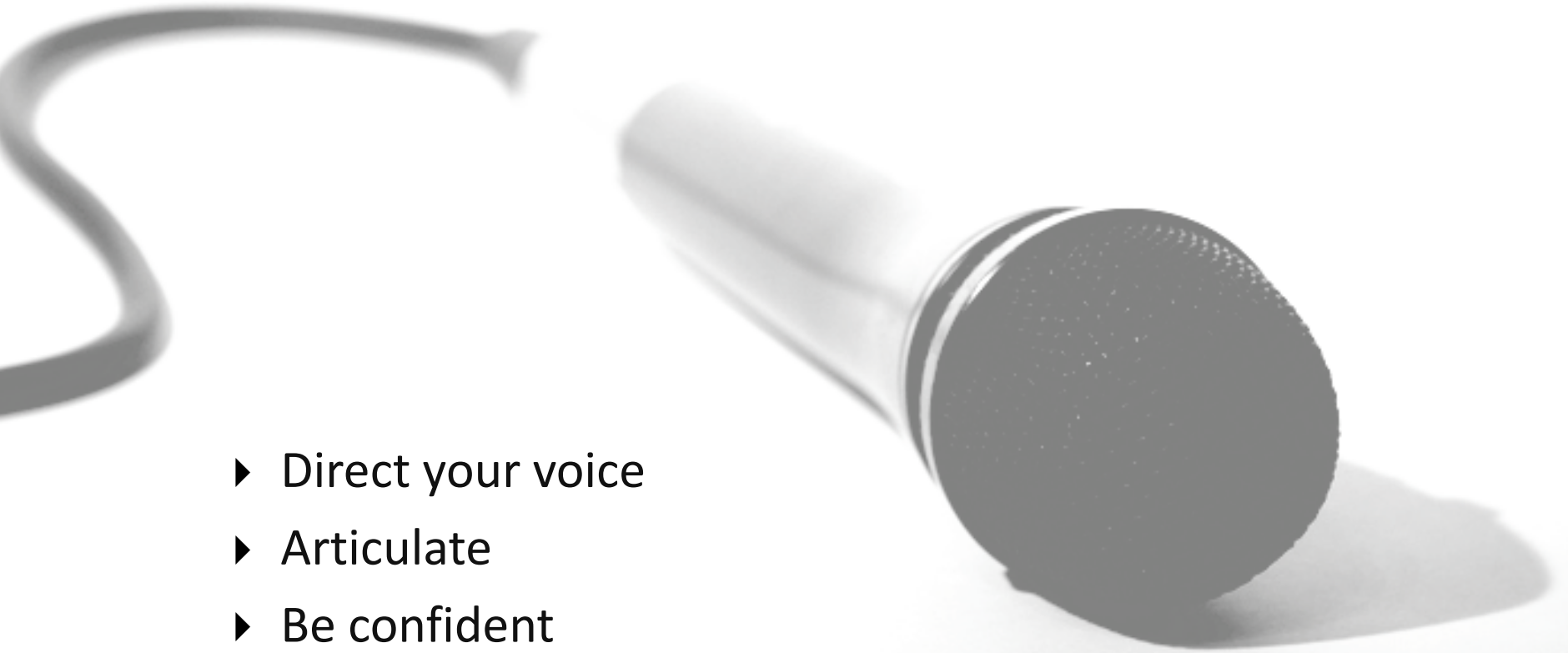
Make yourself visible

- ▶ Place yourself in the line of sight
- ▶ Adopt a stable posture
- ▶ Keep your toes pointed towards your audience





Talk to your audience



- ▶ Direct your voice
- ▶ Articulate
- ▶ Be confident
- ▶ Breathe!



Maintain eye contact

- ▶ Look at people
- ▶ Vary eye contact
- ▶ Include the entire audience





Illustrate with gestures

- ▶ Draw attention to what is important
- ▶ Show openness
- ▶ Avoid unnecessary movements



Practice!

Activity

- ▶ We will split in smaller groups
- ▶ Teach your **5' mini-lesson**
- ▶ Give **feedback** to each other on the 4 elements:
 - posture,
 - voice,
 - eye contact,
 - gestures

We get back together after the presentations here (BI A2 468)



Feedback

Offering feedback...

...in 3 sentences:

1. Identify the goals
2. Highlight strengths and weaknesses
3. *Ask to plan*



Receiving feedback

- ▶ Link with goals
- ▶ Be receptive
- ▶ Decide what to do with it !



Mini-lesson of: _____

Focus on: _____

<i>Goals</i>	Strengths	Weaknesses
Posture		
Voice		
Eye contact		
Gestures		

Debriefing

- ▶ What have you learnt from the **feedback** of others?
- ▶ What have you learnt from **observing others**?



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**Using teaching aids
to support your message**

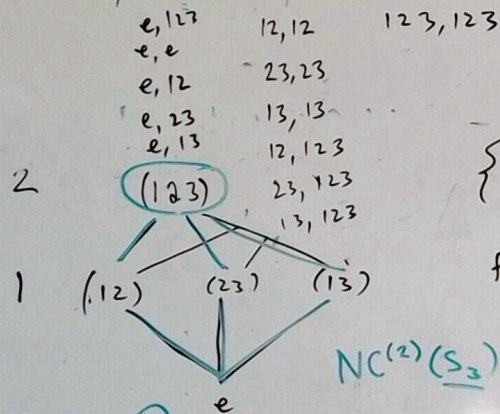


How to use a board?

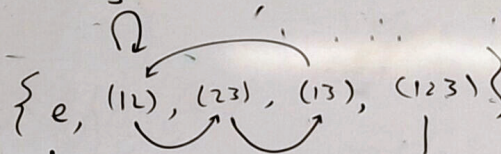
Activity

- ▶ Analyze the following **examples of boards** left after class. What can you say about the way they have been used?

$$S_3 = \langle (12), (23), (13) \rangle$$



$$C_3 = \langle (123) \rangle$$



$$QN: GL_n(\mathbb{F}_q) \quad GL_2(\mathbb{F}_3) \subseteq \mathbb{F}_3^2$$

how many ref^{ns} are there in $\mathbb{F}_q^n$
N

$$h = \frac{N + \frac{q^n - 1}{q - 1}}{n}$$

$$\begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$$

$$J_N / \prod J_{i,1} \quad S_+ = \langle (12), (13), (23), \dots \rangle$$

$$C_{\alpha}: N^+ = N$$

$$\begin{vmatrix} x & -1 \\ -1 & x \end{vmatrix} = x^2 - 1 = (x-1)(x+1)$$

$$C = \langle (1234) \rangle$$

$$h = \frac{2N}{rk}$$

$$\begin{vmatrix} x & -b \\ -1 & x-a \end{vmatrix} = x^2 - ax - b$$

$$= \frac{(16+8)(16+6)}{8 \cdot 6} = \begin{pmatrix} 0 & 2 \\ 1 & 2 \end{pmatrix}$$

$$11 = \frac{3 \cdot 22}{6} = \frac{24 \cdot 22}{8 \cdot 6}$$

$$h = N + N^*$$

$$N = \# \text{ ref. hyp.} = 4$$

$$N^* = \# \text{ ref}^{\text{ns}}$$

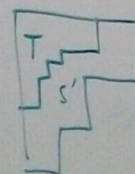
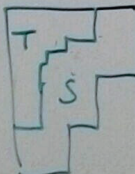
$$h = 2$$

$$p: x \rightarrow \sigma x$$

$$= \frac{20 + 4}{2} = 12$$

$$w = uv$$

$$w' = uv'$$



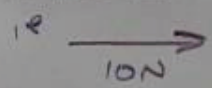
$$\begin{aligned} & \rightarrow \pi_1(X) \rightarrow \pi_1^{orb}(X/S_n) \rightarrow S_{n-1} \\ & \rightarrow \pi_1(ES_n \times X) \rightarrow \pi_1(ES_n \times X / S_n) \rightarrow S_n \end{aligned}$$

DYNAMICS

NEWTONS

- ① THINGS K
- ② $F = ma$
- ③ ACTION-

FORCES - V



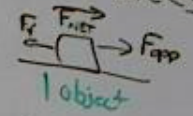
From pt. 11

$$F_g = mcg$$

$$F_s = kx$$

spring constant

linear forces



UNIF. ACCEL TEST - THURS, OCT. 30 (3/4)

PHYSICS II

UNIFORMLY ACCELERATED MOTION

if not
one acceleration
then to you

ACCELERATION MEANS GOING FAST ~~NO!~~

ACCEL = RATE OF CHANGE OF SPEED/VEL.

KINEMATICS EQUATIONS SOLVED.

$$d = \frac{U_i + U_f}{2} \cdot t \quad | \quad U_f = U_i + at$$

$$U_i = \frac{2d}{t} - U_f \quad | \quad U_i = U_f - at$$

$$U_f = \frac{2d}{t} - U_i \quad | \quad a = \frac{U_f - U_i}{t}$$

$$t = \frac{2d}{U_i + U_f} \quad | \quad t = \frac{U_f - U_i}{a}$$

$$d = U_i t + \frac{1}{2} at^2 \quad | \quad U_f^2 = U_i^2 + 2ad$$

$$U_i = \frac{d - \frac{1}{2} at^2}{t} \quad | \quad U_i^2 = U_f^2 + 2ad$$

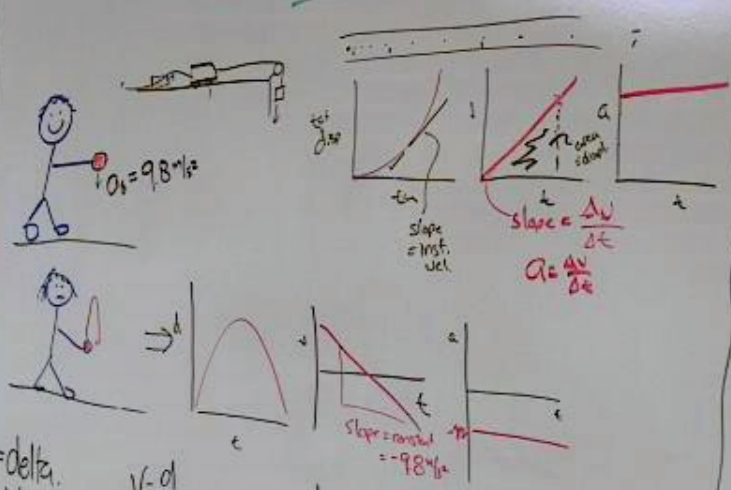
$$a = \frac{d - U_i t}{\frac{1}{2} t^2} \quad | \quad a = \frac{U_f^2 - U_i^2}{2d}$$

* if dropped from rest

$$U_i = 0$$

$$d = \frac{1}{2} at^2$$

$$a = \frac{2d}{t^2} \quad t = \sqrt{\frac{2d}{a}}$$



Δ = delta
= change in
= final - initial

$$V = \frac{d}{t}$$

uniform motion (no accel)

$$U_{avg} = \frac{d}{t} = \frac{U_i + U_f}{2}$$

$$a = \frac{v}{t}$$

$$a = \frac{U_f - U_i}{t}$$

5 Variables
 U_i, U_f, t, a, d

4 equations

above

finish
100% - 100%
formula
accel
data



Developing a good practice guide

Activity

► Let's summarize:

What are the **good practices** when using a **board**?

-
-
-
-
-
-
-



Practice!

Activity

- ▶ **Prepare** for presenting the solution of your exercise from the role play **using the board** (5')
- ▶ Present the solution of your exercise **using the board** (5')
(remind your audience rapidly what exercise you present)
- ▶ Give **feedback** to each other on the 4 elements:
 - readability,
 - use of space,
 - structure,
 - logical flow

Mini-lesson of: _____

Focus on: _____

<i>Goals</i>	Strengths	Weaknesses
Readability		
Use of space		
Structure		
Logical flow		

Debriefing

- ▶ What have you learnt from the **feedback** of others?
- ▶ What have you learnt from **observing others**?



Practical info about the exam & project



Key learnings

Individual reflection

Activity

Write for yourself:

- ▶ 3 things you have learnt today
 -
 -
 -

- ▶ 1 thing on which you will work in your next presentation
 -



Conclusion



