5-10-2016

# Step Up to the Plate! Using Multimedia Content and Game Winning Strategies for Implementation

Betsy J. Becker
*University of Nebraska Medical Center*, betsyj.becker@unmc.edu

Peggy Moore
*University of Nebraska Medical Center*, peggy.moore@unmc.edu

University of Nebraska Medical Center

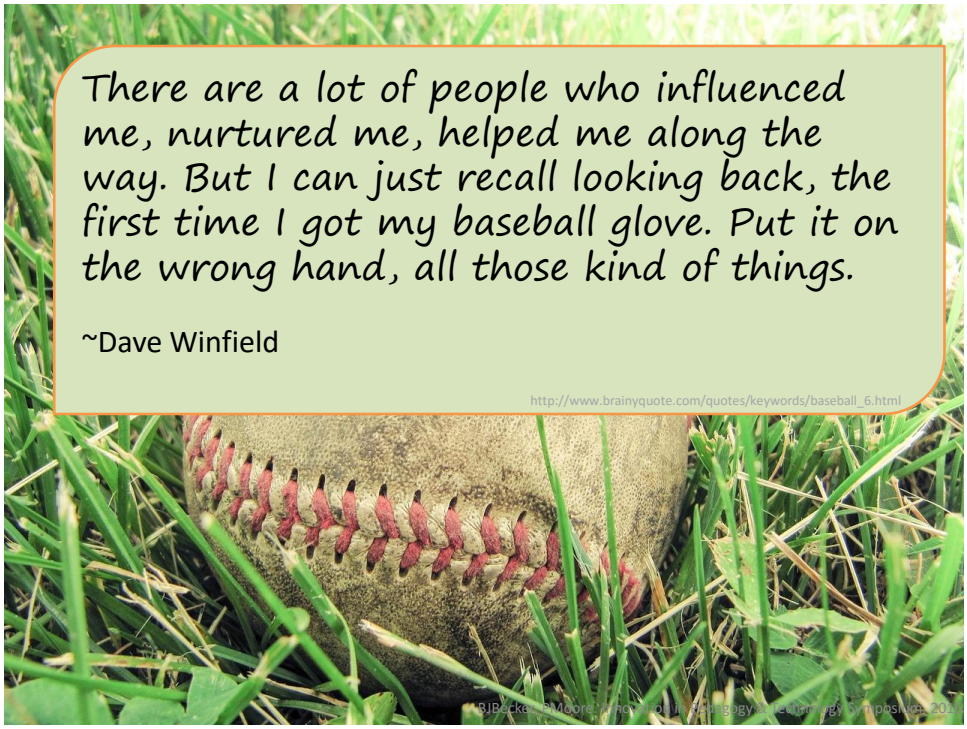
# Step Up to the Plate!

## Using Multimedia Content & Game Winning Strategies for Implementation

**Betsy J. Becker, PT, DPT, CLT-LANA**
UNMC Assistant Professor,
Physical Therapy Education
College of Allied Health Professions
BetsyJ.Becker@unmc.edu

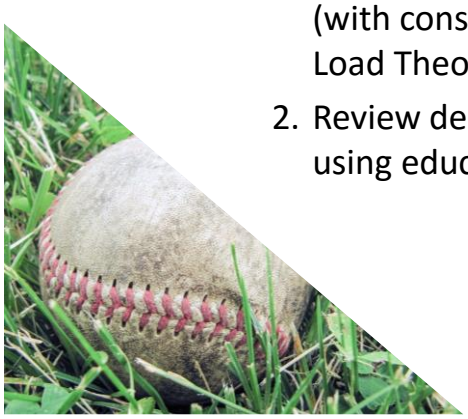
**Peggy Moore, MSEd**
UNMC E-Learning Instructional Designer
peggymoore@unmc.edu

The presenters have no financial disclosures that would be a potential conflict of interest with this presentation.




## Objectives

1. Apply Mayer's Multimedia Principles (with consideration of the Cognitive Load Theory) to presentation content.
2. Review decision making strategies for using educational technology.



# Why?

- Teaching
- Research presentations
- Grant proposal presentations
- Expectations and requirements
  - Professionalism and evaluation



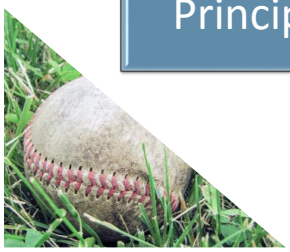
## How Does Multimedia Learning Work?

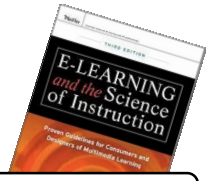
- 2 Channels
  - Verbal
  - Visual
- Limited Capacity
  - Small Bits
- Active Processing
  - Engage

Mayer, R. E. (Ed.). (2014). *The Cambridge handbook of multimedia learning (2nd ed)*. New York: Cambridge University Press.

# 4 Mayer's Multimedia Principles To Consider

- Coherence Principle
- Segmenting Principle
- Redundancy Principle
- Spatial Contiguity





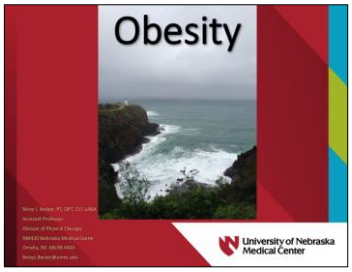

Find all of Mayer's principles in this book

BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

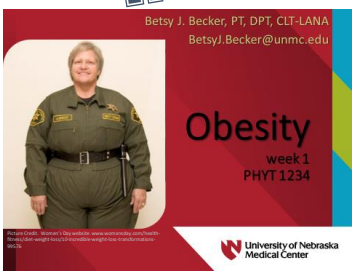
# Coherence Principle

*Omit extraneous words, visuals or elements add purely for interest. Less is more.*

STRIKE OUT




HOME RUN



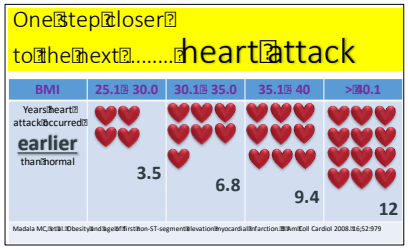

BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

# Redundancy Principle

*Explain graphic with words OR text, not both*

STRIKE OUT


HOME RUN

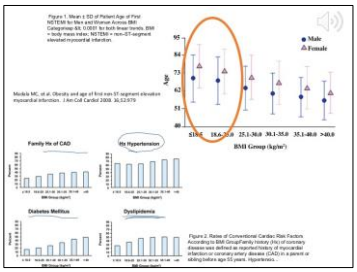



BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

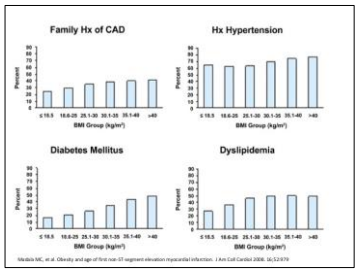
# Segmenting Principle

*Break complex lessons into bite-size segments*

STRIKE OUT



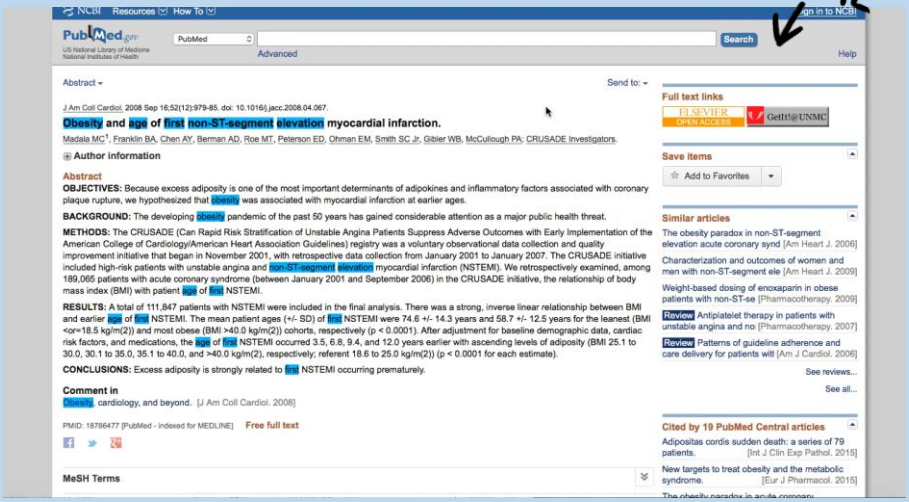
HOME RUN




BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

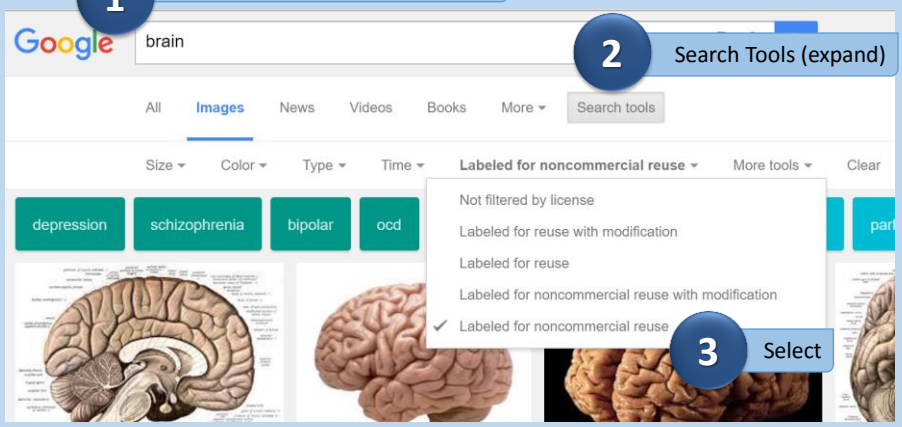
Screencast video of downloading PowerPoint Slides from manuscript

CLICK HERE




BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

# Fair Use Images from Google Images

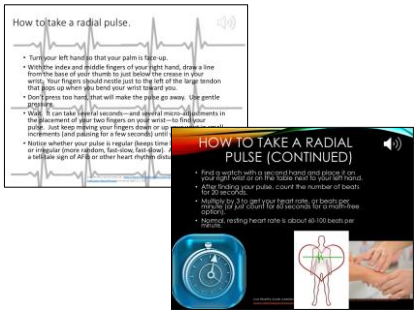



BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

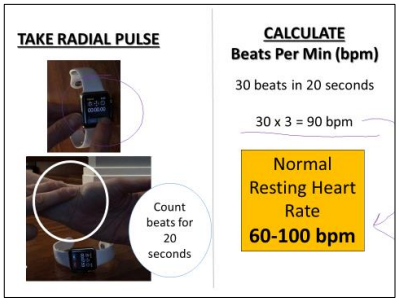
# Signaling Principle

*highlight important elements with cues*

STRIKE OUT




HOME RUN

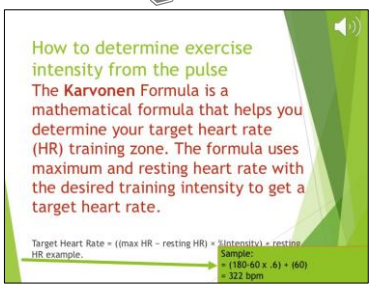



BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

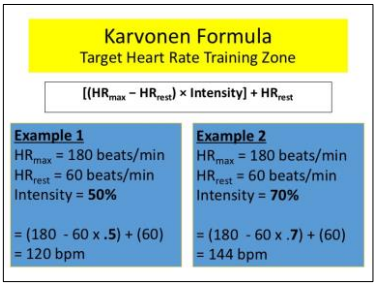
# Redundancy Principle

*Explain graphic with words OR text, not both.*

STRIKE OUT




HOME RUN

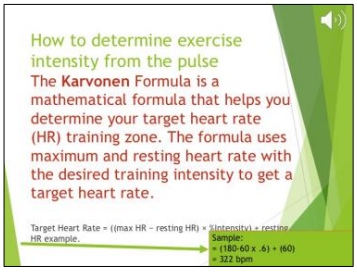



BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

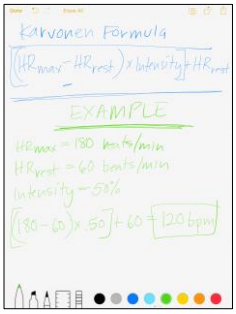
# Signaling Principle

*highlight important elements with cues*

STRIKE OUT




HOME RUN



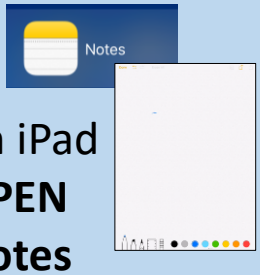

BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

How to screen capture (record) what happens on an iPad or iPhone

1

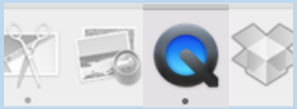
**Connect**
iPad to Mac with USB cord

2



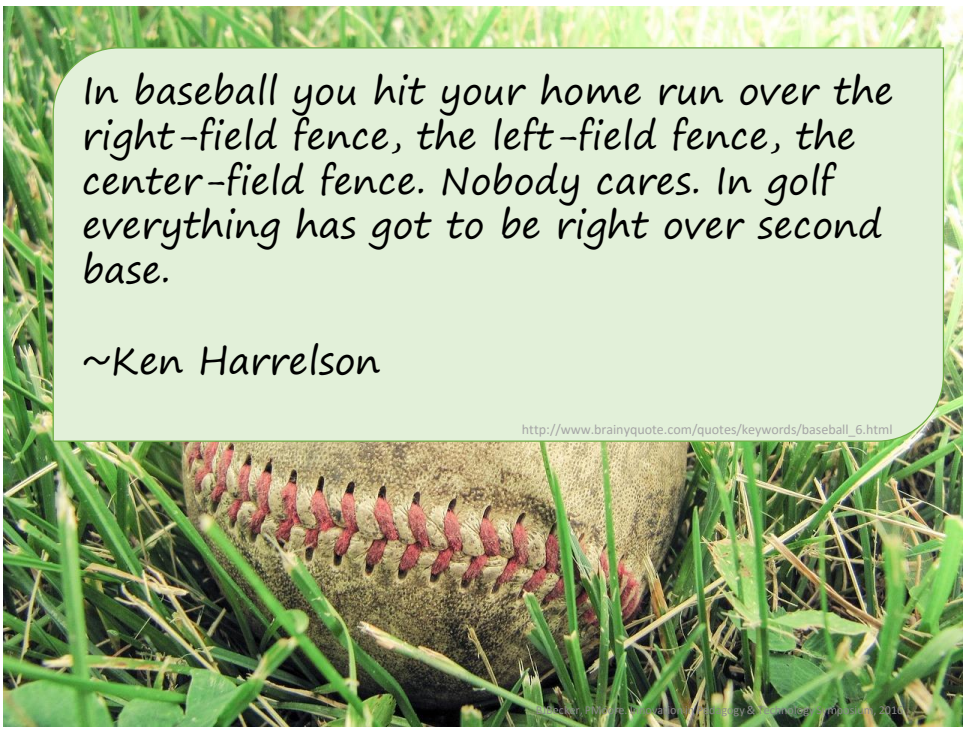

on iPad
**OPEN Notes**
(app)

3



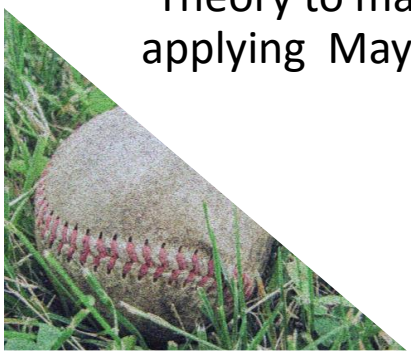
On Computer
**OPEN QuickTime** Player
Select New Movie Recording

BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016



## Summary

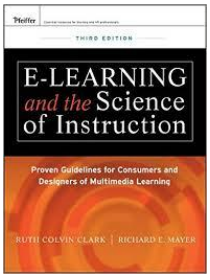
Demonstrated examples of content design (including decision making strategies) utilizing the Cognitive Load Theory to maximize deeper learning by applying Mayer's Multimedia Principles.

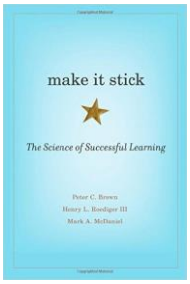


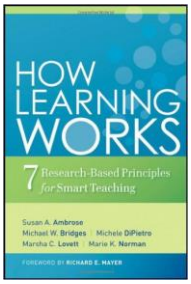
BJBecker, PMoore. Innovation in Pedagogy & Technology Symposium, 2016

## Educational Resources

Click on a cover for a link to online bookseller.



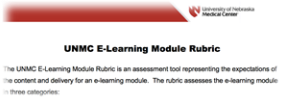



# University Resources

*(we know there are many more – here is a start!)*


UNMC E-Learning


Connect Ed




Rubric (checklist)


UNMC COPH Ed Tech Tips Thursday


UNL Office of Online & Distance Education


UNO API Faculty Portal


UNK Faculty Resources

# Best Practices

Cardinal Rule: Keep It Simple



http://storage.ted.com/tedx/manuals/tedx_speaker_guide.pdf

http://www.amstat.org/meetings/jsm/2014/effectivepresentations.cfm


University of Nebraska℠
Medical Center
BREAKTHROUGHS FOR LIFE.®
University of Nebraska
Medical Center