

*Giant Screen Films and Lifelong Learning*

Memorable Learning  
Experiences in Giant Screen  
Films



- **Diverse Ages**
- **Wide Range of Prior Knowledge**
- **Interest in Learning**
- **Expectation of Good Storytelling**

Who is the audience?

- **Content knowledge e.g. facts**
- **Enriched understanding, context**
- **Ability to visualize**
- **New attitudes, perspectives and approaches**

**What constitutes learning?**

# *The Human Body*



**De-familiarizing the familiar**

Prior to watching the film, we asked viewers how they felt about their bodies ....

- **“healthy”**
- **“fit”**
- **“overweight”**
- **“good”**
- **“tired”**
- **“out of shape”**

# ***The Human Body***

**New landscapes**

After viewing the film responses about how they felt about their bodies were very different....

- **“amazing”**
- **“marvelous”**
- **“miraculous”**
- **“awesome”**
- **“fascinating”**
- **“incredible”**
- **“It’s an amazing machine”**
- **“Awesome! Only God could make it”**

- **“extraordinary”**
- **“intricately made”**
- **“cool”**
- **“complicated”**
- **“complex”**
- **“fantastic”**
- **“I could still use a tattoo, but it’s amazing,”**

# ***Wired to Win: Surviving the Tour de France***

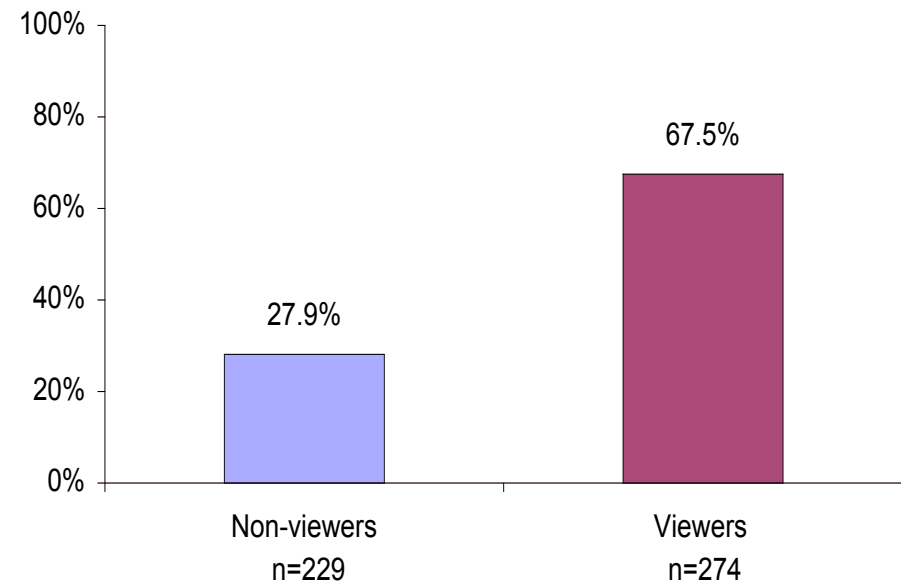
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**Integrating Science and Story**

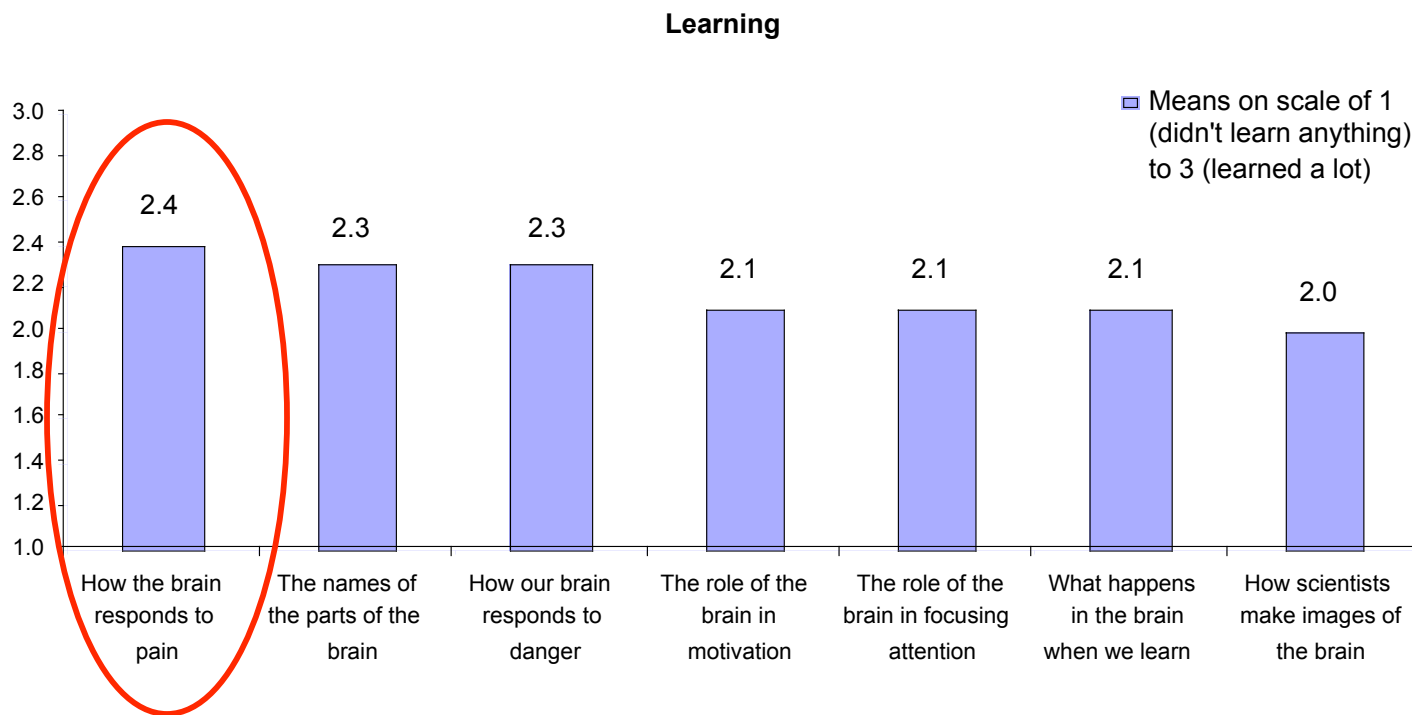
# Factual knowledge (multiple choice)...

Which of the following is true about how we experience pain?

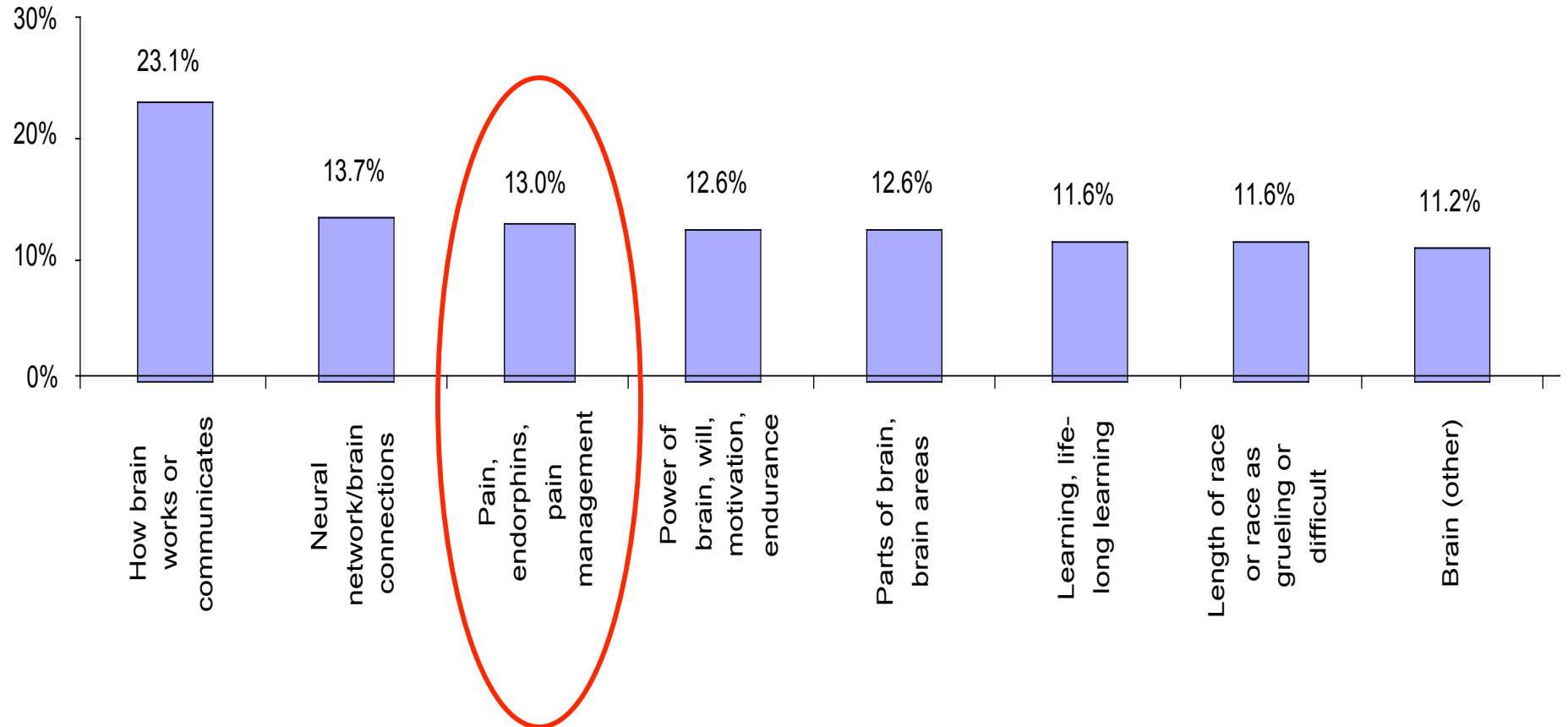
- a. \_\_\_ Pain is eased at the site of the injury where adrenaline is released.
- b. \_\_\_ Pain is eased in the brain when endorphins are released.
- c. \_\_\_ Pain is eased when synapses in the brain expand to release hormones.
- d. \_\_\_ Pain is eased when endorphins from the brain and pain signals from the injury meet in the spinal column.



# Perception of learning (rating scales)...



# Interesting facts learned (open-ended questions)...



# ***Dinosaurs Alive***



**Visualizing Scientific Processes**

# *Dinosaurs Alive*



**Visualizing Scientific Processes**

# Visualizing scientific processes

- **“I will remember the flood water rushing through – you don’t get that from the exhibit descriptions.”**
- **“I liked the flash flood recreation. That showed the imagination paleontologist uses to recreate the events – it was memorable.”**
- **“[what was] extremely effective was the way the film and education can meet – when they showed the real life fossil and dissolved to animated bird.”**
- **“when the fossil on the cliffs became an animated bird – that was so effective.”**

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- Manipulate scale and time, such as through macrophotography and slow motion
- Juxtapose perspectives
- Storytelling matters; human characters and motivation make the science engaging
- Use visuals to scaffold imagination

An invitation to discuss...

Please come talk to me during  
the conference about your  
thoughts on any and all of this.

