It’s Not the Upside Down: Creating a Flipped Classroom Experience for Critical Appraisal

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3 critical appraisal sessions were added to Foundations of Clinical Practice course in the second year

- Diagnosis
- Prognosis
- Harm

Challenge: Not enough time to have 2 hours in the classroom for each session
Meeting the Challenge

Using Kaltura, the assistant director designed and recorded short video tutorials with embedded formative assessments for prognosis, harm, and diagnosis. Students completed the video tutorials and a summative quiz within Canvas ahead of facilitated small group sessions.
**Design Process**

**Step 1:** Develop learning outcomes for each session

**Step 2:** Write video scripts & “chunk” content into manageable sections

**Step 3:** Plan assessment strategy

**Step 4:** Record & disseminate interactive videos
Sample LOs

1. Calculate Sensitivity and Specificity
2. Use PubMed to locate articles on diagnosis
3. Calculate positive and negative predictive values
4. Use a nomogram and likelihood ratios to arrive at a post-test probability
All teaching faculty required to attend a teach-through prior to facilitation

Key with discussion points provided

Targeted sessions focusing on EBM math concepts throughout the semester
Assessment

- **Formative**
  - Kaltura allows for embedded quizzes within videos
  - Questions allow students to test their understanding of concepts before moving to the next video or section

- **Summative**
  - All students completed a 10-question quiz in Canvas prior to each session
  - Facilitators reviewed quiz results prior to in-person sessions
“Overall I really enjoyed this. The videos were great and I felt this was a great review. Thanks!”

“It was a perfect assignment”

“I enjoyed the videos.”

“Been a while since I have done this. The practice was appreciated!”
<table>
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<tr>
<th>Pros</th>
<th>Cons</th>
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<td>Maximize content while minimizing instruction time</td>
<td>Up-front commitment of time/energy is substantial</td>
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<td>Librarians feel more comfortable facilitating vs. teaching sessions incorporating new content</td>
<td>Technology learning curve</td>
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Conclusions

- We are on the second year of using this model.
- Two of the librarians on the curriculum team are working on scripts to create more interactive video modules.
- This year, we have added clinical practice guidelines to the Diagnosis session.
- We will continue to use this model to provide the students with SDL opportunities with minimal disruption to course and librarian schedules.