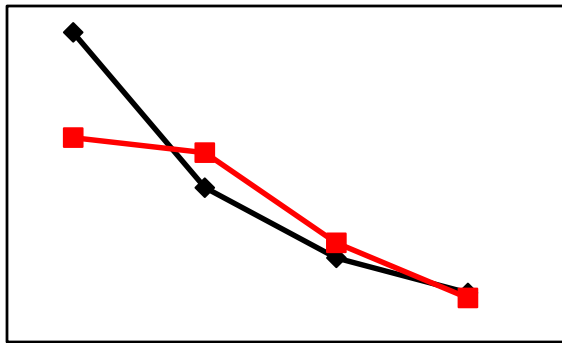


# How to design effective oral presentations



**Audience and organization**



**Visual design**



**Oral presentation skills**

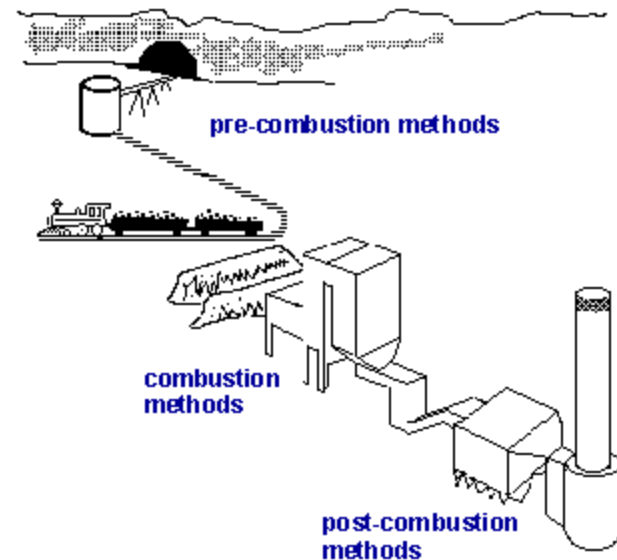
# Overview slide.

## Outline

- Introduction
- Background
- Pre-Combustion methods
  - Coal switching
  - Coal cleaning
- Combustion method
  - Atmospheric fluidized bed
- Post-Combustion methods
  - Absorption
  - Adsorption
- Conclusions
- Acknowledgments
- Questions

**Before**

**This presentation compares methods for reducing emissions of sulfur dioxide from coal power plants**



**Default settings in PowerPoint do not result in the best presentations**



# Oral communication is different than written

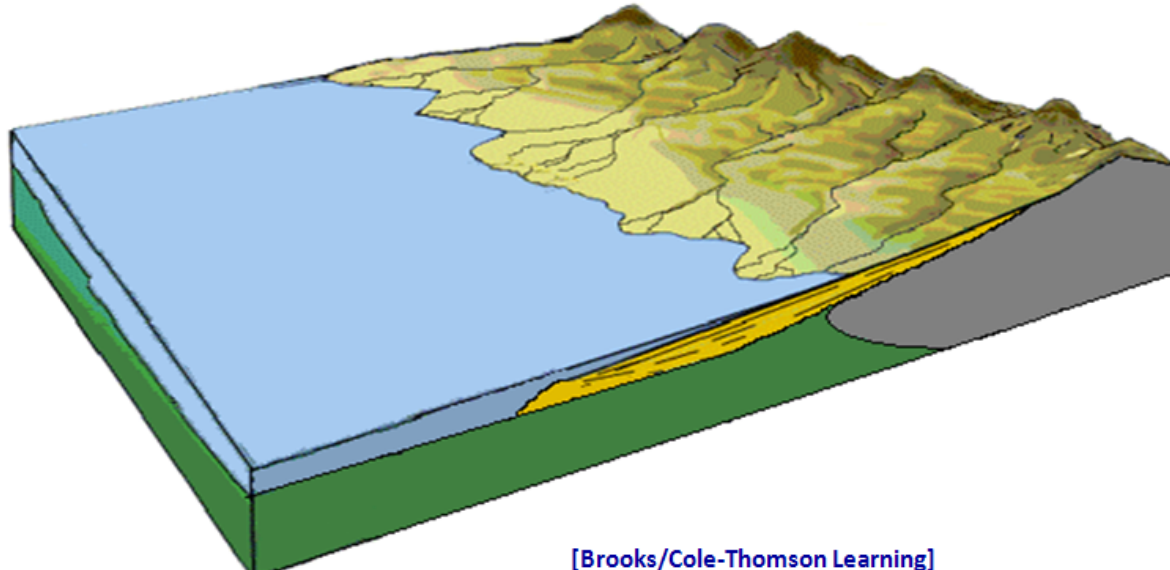
Title should convey the take-home message of the slide.

Keep It Simple  
Focus on 1 to 3 key points

There are two types of crust:  
oceanic and continental

**Oceanic crust:**  
rich in iron and magnesium  
more dense

**Continental crust:**  
rich in silica and aluminum  
less dense

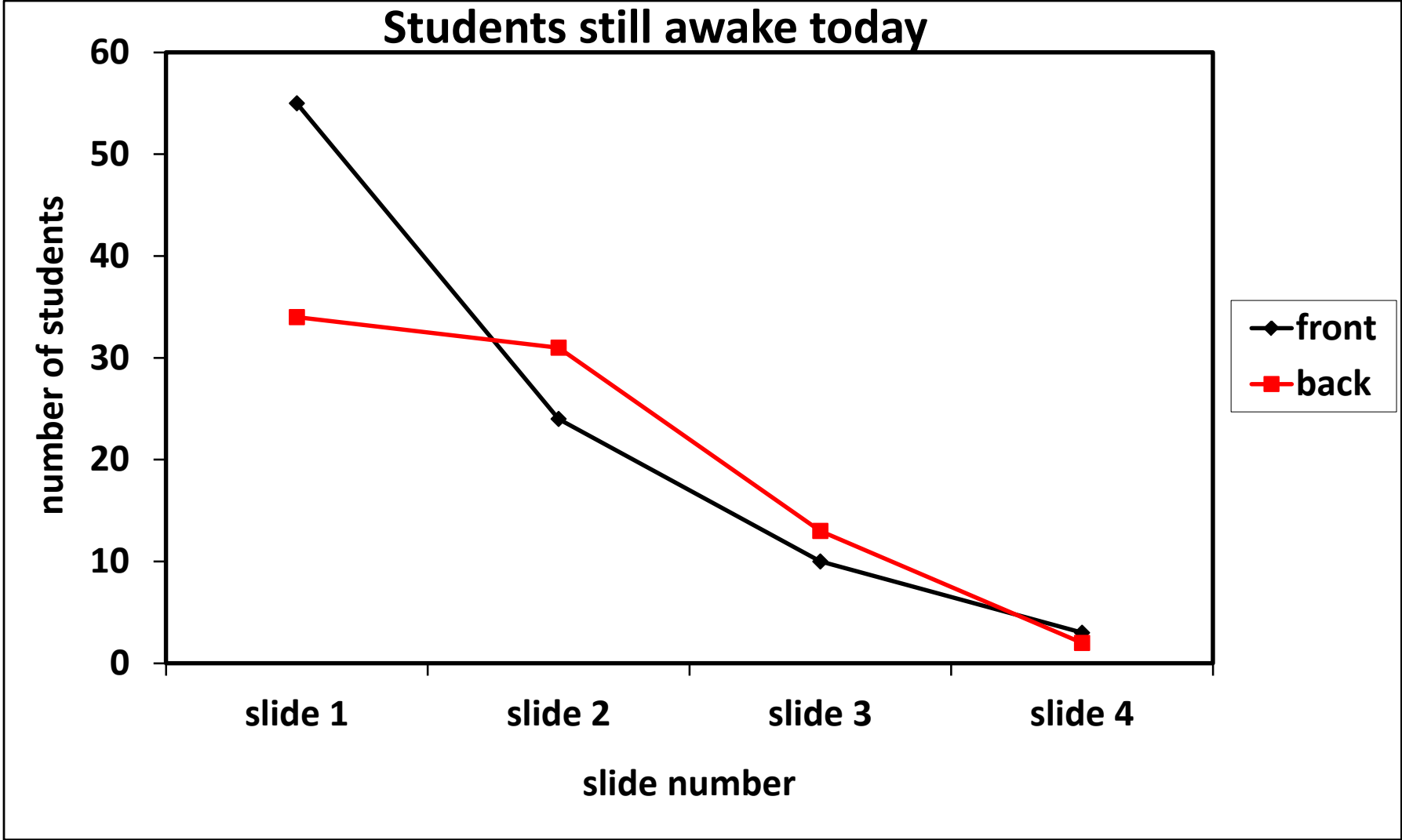


# Figures convey messages better than tables or text

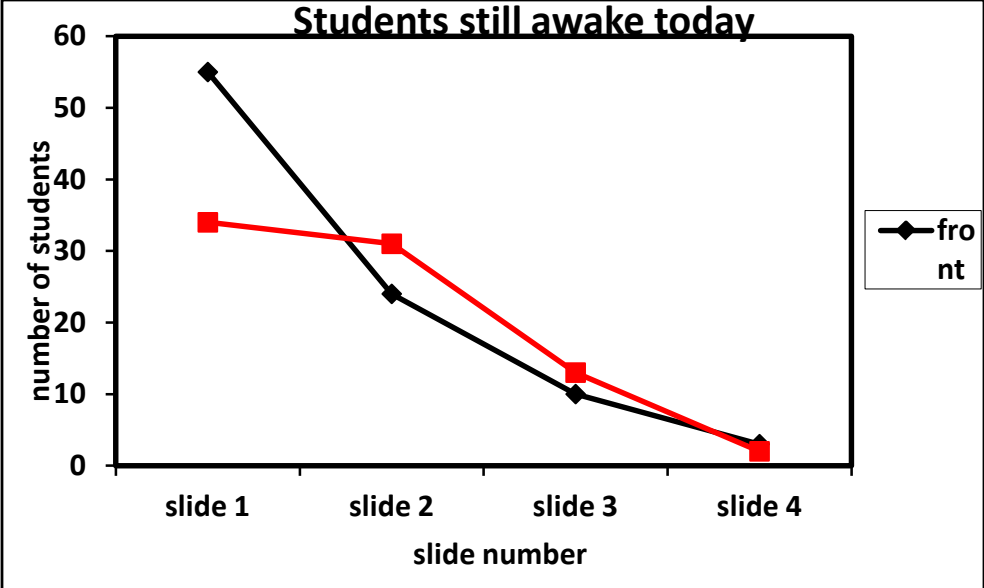
## Data on Student Awakeness

- **Over 50% of students at the front of the room are awake during the 1<sup>st</sup> slide.**
- **Only 35% of students at the rear of the room are awake during the 1<sup>st</sup> slide.**
- **With each successive slide fewer students are awake**
- **By slide 2 there is no significant difference between the front and the back of the room**
- **Fewer than 5% of students are awake by slide 4.**

# Figures convey messages better than tables or text



# Make it Big



## 5 x 5 Rule:

no more than 5 bullets

5 words each



fungi are heterotrophic (“other feeding,” must feed on preformed organic material), not autotrophic (“self feeding,” make their own food by photosynthesis).

Unlike animals (also heterotrophic), which *ingest then digest*, fungi *digest then ingest*.

Fungi produce exoenzymes to accomplish this  
most fungi store their food as glycogen (like animals)--  
plants store food as starch

Fungal cell membranes have a unique sterol, ergosterol,  
which replaces cholesterol found in mammalian cell  
membranes

lysine biosynthesis pathway in fungi is different

# 5 x 5 Rule

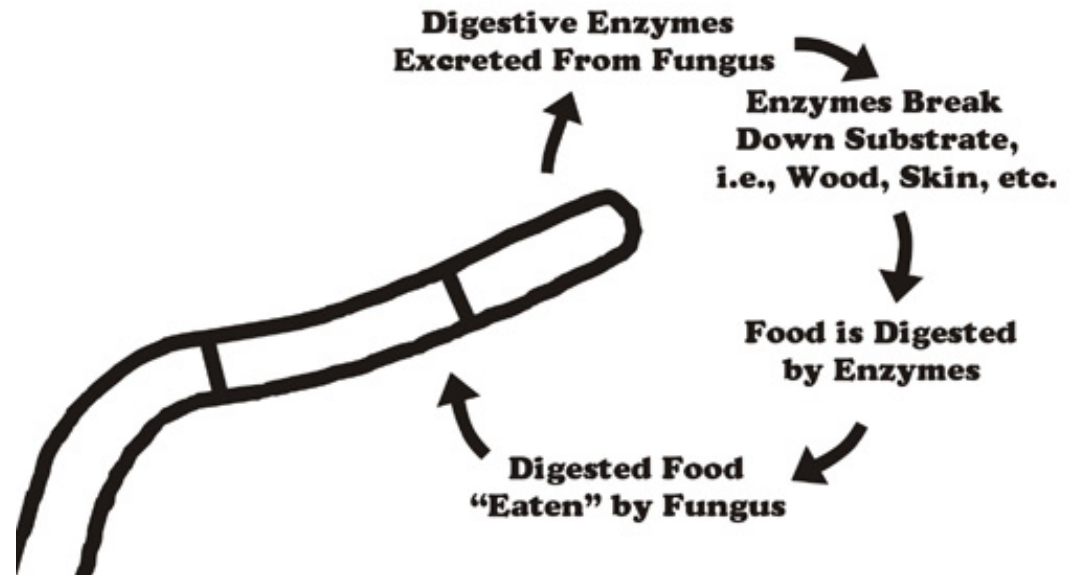
Heterotrophic

*Digest then ingest:*  
exoenzymes

glycogen

cell membranes have  
ergosterol,

Different lysine  
biosynthesis  
pathway



<http://www.botany.hawaii.edu/faculty/wong/BOT135/hypha2.JPG>



# Fonts that are sans-serif are much easier to read

Serif font

**H**

Sans-serif font

**H**

Heterotrophic

Heterotrophic

*Digest then ingest: exoenzymes*

*Digest then ingest: exoenzymes*

glycogen

glycogen

cell membranes have ergosterol,

cell membranes have ergosterol,

Different lysine biosynthesis  
pathway

Different lysine biosynthesis  
pathway



Times New Roman, Cambria

Calibri, Arial, MS Sans serif

# Modify figures if needed to emphasize your point

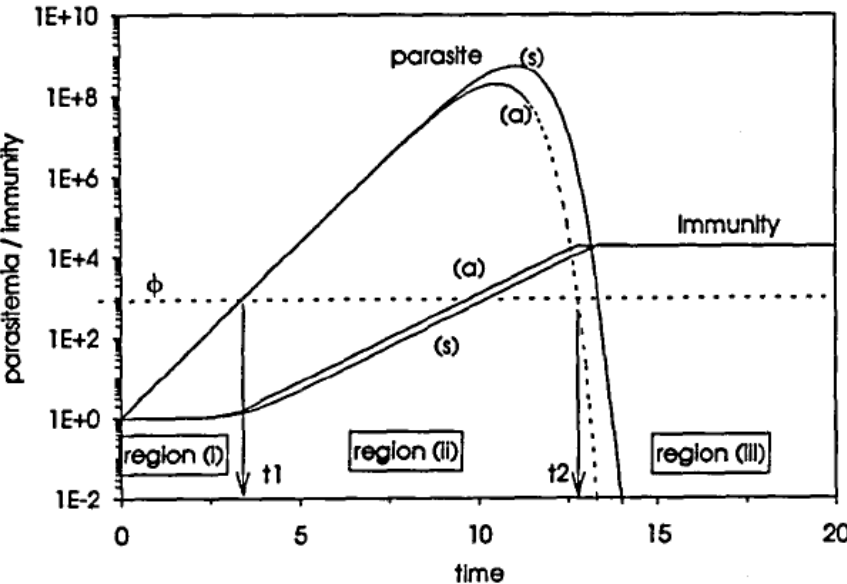
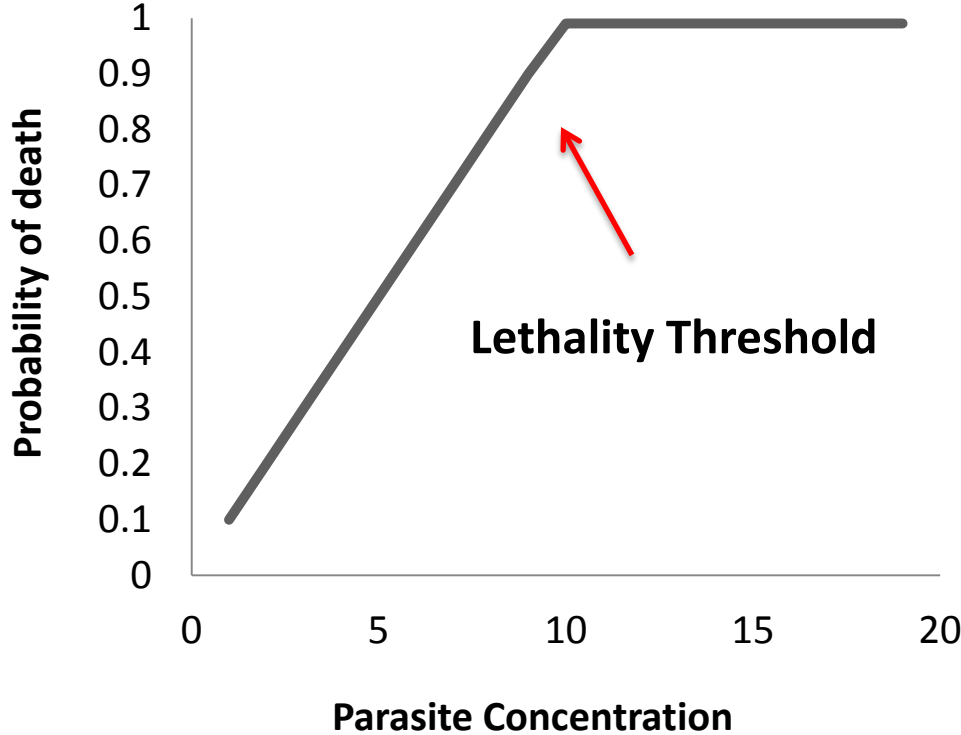
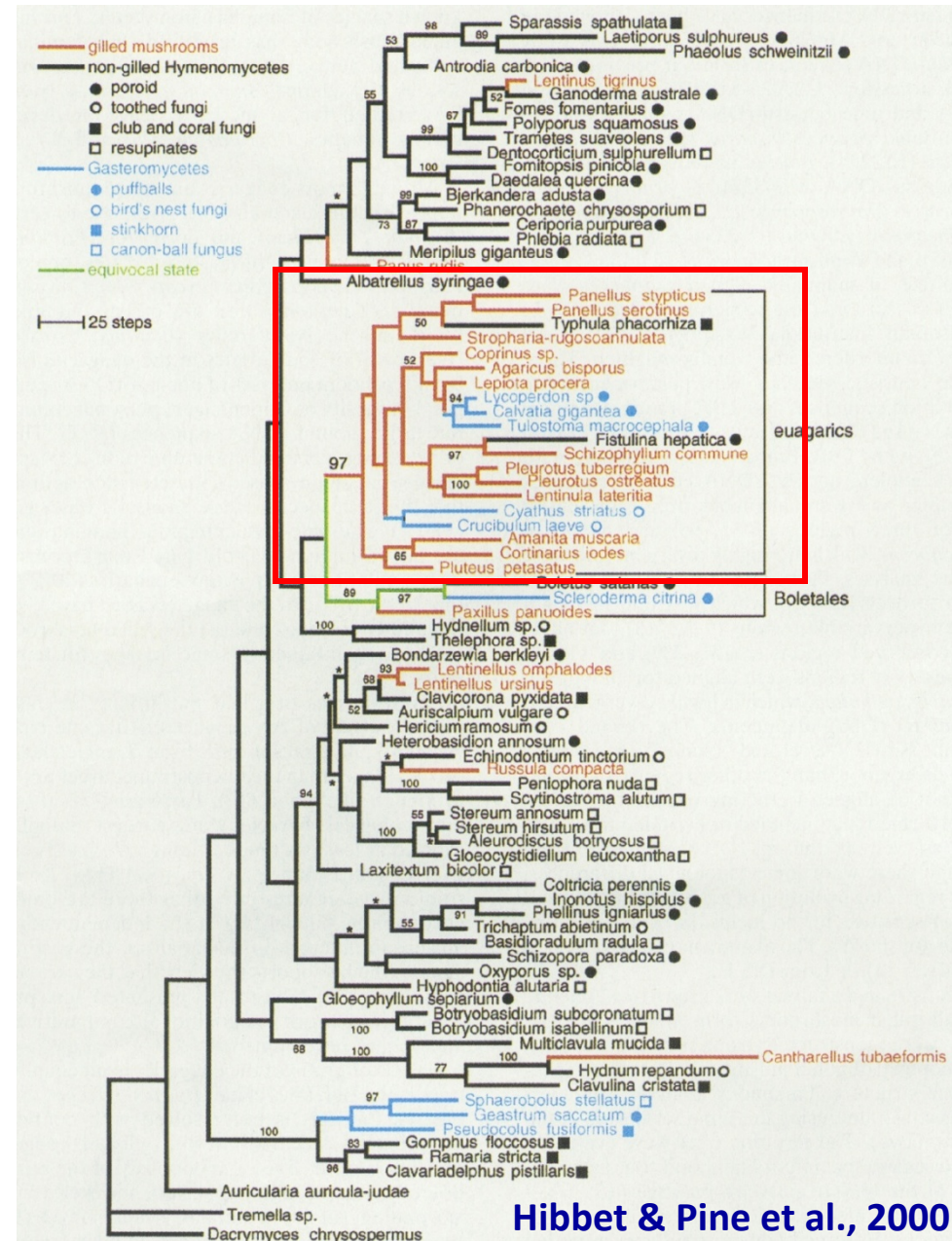


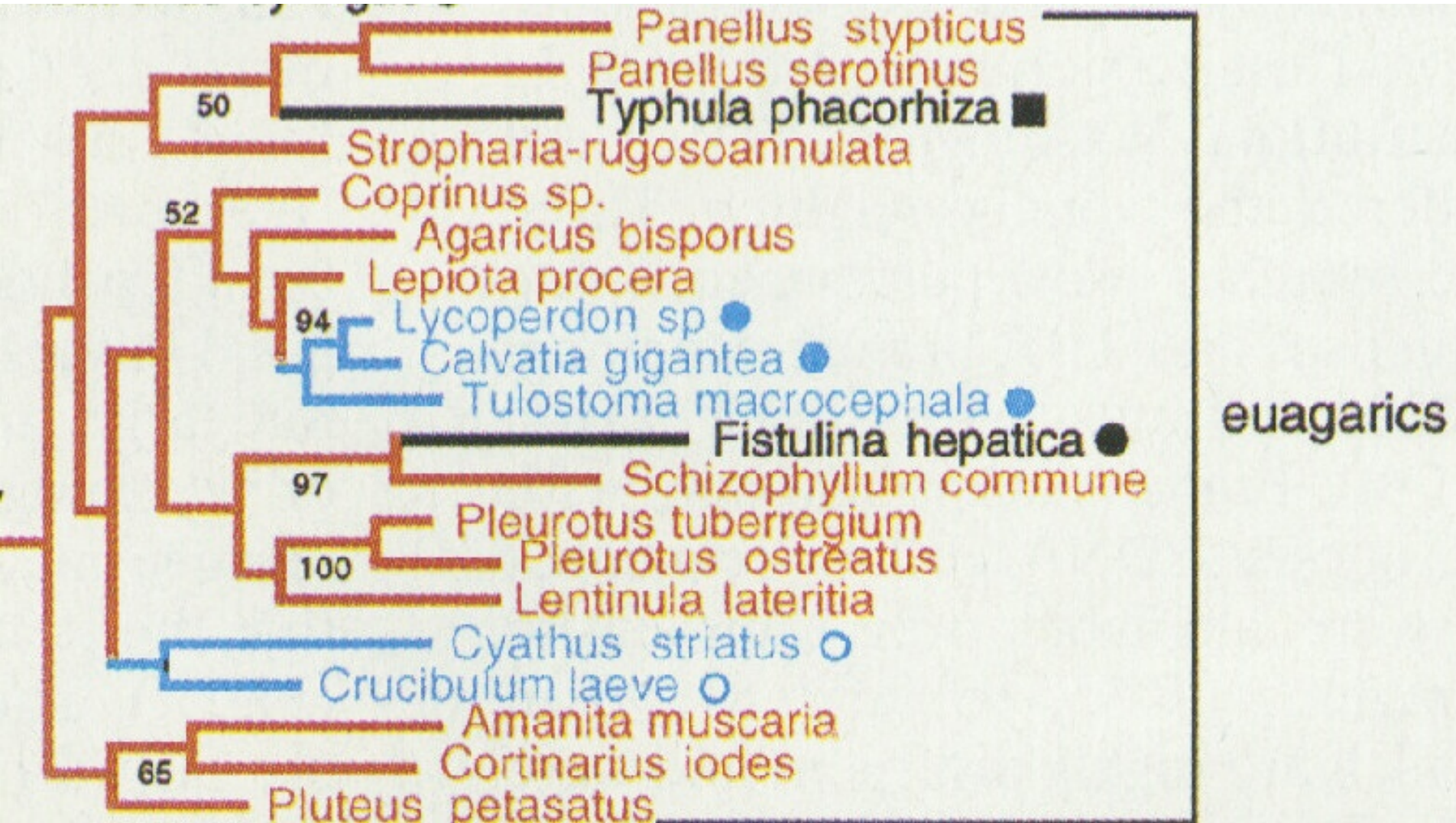
Fig A1. Antia et al. 1994



Modified from Antia et al. 1994

# Crop figures to focus on portions relevant to your talk





# High quality and consistent design of slides improves audience comprehension.

## Aesthetics

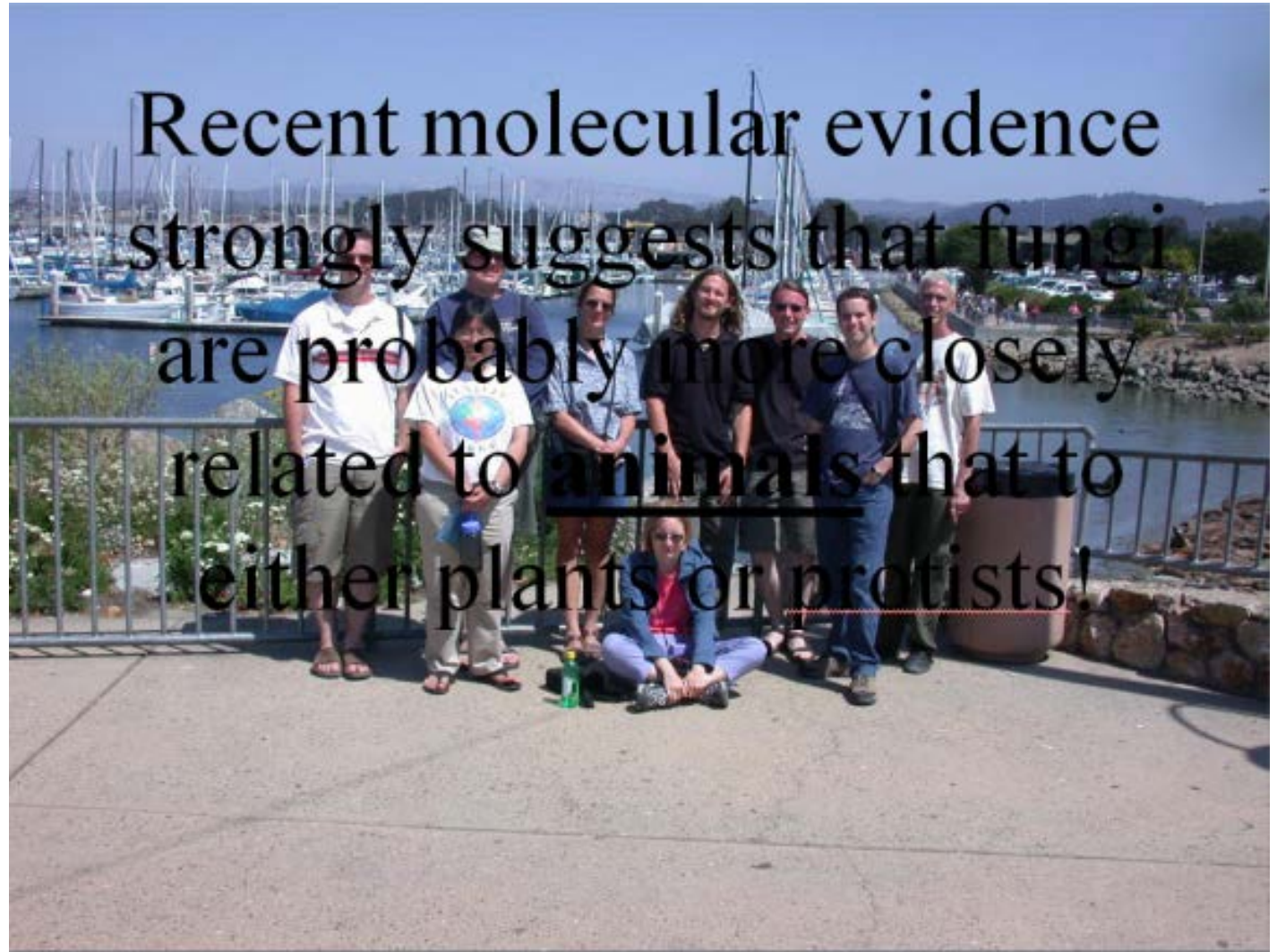
A rectangular slide with a vertical gradient background transitioning from dark red at the top and bottom to bright yellow in the center. The text "Don't do this to your audience" is centered on the slide in a red, serif font.

Don't do this to your audience

## Contrast

Don't do this either!

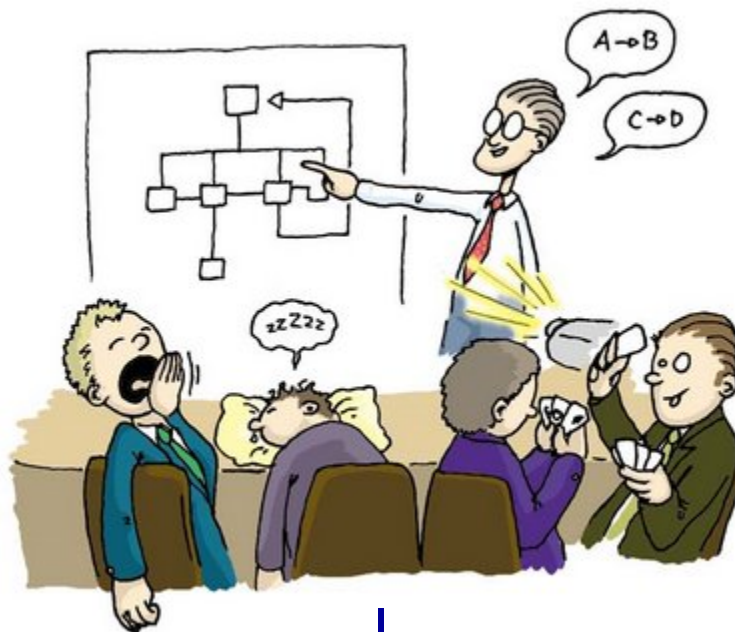
## Readability



# Oral communication is different from written

Conversational tone and word choice

Talk to the audience and not the screen (eye contact)



Use slides to illustrate your points (not vice versa)



# Practice your talk.

Practice out loud to a live human audience



Have them grade you using the seminar evaluation form

**BIOLOGY 491/492 SEMINAR EVALUATION FORM**  
(Completed by Seminar Instructor)

Student \_\_\_\_\_ Seminar Date \_\_\_\_\_

A. ORGANIZATION	Points Possible	Earned
1. Preparatory materials produced and distributed. See the following check list and note due dates. <input type="checkbox"/> One week prior to seminar date, the speaker emailed the discussion leader and provided him/her with (1) short bio; (2) copy of one reference (review) article; and (3) Outline of presentation. The seminar instructor was copied on the email. <input type="checkbox"/> One week prior to seminar date, the speaker uploaded into the D2L Dropbox the seminar Outline and Literature Cited section <input type="checkbox"/> Three school days before the seminar date, the speaker uploaded the presentation (Powerpoint slides) into the D2L Dropbox the Powerpoint slides so that they could be reviewed by the seminar instructor..	15	_____
2. Subject material should be presented in a reasonable and meaningful sequence.	10	_____
3. The student should make efficient use of entire time allotment.	5	_____

**Note:** Neglecting to perform tasks by the due dates will result in an automatic five point deduction (five points for each task missed, i.e., it is possible to lose a total of 15 points).

# Conclusion slide

- **include your take-home message**
  - Be organized and concise
  - Professional uncluttered slides
  - Practice and don't read to your audience
- **critical images from your talk**

