

Effective use of PowerPoint for Teaching and Research

الإستخدام الفعّال للبوربوينت في التعليم
والبحث العلمي

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Acknowledgment

Mrs. Allyson Hajek
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Agenda

- Introduction / Why use PowerPoint?
- Areas of Concern
- Tips and Techniques for
 - Designing
 - Learning
 - Presenting
- Summary and Close



Why use PowerPoint?



Areas of Concern

- Teaching and learning principles
- Presentation/lecture design
- Visual design
- Delivery/presentation skills



Visual Design

Identification

- The humpback whale is blackish in color with white underneath and at its sides.
- Its wing-like pectoral fins, or flippers, are mottled on the top and white below.
- A humpback whale's jaws and flippers often carry large barnacles.
- It's head, which is broad and round, and lower jaw are spotted with knobby protuberances or tubercles each with a long coarse hair growing from the center.
- There are between 20-50 ventral grooves which extend slightly beyond the navel.
- The tail, or flukes, which can be 18 feet wide, is serrated and pointed at the tips.
- The underside of the tail is white with black patterning which is distinctive to each individual whale.
- Adult males measure 40-48 feet (12.2-14.6 m). Adult females measure 45-50 feet (13.7-15.2 m).
- They weigh 25 to 40 tons (22,680-36,287 kg).



Guideline:

1. Limit amount of text on slide.
 - provide outline not transcript
 - use words and phrases not complete sentences
 - 6 x 6 rule: six lines of text with
six words per line

Guideline:

2. Use readable font sizes.
 - titles: 32 or greater
 - body text: 24 or greater

12 point type

16 point type

20 point type

24 point type

28 point type

32 point type

36 point type

40 point type



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Identification

- Blackish with white underneath and at sides
- Flippers (pectoral fins) mottled on top, white below
- Jaws and flippers carry large barnacles
- Knobby protuberances (tubercles) on head and lower jaw; each tubercle has long coarse hair
- 20-50 ventral grooves extend beyond navel
- Tail (flukes) 18 feet wide, serrated, and pointed at tips



Identification (Cont.)

- Tail underside is white with black patterning distinctive to individual
- Length: males 40-48 ft; females 45-50 ft.
- Weight: 25 to 40 tons



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Guideline:

3. Use readable font styles.

- use common, easy-to-read fonts, e.g., Arial, Helvetica, Verdana
- decorative/fancy fonts are hard to read
- decorative font may not be available on presentation computer

a. This text is displayed in 24 pt. Verdana.

b. *This text is displayed in 24 pt. Allegro.*

c. This text is displayed in 24 pt. Times New Roman.

d. This text is displayed in 24 pt. Kaufmann.



Serif



Serif Fonts

Times

Georgia

Palatino

Sans-Serif Fonts

Arial

Futura

Verdana



Guideline:

4. Left align all text.

- difficult to read more than two lines of centered or right aligned text
- exception: titles may be centered

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IDENTIFICATION

- ❖ BLACKISH WITH WHITE UNDERNEATH AND AT SIDES
- ❖ FLIPPERS (PECTORAL FINS) MOTTLED ON TOP, WHITE BELOW
- ❖ JAWS AND FLIPPERS CARRY LARGE BARNACLES
- ❖ KNOBBY PROTUBERANCES (TUBERCLES) ON HEAD AND LOWER JAW; EACH TUBERCLE HAS LONG COARSE HAIR
- ❖ 20-50 VENTRAL GROOVES EXTEND BEYOND NAVEL
- ❖ TAIL (FLUKES) 18 FEET WIDE, SERRATED, AND POINTED AT TIPS

Guideline:

5. Limit the use of all caps.
 - text in all upper case letters harder to read than lower case or title case
 - reserve use for titles not body text

HELP

help

READ

read



Guidelines:

6. Limit the number of colors and fonts.
 - maximum of three colors
 - two simple, easy-to-read fonts – one for headings, one for body text
7. Use a consistent look and feel from slide to slide.
 - select a design template and stick with the color scheme and layout
 - don't vary text size and color
 - don't vary color and position of background graphics

IDENTIFICATION

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- ❖ TAIL (FLUKES) 18 FEET WIDE, SERRATED, AND POINTED AT TIPS

Identification

- Blackish with white underneath and at sides
- Flippers (**pectoral fins**) mottled on top, white below
- Jaws and flippers carry large **barnacles**
- Knobby protuberances (**tubercles**) on head and lower jaw; each tubercle has long coarse hair
- 20-50 **ventral grooves** extend beyond navel
- Tail (**flukes**) 18 feet wide, serrated, and pointed at tips

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Guideline:

8. Maximize contrast between the text and background.
 - dark text on light background or light text on dark background
 - light backgrounds provide ambient light
 - cool colors best for backgrounds
 - avoid multi-colored and heavily textured backgrounds

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Guidelines:

9. Limit the flash.

- avoid “bells and whistles” overload
- moving text, sound, and elaborate slide transitions can be distracting; add nothing to learning value of presentation
- use these features with specific, clearly defined learning goal in mind

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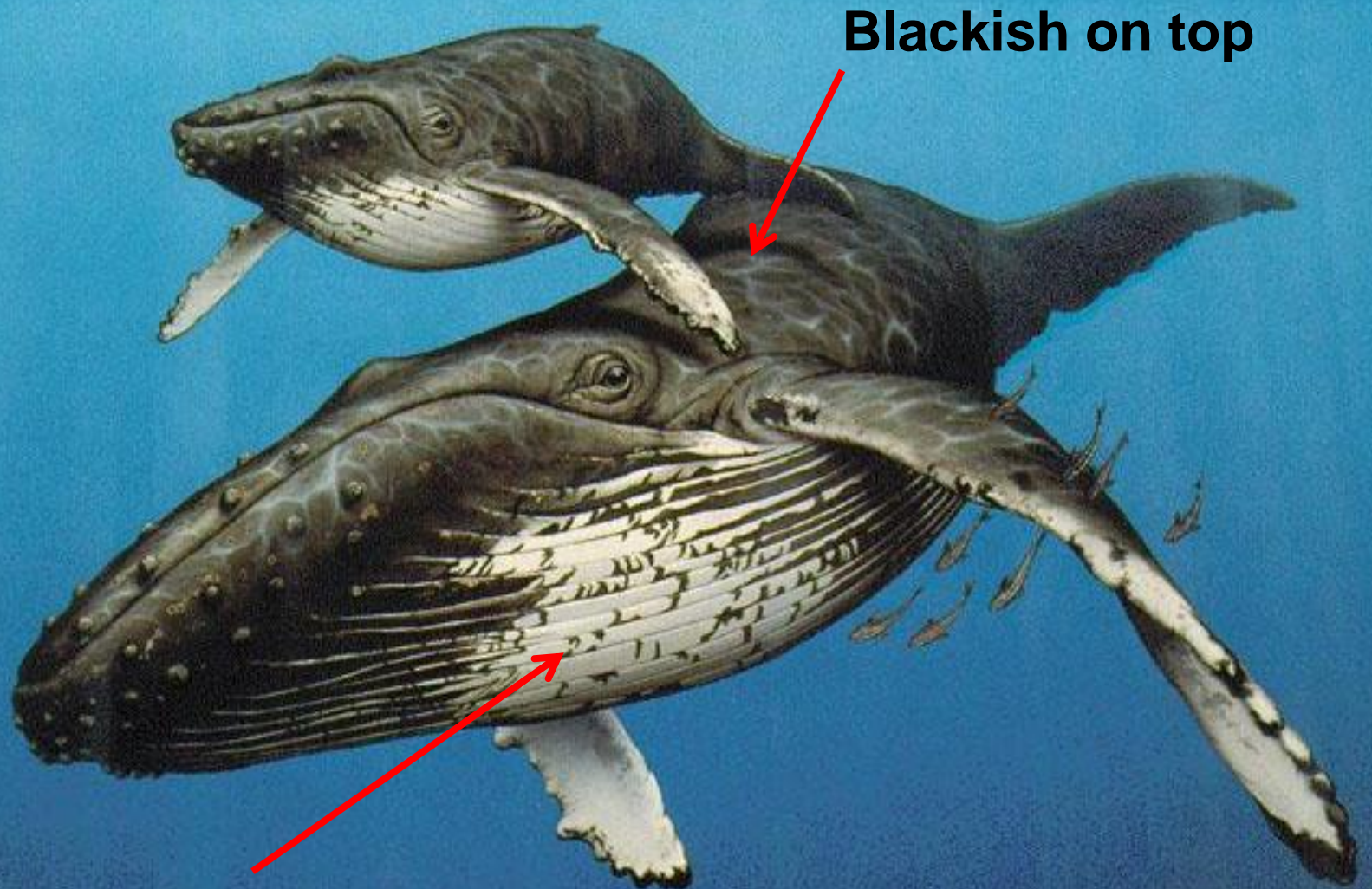
Teaching & Learning



Identification

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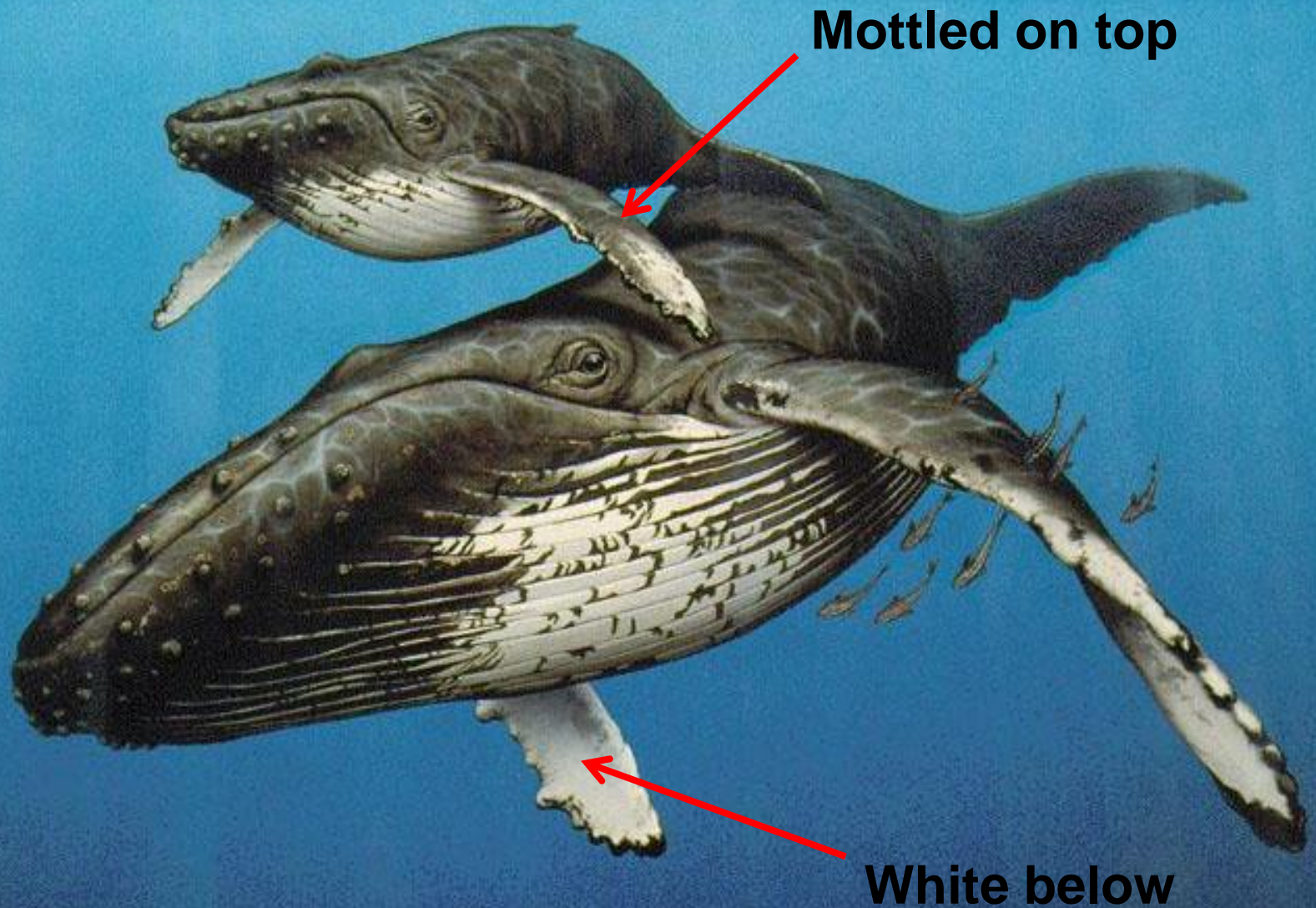
1. Color



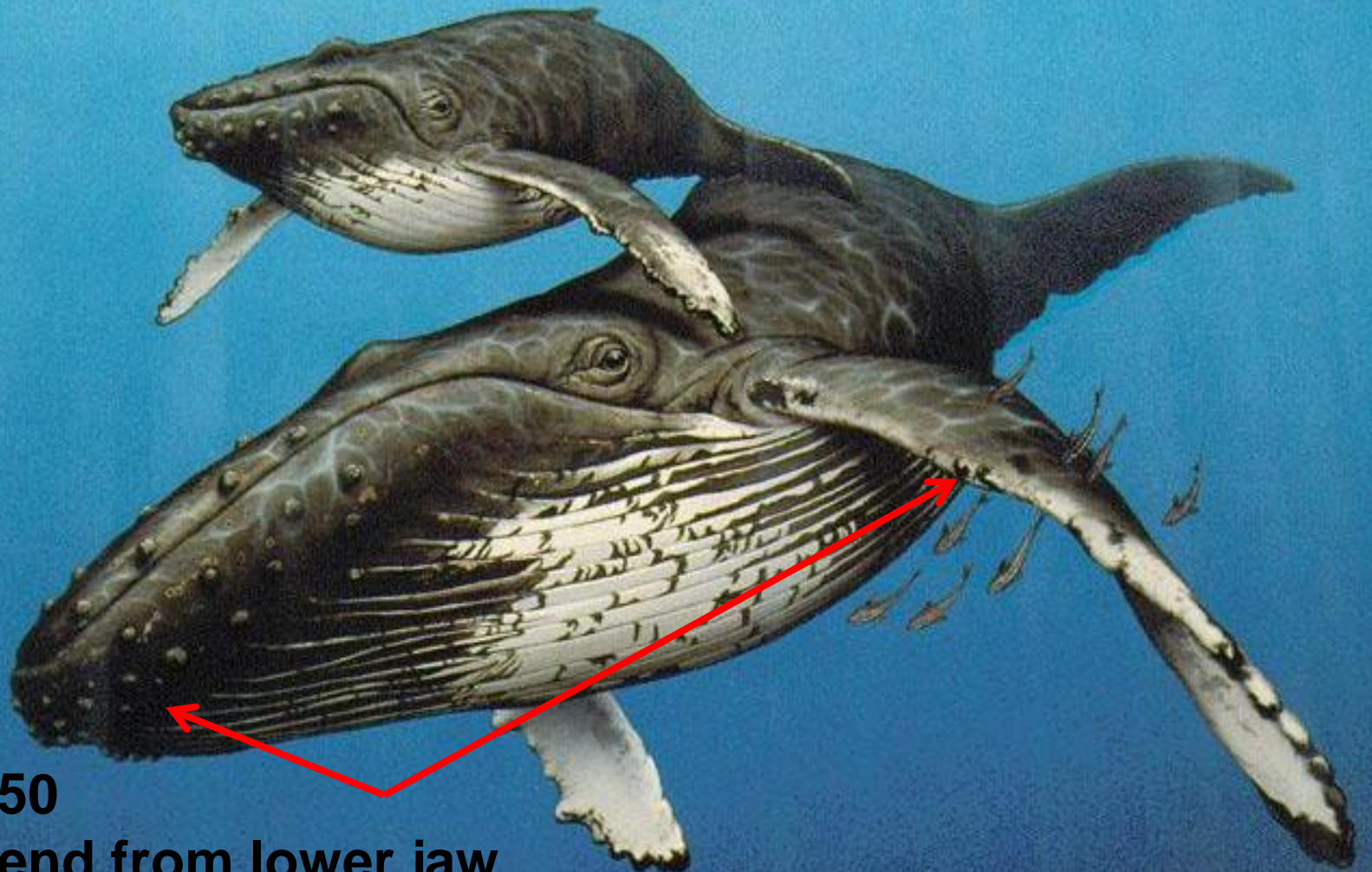
Blackish on top

White at sides & underneath

2. Flippers (Pectoral fins)



3. Ventral Grooves



20-50
extend from lower jaw
to beyond navel

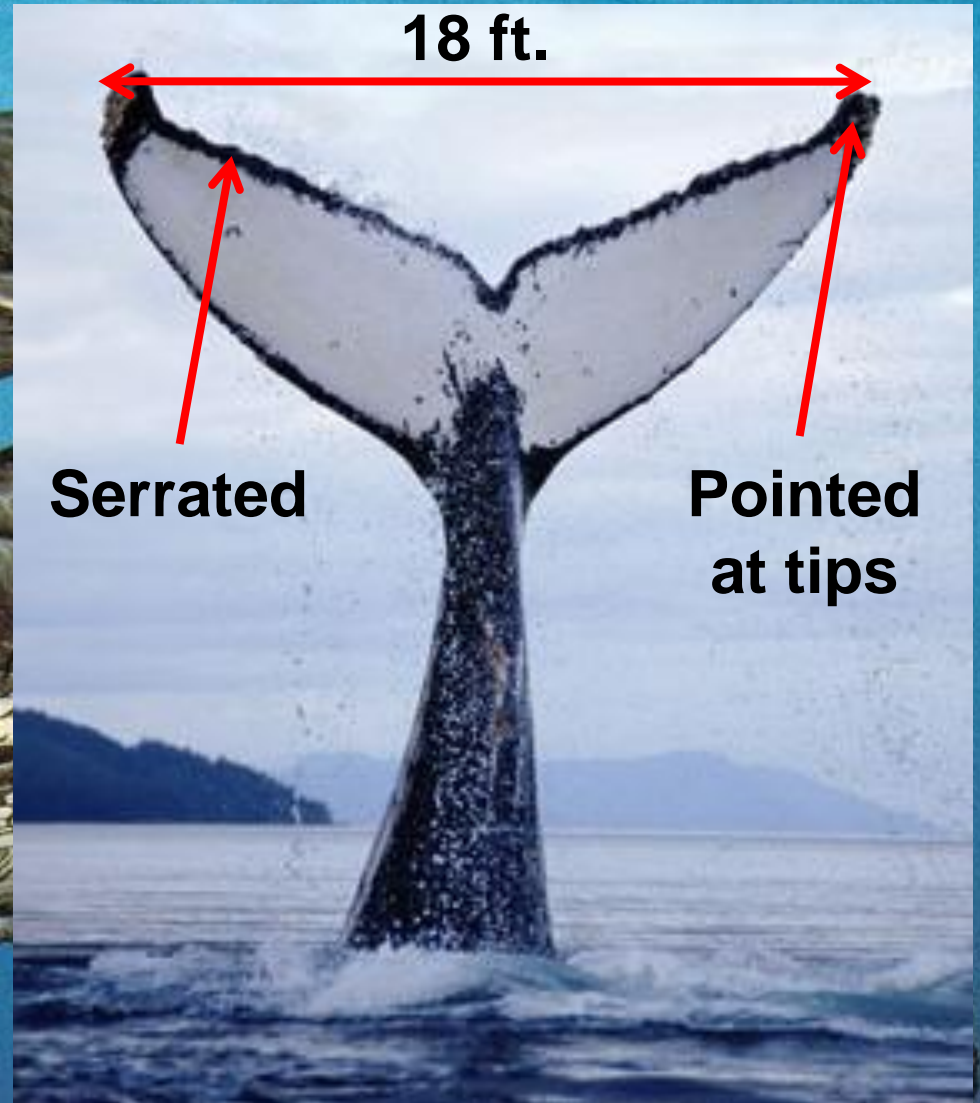
4. Tubercles

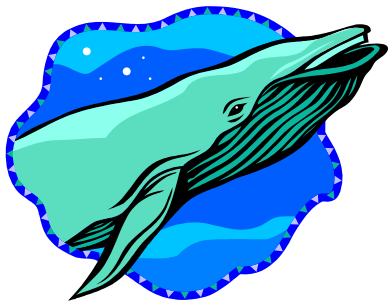


5. Barnacles



6. Tail (Flukes)





Identification

- Flukes (tail) 18 feet wide, serrated, and pointed at tips
- Underside of flukes white with black patterning
- Patterning distinctive to each whale
- Patterning used by scientists to identify individual whales



Identification

- Flukes (tail) 18 feet wide, serrated, and pointed at tips
- Underside of flukes white with black patterning
- Patterning distinctive to each whale
- Patterning used by scientists to identify individual whales







Guideline:

1. Strive for balance between verbal and visual information.
 - visual elements can promote communication
 - appeal to visual learners
 - move beyond clip art to photos, charts, diagrams
 - eliminate visual elements that do not support/reinforce content

Visual Continuum

1. Reader
2. Emphasized Reader
3. Reader with Visual Cues
4. Balanced
5. Pictorial with Verbal Cues
6. Emphasized Pictorial
7. Pictorial



Behavior

■ Friendly:

- Breach
- Spy hop
- Pectoral slap
- Pectoral stroke

■ Not so Friendly:

- Peduncle slap
- Tail splash
- Tail slap
- Tail extension

Breach



Spy hop



Pectoral slap



Tail slap



Behaviour

- WhaleNet [Humpback Whale Catalogue](#), Wheelock College, Boston, MA
- [Greenpeace Records Humpback Whales in Southern Ocean](#), YouTube, added: January 08, 2008, Greenpeace USA
- Humpback song



Guideline:

2. Use PowerPoint's multimedia and hyperlinking capabilities to enrich or supplement content.

 images

 video

 audio

 animation

 hyperlinks



Guideline:

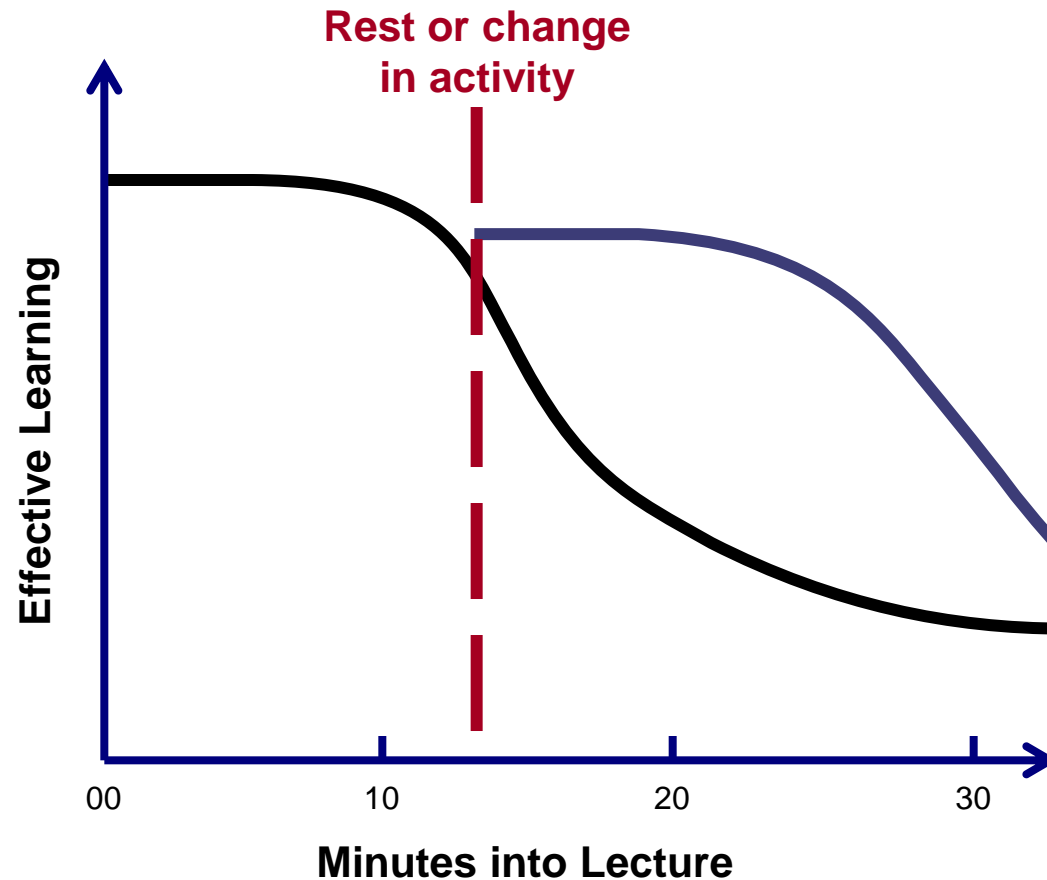
3. Build in interactivity.

Learning takes place through the active behaviour of the student; it is what *he* does that he learns, not what the teacher does.

(Ralph W. Tyler, 1949)

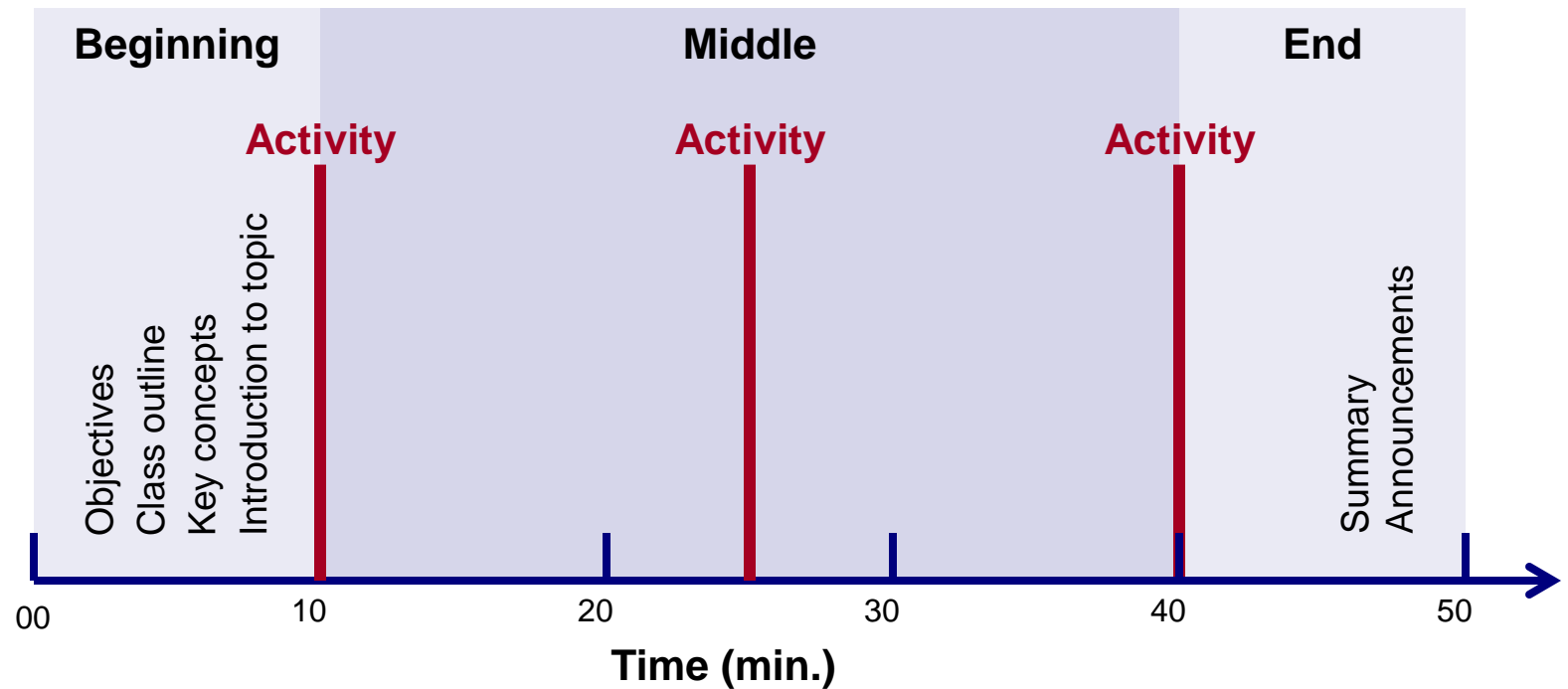
Guideline:

3. Build in interactivity.



Guideline:

3. Build in interactivity.



Atlantic Population

- Mid-1800s – 4,000 and 6,000 individuals (Reeves and Mitchell 1982; Breiwick et al. 1983; Whitehead 1987)
- Late 1960s or early 1970s (post-whaling) – between about 800 and 1,300 individuals (Mitchell 1973; Winn et al. 1975)
- West Indies breeding population, 1979-1993 – suggest annual population growth of 3% (Stevick et al. 2001).
- Gulf of Maine, mark-recapture estimate from 1992/93 – 652 individuals (CV = 0.15; Waring et al. 2000)
- 1992/93, Eastern Canada – estimate of 2,509 individuals (CV = 0.077)
- 1999, line-transect estimate – 816 individuals (CV = 0.45; Palka 2000).
- 2001 (Stevick et al.) – 11,570 individuals (CV=0.069), for entire North Atlantic (estimate is known to be negatively biased (Anonymous 2001)). No recent basin-wide estimates available.



Guidelines

4. Supply detailed text and data in handouts.
 - difficult to absorb dense/detailed technical data
 - provide only a summary of important results
 - refer to supplied handouts
5. **Proof read your slides.**



Delivery



Guidelines for Delivery/presentation skills

- Arrive Early.
- Relax, control, enjoy
 - Calming your butterflies, and overcoming any fears you have.
 - Take a few deep slow breaths to make you feel relaxed.
 - Smiling helps to relax you and to keep people involved and enjoying themselves.



Guidelines for Delivery/presentation skills

- Facial expressions, natural and comfortable...smile!
- Dry mouth is a common result of anxiety and fear (**drink water**).
- Be comfortable with the technology.
- Hide the cursor – Ctrl H (hide), A (appear)
- Number your slides.



Guidelines for Delivery/presentation skills

- Consider a good voice and volume- speak clearly
- Physical appearance, dress formally.
- Keep eye contact.
- Actively engage the audience.
- Admit you don't have all the answers.
- Do not make the room too dark.

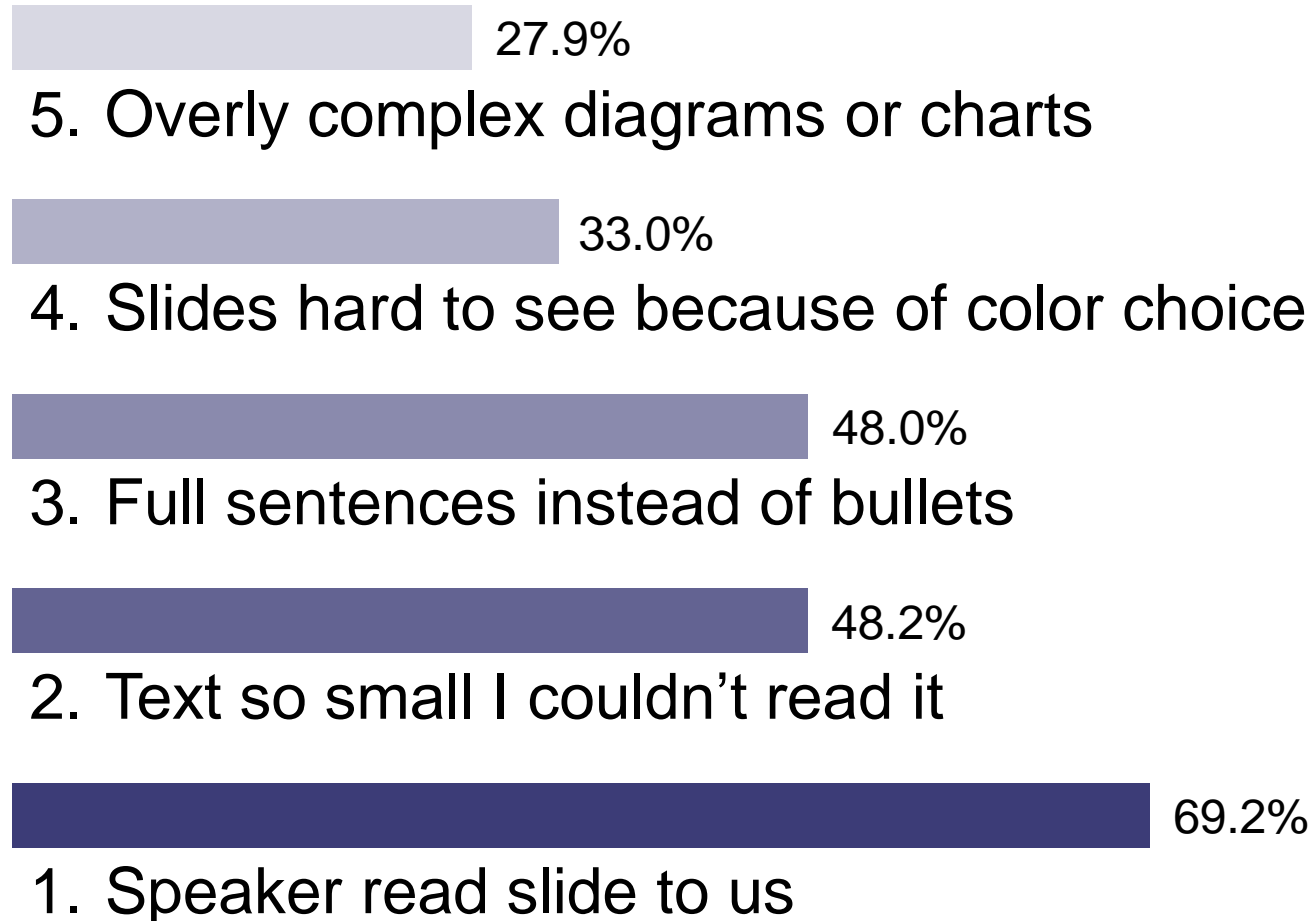


Guidelines for Delivery/presentation skills

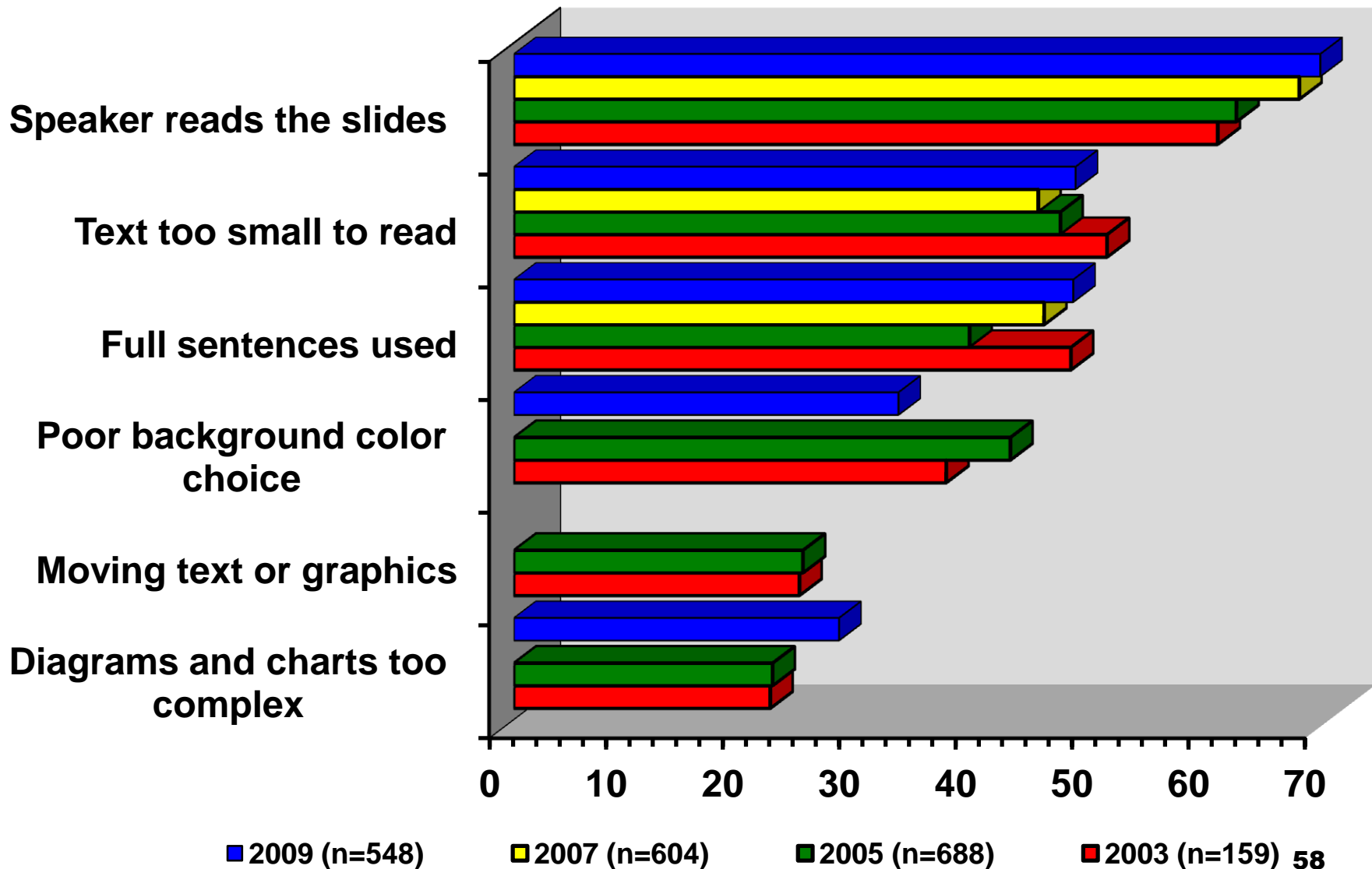
- Body language, use your body movement and position in a proper way!
- Face your audience.
- Watch your pace.
- **Do not read from the slides.**
- Backup plan!

Annoying PowerPoint Survey (2009)

Top Five Annoyances



Annoying PowerPoint Survey



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**Thank you
for your attention**