

May 08 2007

Presentation Feedback

Wrap Up

Prep for Final

## Notes:

Always include the source of graphics if not yours.

Anticipate that there may be people in the audience with sight disabilities.

Beautify Slides with Pictures in a way that does not distract from readability. (I limit background images to one or two slides).

Graphs: always explain axes and label clearly  
Always capture images at higher resolution than displayed and downsize to fit into powerpoint.

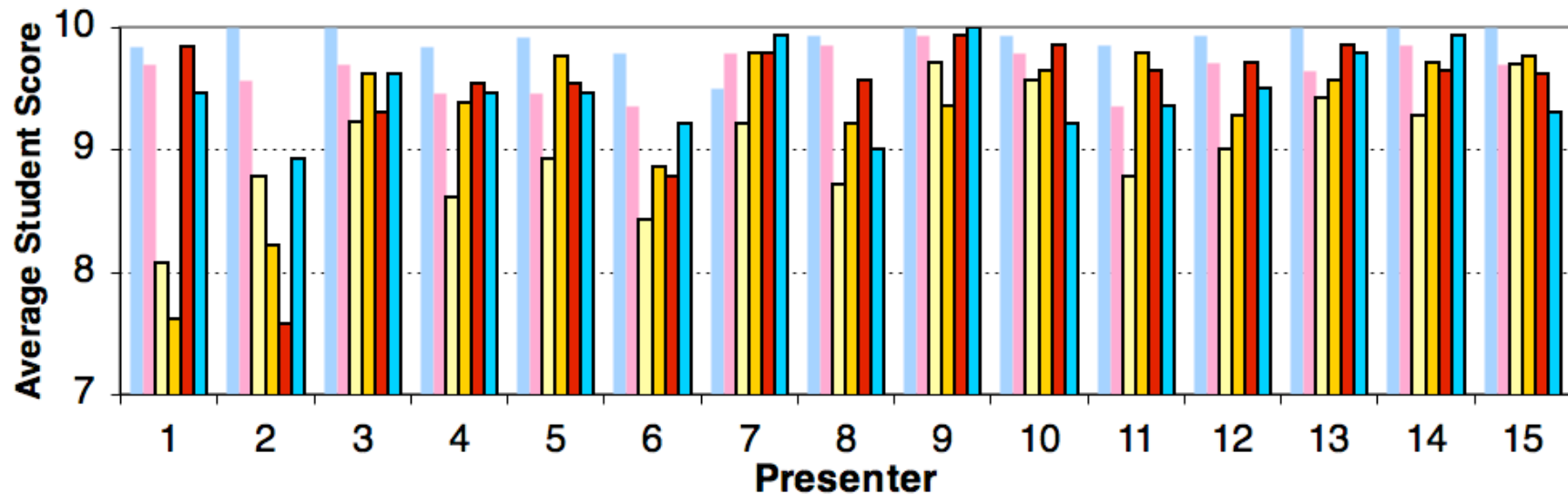
Use animations wisely. Don't overdo the effects (I just use "appear on click").

Don't crowd text onto one slide (you can split between two).

# Your evaluations of yourselves (excluding yourself)

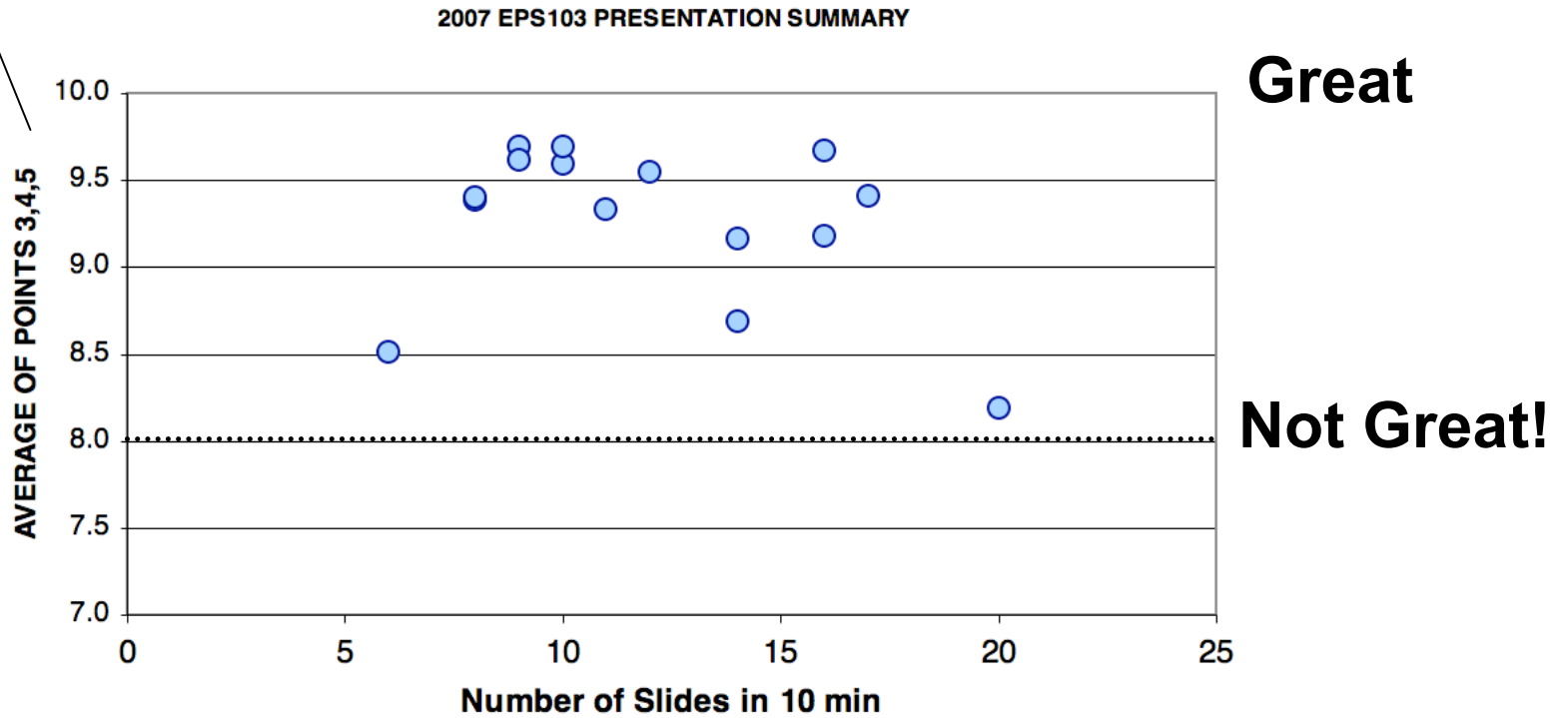
## 2007 EPS 103 Presentation Style

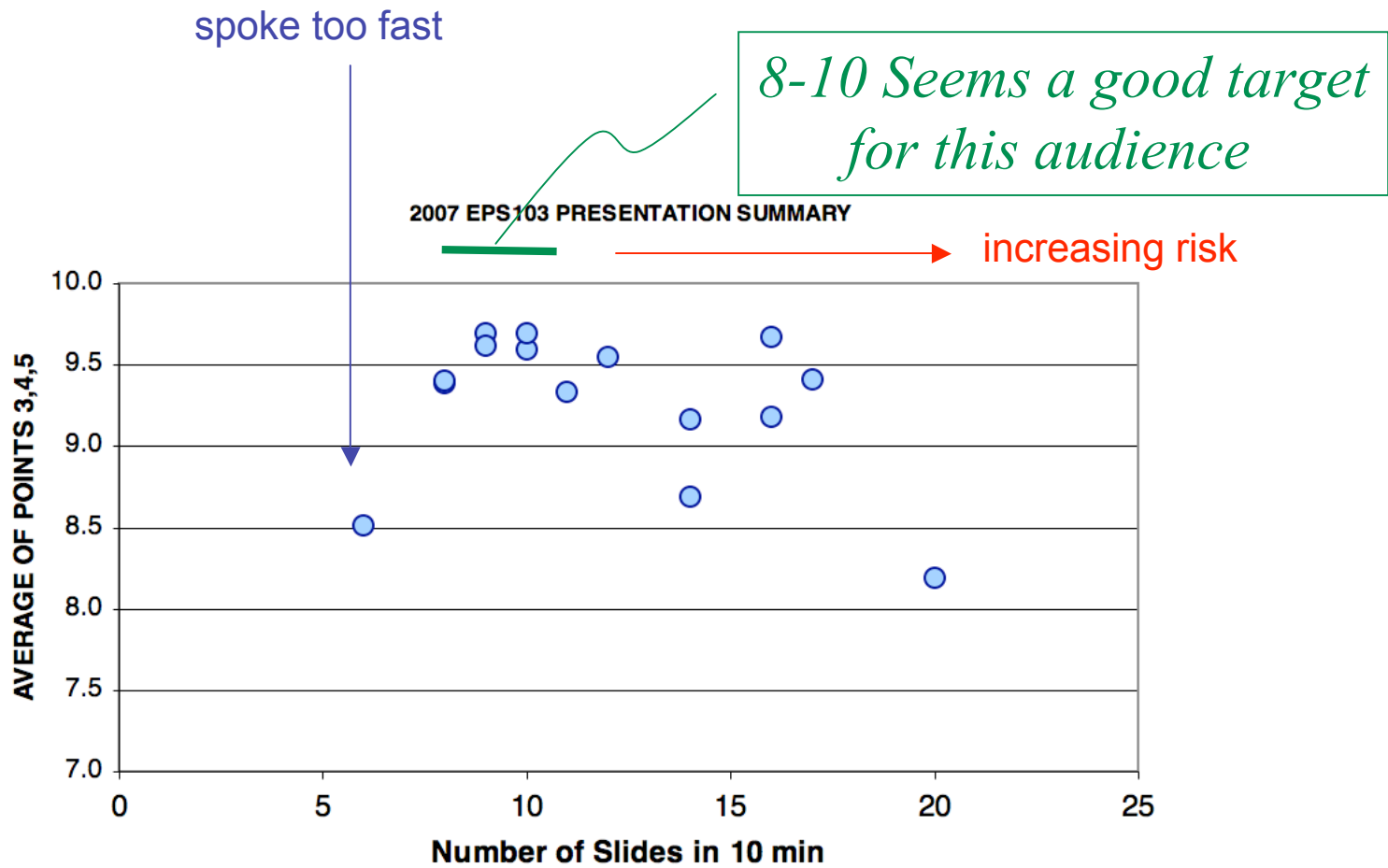
- 1 ■ Topic/Presenter/Reference
- 2 ■ Was there a Statement of Problem?
- 3 ■ Could I take notes?
- 4 ■ View Graphs and Text Clear?
- 5 ■ Did the talk match available Time
- 6 ■ Was There a Conclusion?



# How many slides per minute?

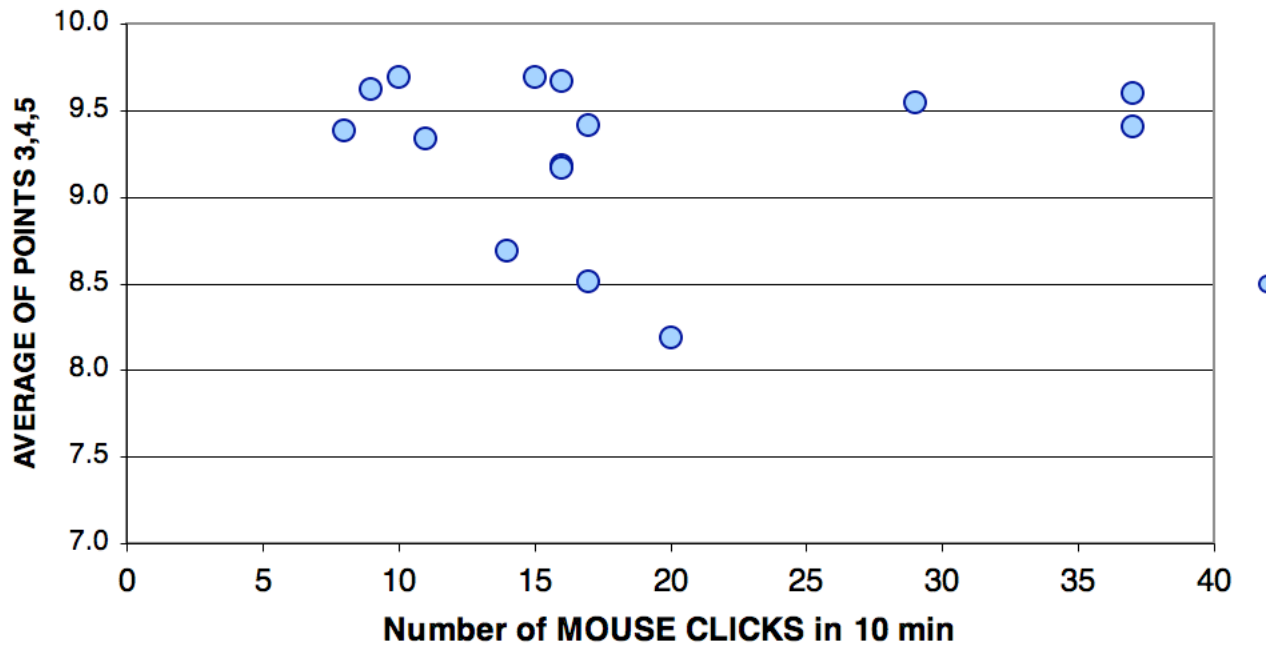
Notes? Readable? Time?





# ANIMATION can help but not clear advantage

2007 EPS103 PRESENTATION SUMMARY



Final:

No need for blue books, Bring simple calculator and ruler (\*hint).

- ~ 10 questions / ~ 80-90 % of mark compulsory
- one (A/B) choice
- some bonus marks
  - Vocabulary (since course began) and basic facts (mult choice / match)
  - Mass balances/ fluxes are a theme throughout course
  - Art work, and short essay several questions
  - numerical problems (we provide needed constants)
  - representation of a system

MARKING philosophy as in midterm.

## Review of lectures last half of course:

20070316 MIDTERM review

Q3: Open System CO<sub>2</sub> calculations.

Q7: C-14 question, The DELTA notation and Radioactive Decay

20070320-23

Review of fast methods to construct graphs (log C - pH)

know how to represent open and closed systems wrt CO<sub>2</sub>

Numerical Example of closed CO<sub>2</sub> system calc (Na<sub>2</sub>CO<sub>3</sub>)

derivation of titration curve for carbonate system ...

***Get (and understand) Notes from others in class***

***if you missed the lecture***

20070403

Supreme Court Decision: EPA vs MASS

CO<sub>2</sub> as regulated pollutant.

20070403-10

CO<sub>2</sub> system, pH, Total CO<sub>2</sub>, Alkalinity

Titration Curves, Buffering

CO<sub>2</sub> system in seawater: Complexity due to salt, T, P, ions

Solute Solute, Solvent Solute interactions

Concepts: Activity, Ion Pairing, Apparent Constants

Know in relative terms T, S, P influence on  $K_H$ ,  $K_1$ ,  $K_2$ ,  $K_{SP}$ 's

20070413

Wrap up of Carbonate system (activity, ion-pairing)

Revelle Ratio, Uptake Factor.

Several Questions asked. Think about answers?

20070413

Internal Cycles of elements.

Simple box model representation of systems.

20070417 Internal Cycling of Elements: Adding Biology

Pools and Fluxes Ocean Carbon Cycle

Simple recipe for plankton: Redfield Ratios

Review Wind Driven Circulation/ Coriolis Effect

Spatial Views of surface T,S,nutrients...

Sections: N Atlantic to Southern Ocean to N Pacific

20070420 VISIT to LBNL

20070424

Stratification, Mixing, Light Regime,

Photosynthesis:

Compensation Depth, Critical Depth

Carbon Explorer RESULTS FROM THE SOUTHERN OCEAN

20070427

Preservation of organic matter in sediments

**REDOX CHEMISTRY** (from Pilson Ch 12, S&G Ch 6)

- anoxia (BLACK SEA)

rare in today's ocean (marginal seas)

common in continental margin sediments

SCIENCE article on sedimentation/remineralization

TWILIGHT ZONE (100-1000 m)

## 20070501: Return to Biology and internal cycling

FERTILIZING THE OCEAN'S "FOREST" (planktos in the news)

TRACE METALS (particle chemistry reveals

local biology and sediment redox source of Fe and Mn)

## 20070504: Presentations

Carbon Cycle (P, picoplankton, Iron (multiple views))

Climate Change: CO<sub>2</sub> and warming

Nitrogen Fixation, Denitrification, Nitrification

Paleoceanography

Sediment proxies (organic and inorganic)

Isotope Geochemistry

Not really well covered:

Other anthropogenic tracers (CCl<sub>4</sub>, CFC's)

<sup>3</sup>He in deep water - from HT venting.