The Science of Presentations
Aristotle
Heavier objects fall faster than lighter objects.
Heavier objects fall faster than lighter objects.
Galileo
Galilei
Scientific Method
Both objects fall at the same rate.
Today
Cognitive Theory of Learning

• Limited Capacity
  – 7 Elements +/- 2 held in working memory

• Two Modes
  – Visual
  – Auditory

• Active Learning
  – Text, images, spoken words, recalled information held in working memory
  – Contents of working memory assembled into mental model
Blah Blah Blah Blah Blah Blah

• Blah Blah Blah
  – Blah blah blah blah blah blah blah

• Blah Blah Blah
  – Blah
  – Blah

• Blah Blah
  – Blah blah blah blah blah blah blah blah
  – Blah blah blah blah blah blah blah
Present According to How People Learn
Cognitive Theory

Factors for Effectiveness

Application
Limited Capacity
Working Memory
Active Learning

Images

Spoken Words

Text

Memories

Mental Model
Working Memory

Mental Model
If you’re reading this...
You aren’t listening.
Effects
Coherence Principle
“Any car which holds together for a whole race is too heavy.”
--Colin Chapman
Chunking
Advance Organizer

Familiar → Unfamiliar
Horseless Carriage
Exposition

vs

Narrative
לא תזרע לא תנאם
לאתвшей לא תעב
לא תשה ולאת עשה
לאת עשה
לא תקן אל הנה
לא כל יומ
לאת אפי
לבא את אביך
אל יהוה
APPLICATION
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Present According to How People Learn → Limited Capacity

Two Modes → Active Learning
Present According to How People Learn
Limited Capacity
Active Learning

Images

Spoken Words

Text

Memories

Mental Model
Present According to How People Learn

Limited Capacity

Active Learning
- Images
- Spoken Words
- Text
- Memories

Mental Model
Multimedia Learning
Richard E. Mayer
Universal Principles of Design
Lidwell, Holden, Butler
Thank You!
For speaker notes and references:
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