

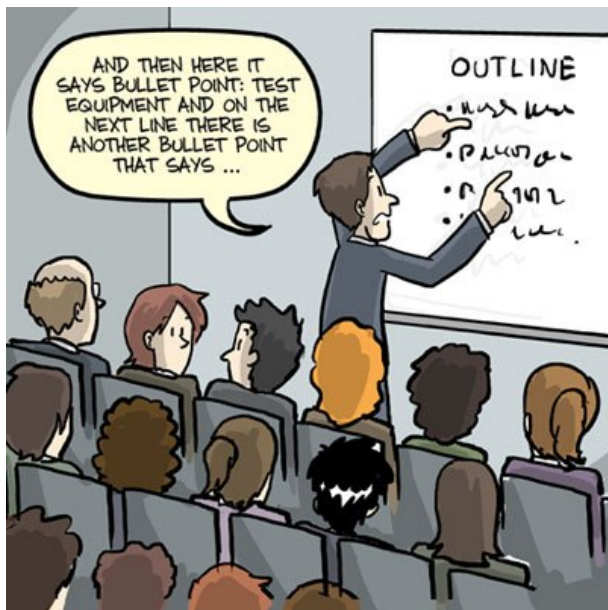
Oral (Scientific) Presentations

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Summer Semester Seminar

15th May 2019



What follows is not
a scientific presentation!

Outline

- 1 Introduction
- 2 Content & Structure
- 3 Tips & Recommendations
- 4 References & Remarks

Introduction

Before starting to prepare a presentation...

think on:

- 1 The topic
- 2 The audience
- 3 The time

Introduction

Before starting to prepare a presentation...

think on:

- 1 The topic
- 2 The audience
- 3 The time
- 4 The content & structure

Introduction

A talk is a story

Introduction, Development, and End

Content & Structure

- 1 Introduction
- 2 Content & Structure**
- 3 Tips & Recommendations
- 4 References & Remarks

Content & Structure

Introduction, Development, and End

A talk is a story

with a trailer and maybe a spoiler

Content & Structure

Introduction with trailer and spoiler

1 Front slide(s)

- Who (collaborators too!) and **what**
- Attention getter?

Content & Structure

Introduction with trailer and spoiler

1 Front slide(s)

- Who (collaborators too!) and **what**
- Attention getter?

2 Table of contents

Content & Structure

Introduction with trailer and spoiler

1 Front slide(s)

- Who (collaborators too!) and **what**
- Attention getter?

2 Table of contents

3 Introductory section

- Attention getter?
- **Need** and task
(Main message and preview)

1 Task definition

- 1 Task definition
- 2 Your approach, **key idea**

- 1 Task definition
- 2 Your approach, **key idea**
- 3 Theory, model and **results**

- 1 **Sum up** your main conclusions
- 2 Which are the **strong points** (as compared to others)
- 3 How are you going to improve your **weak points**
- 4 Any **further work**?
- 5 **Thanks**

Content & Structure

A talk is a story

Introduction, Development, and End

20-30%, 60-70%, and 10%

Content & Structure

End?



www.phdcomics.com

Content & Structure

End?

- Back-up slides
- Leave time for questions
- Learn from others

Tips & Recommendations

- 1 Introduction
- 2 Content & Structure
- 3 Tips & Recommendations**
- 4 References & Remarks

Tips & Recommendations

As a rule of thumb...

- Be **confident** (but not pedant),
no one knows more about your talk than you
- Use common sense and, in general,
 - **1 slide per minute**
 - **Visuals** (doesn't mean animations!)
 - **Examples**

Tips & Recommendations

Verbal and nonverbal communication

- Make **eye contact**, don't talk to the screen
- Do **not hide** behind the computer and read

Tips & Recommendations

Verbal and nonverbal communication

- Make **eye contact**, don't talk to the screen
- Do **not hide** behind the computer and read
- Speak **loud** and,
- **change** your pitch, rhythm, and timbre

Tips & Recommendations

Verbal and nonverbal communication

- Make **eye contact**, don't talk to the screen
- Do **not hide** behind the computer and read
- Speak **loud** and,
- **change** your pitch, rhythm, and timbre
- Do **not rush**, especially towards the end
- Make **pauses**, you can use the ToC

Tips & Recommendations

Visual communication

- One idea per slide
- High contrast
- Few text (and summarised)
- Large (and simple) font

Tips & Recommendations

Visual communication: One idea per slide

Theme	% Students with Complete Answers	% Students with Partial Answers	% Students with Unsatisfactory Answers
Reproduction	91	76	28
Theory of evolution	51	76	47
Evolutionary relationships	25	76	78
Genes	21	45	28
Mutations	2	33	58
Interpreting genetic evidence	5	1	53
Genetic disease	5	31	56
Recombinant DNA	8	77	58

Source: National Science Foundation

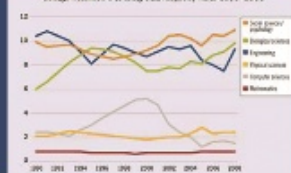
Science 1997



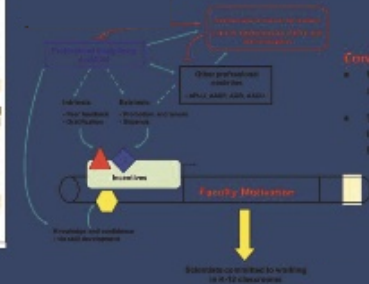
Source: Trends in International Mathematics and Science Study

By John W. Heston/2002

College freshmen interpreting SAT results, by field: 1993-2006



Source: National Science Foundation, 2007



Conclusions

- Wide variation in the quality of U.S. genetics standards
- U.S. genetics standards are insufficient for preparing the next generation of genetic scientists

Tips & Recommendations

Visual communication: Density of text



This is a document.



This is a slide.

Tips & Recommendations

Visual communication: Contrast, Font size



Tips & Recommendations

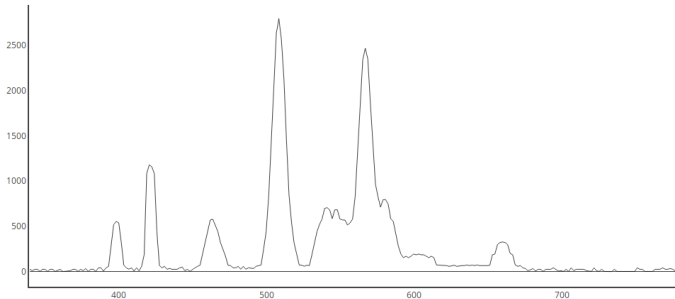
Specific to scientific talks

- Readable plots with axis and labels
- Readable tables
- Non-misleading information
- Acknowledge other's data

Tips & Recommendations

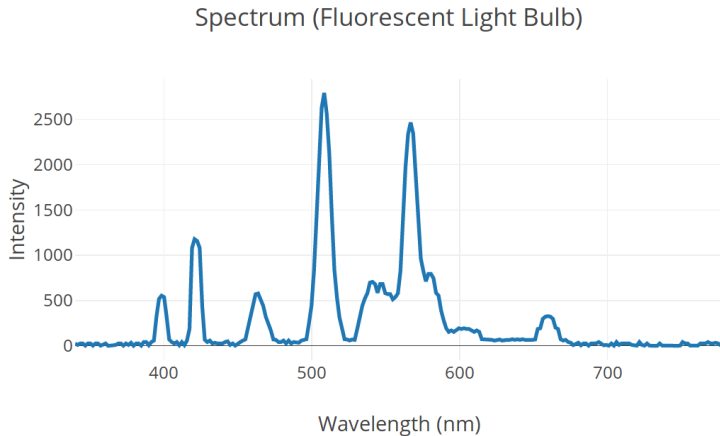
Visual: Clear plots

Spectrum (Fluorescent Light Bulb)



Tips & Recommendations

Visual: Clear plots



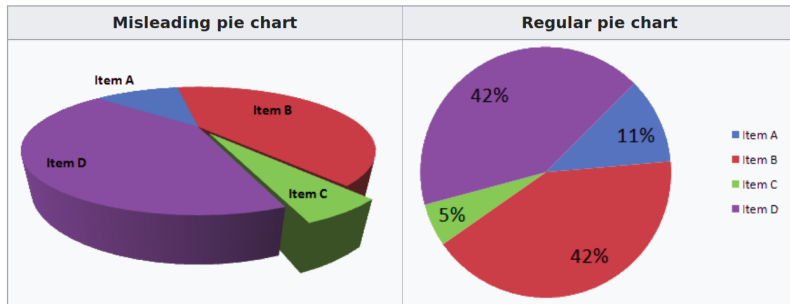
Tips & Recommendations

Visual: Clear tables with comprehensible data

	beam size		factors + 4-ensembles (beam size 10)						
	w5	w10	w	wb	wt	wpsmb	wpsm (SUB1)	wpsmt (SUB2)	wpsmbt (SUB3)
<i>de2it</i>	18.02	19.20	19.78	20.28	19.67	20.35	20.10	20.05	20.33
<i>it2de</i>	18.05	19.49	19.90	20.42	20.30	20.22	20.42	20.06	20.45
<i>de2nl</i>	18.82	21.11	21.75	22.51	21.62	21.73	22.29	22.10	21.90
<i>nl2de</i>	18.82	20.76	21.52	21.99	21.56	22.04	21.81	21.99	21.77
<i>de2ro</i>	15.85	17.57	18.23	18.46	18.19	18.60	18.23	18.00	18.40
<i>ro2de</i>	18.56	20.05	20.87	21.23	20.78	21.34	21.49	21.12	21.41
<i>de2en</i>	30.11	31.67	32.65	32.97	32.71	33.34	33.11	32.91	33.51
<i>en2de</i>	24.61	26.06	27.02	27.26	26.97	27.36	27.15	27.10	27.44
<i>en2it</i>	26.33	27.90	28.88	29.35	28.69	29.06	28.99	28.94	29.34
<i>it2en</i>	31.22	32.56	33.46	33.20	33.25	33.49	33.53	33.33	33.87
<i>en2nl</i>	28.60	30.24	31.27	31.08	31.26	30.80	30.90	31.17	31.44
<i>nl2en</i>	33.86	35.39	36.20	36.57	36.03	36.92	36.82	36.55	37.40
<i>en2ro</i>	23.65	25.28	26.38	26.18	25.76	26.37	25.85	26.08	26.47
<i>ro2en</i>	32.02	33.59	34.34	34.82	34.34	35.31	34.87	34.89	35.09
<i>it2nl</i>	19.03	21.05	21.58	21.91	21.48	21.41	21.79	21.77	21.54
<i>nl2it</i>	19.80	21.23	21.72	21.97	21.71	21.81	21.61	21.84	21.83
<i>it2ro</i>	16.42	18.14	19.16	18.94	18.68	19.51	19.29	19.13	18.73
<i>ro2it</i>	17.37	19.50	20.04	20.84	20.28	20.60	20.94	20.74	20.32
<i>nl2ro</i>	17.28	18.42	19.09	19.39	19.07	19.35	19.09	19.45	19.42
<i>ro2nl</i>	19.28	21.21	21.70	21.65	22.00	22.21	22.61	22.20	22.50
Concatenation	22.68	24.31	25.08	25.32	25.01	25.38	25.33	25.30	25.46

Tips & Recommendations

Visual: Non-misleading visualisations!



https://en.wikipedia.org/wiki/Misleading_graph

References & Remarks

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References & Remarks

Where to know more

- Publishers such as Springer or Elsevier have tutorials
- Learn by listening to others
- We will go through the beginning of Seppo Karrila's slides
- If we have time, we'll go through Lucia Dettori talk
www.uvm.edu/~aellis5/Dettori.2007.Research.talk.101.ppt

References & Remarks

Your second seminar exercise

1 The topic

2 The audience

3 The time

References & Remarks

Your second seminar exercise

- 1 The topic
assigned paper
- 2 The audience
students (assume no previous knowledge on the topic)
- 3 The time
35m + questions
- 4 The content & structure
detailed! –not a research talk yet

53 people clipped this slide

When you review a journal article...

- You must answer these questions:
 - What is this about
 - Why is the topic important
 - What was done
 - Key result (or “what happened?”)
 - Implications on practice OR on research activities
 - What was left unanswered (according to authors)
- ... and this is the real test of your understanding:
 - Your critique of the article

[https://www.slideshare.net/Skarrila/
how-to-review-a-journal-paper-and-prepare-oral-presentation](https://www.slideshare.net/Skarrila/how-to-review-a-journal-paper-and-prepare-oral-presentation)

Thanks!

Questions?

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Back-up slides

Tell a story... but be careful!

THESE CHARTS SHOW MOVIE CHARACTER INTERACTIONS.
THE HORIZONTAL AXIS IS TIME. THE VERTICAL GROUPING OF THE
LINES INDICATES WHICH CHARACTERS ARE TOGETHER AT A GIVEN TIME.

