

## Khan Academy Style Videos In Nursing Education

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NUR407\_2013SUMMER1,7... : Thursday, March 06, 2014 4:05:00 PM ANDREW WOLF - LAG-D04 PANOPTO

Contents | Notes | Comments

- 0103 Definitions
- 0104 Mitochondria: Run Substrates Purpose of Pulmonary System
- 0104 Structures of the Pulmonary System Conducting Airways Upper Airways Neoplasms, Oropharynx, Micro-Ciliary Clearance
- 0205 Structures
- 0206 Airway Epithelium**

### Airway Epithelium

- Shows changes in airway from trachea, to sub-segmental bronchioles, to respiratory bronchioles, to alveoli.
- **Trachea**
  - Have cartilaginous outer rings
  - Thick columnar, many cilia, many goblet cells
- **Bronchi**
  - C-shaped cartilaginous rings
- **Bronchioles (1 - 20 generations)**
  - Thick smooth muscle layer
  - Have connective tissue adventitia
    - No cartilage, collagen fibers
    - Have cilia and goblet cells, dense mucosa layer, mucosal cells
  - Everting up to the point has been distal space (airway)
- **Respiratory bronchioles (20 +)**
  - Have smooth muscle, connective tissue
  - More subcutal appearance
  - Have cilia cell
  - Clara cell - release ribc, phagocytosis, surfactant production, parent cells of bronchiolar epithelium

Videos with bulleted slides

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# Sal Khan

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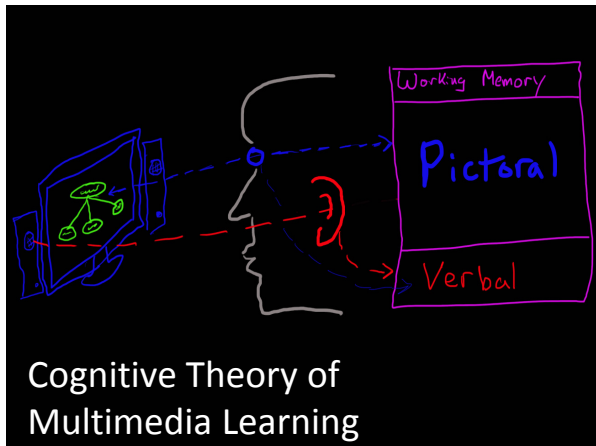
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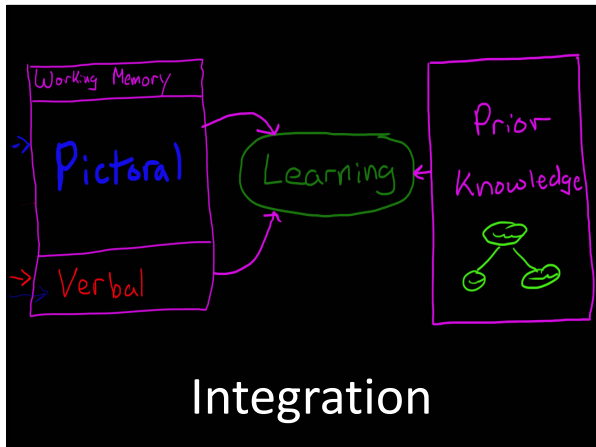
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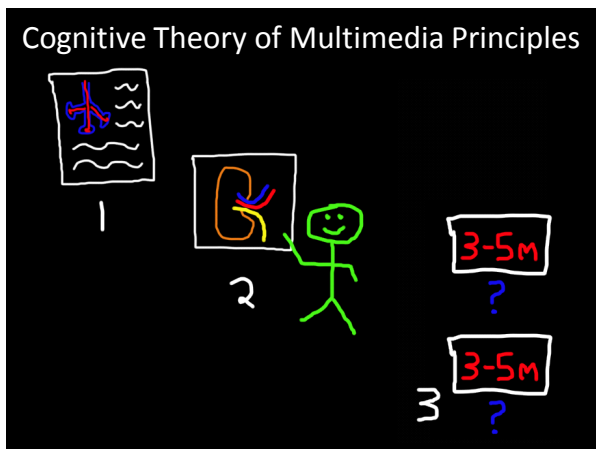
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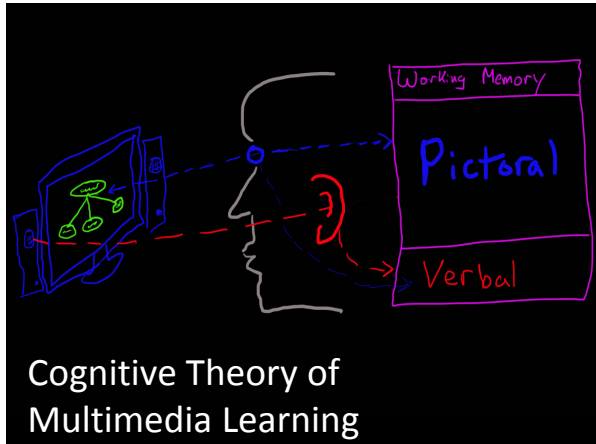
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# Methods

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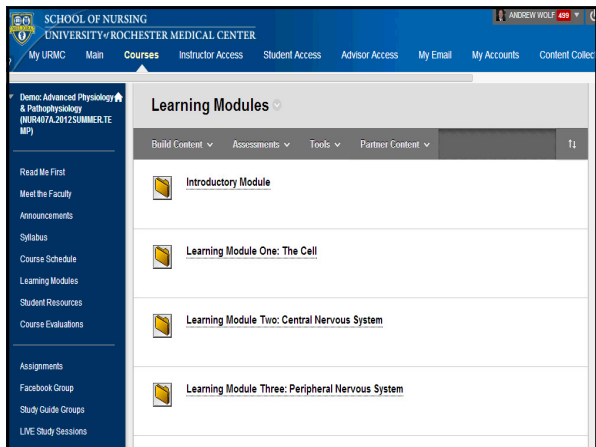
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## Learning Module

- Introduction
- Learning Objectives
- Study Guide: Advance Organizer
- **Interactive Lesson**
- Readings
- Case Presentation Blog
- Facebook Discussion

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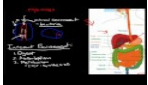
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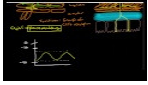
## Interactive Lesson

[Watch video](#)

[Quiz 10.1: Overview of GI Tract](#)

[Watch video](#)

[Quiz 10.2: Control of GI Tract](#)

[Watch video](#)

[Quiz 10.3: Peristalsis](#)

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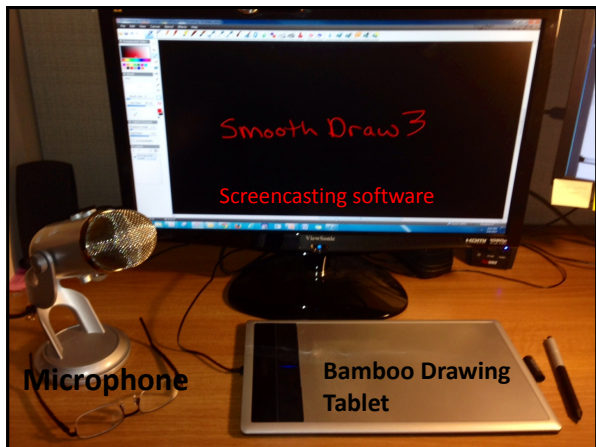
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**Pathophysiology Videos**

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**Survey Questions:  
Perceived Learning Quantitative**

1. The course provided current and relevant information that will be valuable for my professional development.
2. Please select the one resource that MOST helped you understand the FUNDAMENTAL CONCEPTS of this course.
3. Please select the one resource that MOST helped you MAKE CONNECTIONS between concepts and clinical practice.

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**Survey Questions:  
Qualitative**

1. Please explain why this choice helped you understand the fundamental concepts.
2. Please explain why this choice helped you make connections between concepts and clinical practice.

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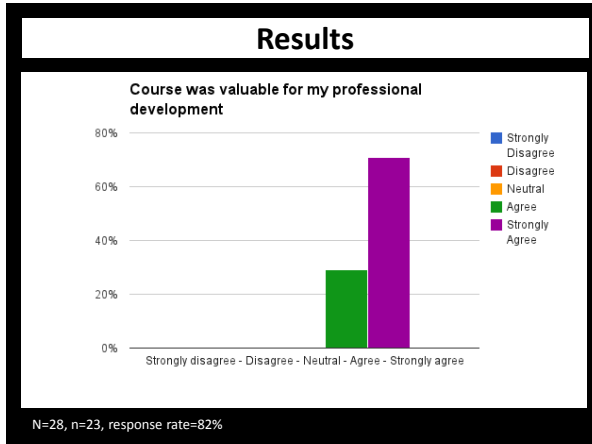
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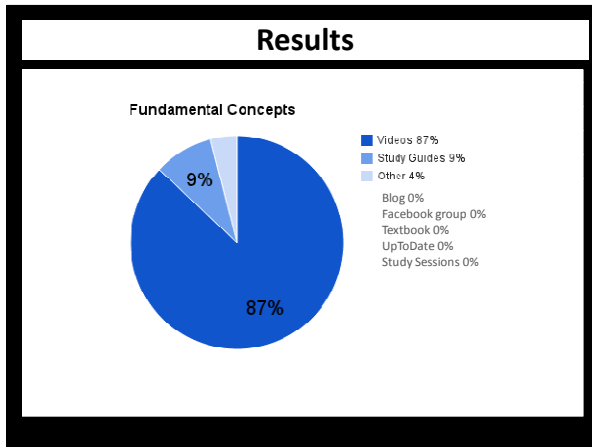
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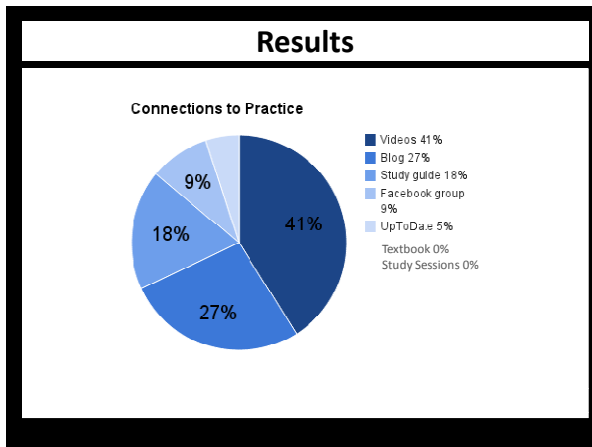
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### Qualitative Data

- Visual & auditory learning
  - “Visual plus explanations work best for me”
- User control
  - “I was able to watch the lectures multiple times and pause during moments when I needed to take notes”
- Accessibility
  - “I was able to ... listen every day while driving to work”

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### Discussion

Data suggest that . . .

- Students prefer videos to the other learning modalities used in this course.
- Videos are perceived to support learning of fundamental concepts & making connections to practice.
- Animated pictures with narration were highlighted as a reason for effectiveness.

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### Implications for Practice

- Khan academy style videos are worth exploring for online, hybrid, and flipped classes
- Professional quality production is not a critical factor
- Combine narration with pictures and/or animations
- Create videos in digestible chunks

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### Implications for Research

- No published data on efficacy of Khan academy style videos in nursing education
- Combination of video with other learning activities
- Incorporating videos in online, hybrid, and flipped classes

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