Using Instructional Videos in Curriculum

- Use of video for curricular delivery
- Challenges for effective use
- Optimizing video for curriculum
- Using video in a flipped curriculum
- YSM video production facilities and support
- Delivery of curricular videos to learners
- Current YSM uses and assessment
Uses of Video for Curricular Delivery

- In place of lecture time to deliver content
- Background “homework” to support, or in lieu of, readings
- Ensure common base of knowledge among students for classroom discussions
- Support for a flipped curriculum
- Provide supplemental content for motivated learners—“deep dives”
Challenges for Video Based Curricular Delivery

• Creating Appropriate Expectations for Learner and Faculty
  • where does the time come from
  • how does the information relate to in class activities
  • are there uniform standards for video content and design
  • WSQ Watch, Summarize & Question (Kirch)
  • use of copyrighted material
• How do we assess effectiveness
  • web based analytics, surveys, focus groups
• Delivery
  • curriculum supported sites, YouTube, others
What does flipping the classroom mean?

Flipping means students are first exposed to new material outside of the classroom and that class time is then used to assimilate the knowledge through a variety of interactive classroom strategies.

Using Bloom’s taxonomy this means the lower level cognitive work of gaining knowledge and comprehension is done prior to class using the videos. The higher cognitive functions and processes of application, analysis and synthesis occur in the classroom with peers and faculty.
Optimizing the use of Video to Support Flipped Curriculum & Self Paced Learning

- Focused on 2-4 concepts
- Learning Objectives
- 8-15 minutes in length
- Delivery platform accessible from iPad and all other devices
- Clear expectations for role of video based content for classroom exercises
- Self assessment at end that can direct in-class small group discussions and provide learner feedback
- Studio, training and support for faculty
Effectively Using Video for Flipping the Classroom

• Use videos to expose students to focused concepts and content prior to class.

• Incentivize preparation for class - completing assessments prior to the classroom activities.

• Use feedback from assessments to aid learner and instructor to ensure that classroom experiences deepen understanding. For example, ask students to develop a question after watching the video on an area of confusion or a general question about the concept for future discussion.

• Do not review for unprepared students
Instructional Video Studio-YSM Library
Instructional Video Studio-YSM Library
Instructional Video Website

Yale SCHOOL OF MEDICINE

Instructional Videos

Use Chrome or Safari. On Win7 you can also use FireFox(v21+) or IE(9+)

Year 1
- Clinical Skills
- Human Anatomy
- IV Demos
- MS-course
- Neurobiology
- Testing

Year 2
- Another Folder
- Clinical Psychiatry
- lie folder

Clerkships
- Pediatrics

Electives, Sub-I
- Cardiovascular

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Instructional Video Website

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Videos 2013

Human Anatomy

Anatomic view of the sympathetic chain
Use this video to prepare for the Nervous System Interactive Lecture and for the Referred Pain Workshop (10/3/13). This video uses sophisticated 3D imaging to explore the sympathetic chain. It will be linked to lectures HA_LE007 and HA_WS003.

Introduction to the ANS – Part 1
Use this video to prepare for the Nervous System Interactive Lecture. This video introduces the basic organisation of the ANS. It will be linked to lecture - HA_LE007.

Introduction to the ANS – Part 2
Use this video to prepare for the Nervous System Interactive Lecture and for the Referred Pain Workshop (10/3/13). This video describes the sympathetic chain, visceral nerves and sensory pathways. It will be linked to the lectures HA_LE007 and HA_WS003.

Spiral Nerve
Use this video to prepare for the Nervous System Interactive Lecture. The video discusses the formation of a spinal nerve. It will be linked to lecture HA_LE007.

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Instructional Video Self Assessment
Use Chrome or Safari. On Win7 you can also use Firefox(v21+) or IE(9+)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
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<tbody>
<tr>
<td>Clinical Skills</td>
<td>Another Folder</td>
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<td>MS-course</td>
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<td>Neurology</td>
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<td>Testing</td>
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Clerkships

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<th>Pediatrics</th>
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Self Assessment Reports

Well Baby Exam

1. Which of the following are important to observe at the beginning of an exam?

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<th>Answer</th>
<th>Bar</th>
<th>Response</th>
<th>%</th>
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<tbody>
<tr>
<td>1</td>
<td>Eye, Hair Color, State of Consciousness</td>
<td></td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td>2</td>
<td>Appearance, Posture, and State of Consciousness</td>
<td></td>
<td>16</td>
<td>36%</td>
</tr>
<tr>
<td>3</td>
<td>Mother and Child Interaction</td>
<td></td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>50</td>
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2. What is the correct way to measure a baby's length?

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<th>Answer</th>
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<th>Response</th>
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<tbody>
<tr>
<td>1</td>
<td>Top of the head to the large toe with the leg fully extended</td>
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<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>2</td>
<td>Shoulders to the toe</td>
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<td>17</td>
<td>34%</td>
</tr>
<tr>
<td>3</td>
<td>Top of the head to the heel with the leg fully extended</td>
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<td>9</td>
<td>18%</td>
</tr>
<tr>
<td>4</td>
<td>Shoulds to the heel</td>
<td></td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>50</td>
<td></td>
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</table>

3. Babies born to mothers at high altitude are:

<table>
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<th>Answer</th>
<th>Bar</th>
<th>Response</th>
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<tbody>
<tr>
<td>12</td>
<td>Larger in height</td>
<td></td>
<td>19</td>
<td>38%</td>
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<tr>
<td>13</td>
<td>No different in height</td>
<td></td>
<td>17</td>
<td>34%</td>
</tr>
<tr>
<td>15</td>
<td>Smaller in height</td>
<td></td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>50</td>
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Exploring the Use of Video in the YSM Curriculum

- Human Anatomy
  - Videos used as background for lectures and workshops
- Psychiatry Clerkship and Module
  - Videos used in lieu of lectures
- Neurobiology Course - 2014
  - Videos to provide background and guidance for small group activities
- Pediatrics Well Baby Exam
  - Collaboration with the Yale Office of Digital Dissemination and Online Education
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