Flipped Classroom for Health Professions Education

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Tuesday May 21, 2019
Time 8:00 AM Michigan; 3:00 PM Ethiopia; 2:00 PM Rwanda
Sponsor: UM-CIRHT
Intended Learning Outcomes

1. Understand the reason to use flipped classroom pedagogy
2. Explore active learning techniques
3. Consider ways to use in your classes
Poll Everywhere

- Please take out your phones or computers if available
- Using Poll Everywhere to answer
- You must first join the session
To use the web:
Go to any browser and visit www.pollev.com/CSTALBURG974

To text:
Send a message to the 5 digit code +61 429 883 481. In the body of the message you will use CSTALBURG974
Where are you today?
Please share what type of health professional you are....
The effect of teaching without pedagogical training in St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

Lack of teacher training
- We do what we know
- Use primarily lectures, some discussion, rare simulation
- Powerpoint overload
- Little space to teach, even less time
- Written exams lead to students focused on “answers” + memorization
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Where do you do most of your teaching?
Why use flipped classroom pedagogy?

- Foundational knowledge gained outside of class
- Maximizes class time
Based in educational theory

- Mastery Learning to promote retention and transfer of knowledge and skills
- Deliberative practice provides improved performance
- Cognitive apprenticeship
- Progressive problem-solving of more complex questions

Persky AM and McLaughlin JE. *The Flipped Classroom—From Theory to Practice in Health Professional Education*. Am J of Pharm Educ 2017; 81(6) Article 118
**Lecture-Based**

**BEFORE CLASS**
*Students* show up, maybe they read before

**IN CLASS**
*Faculty* lecture
*Students* hear material for the first time

**AFTER CLASS**
*Faculty* not available
*Students* do homework to practice and apply

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**Flipped Classroom**

**BEFORE CLASS**
*Students* gain first exposure to material

**AT START OF CLASS**
*Students* complete assignment/quiz (accountability)

**IN CLASS**
*Faculty* guide learning
*Students* collaborate, practice, apply
Now what!?
Active learning techniques
This is a spectrum of some active learning activities arranged by complexity and classroom time commitment.

Prepared by Chris O’Neal and Tershia Pinder-Grover, Center for Research on Learning and Teaching, University of Michigan
Pedagogical Techniques

Provide a few moments for students to answer a question Question should require thought and integration of information EXAMPLE: What are the challenges of a webinar?
Pedagogical Techniques

Ask students to take out a blank piece of paper
Have them answer a question about the reading, or preparatory material
At an appropriate point in class, have them write what they just learned
EXAMPLE: Describe the reasons why flipped classrooms foster learning
Pedagogical Techniques

THINK-PAIR-SHARE

Have students work individually on a problem or reflect
Then have them pair with someone next to them to discuss
Have each pairs report back to the larger group for all to come to a solution
EXAMPLE: What ways could you “flip” your class?
Pedagogical Techniques

CASE STUDIES

Use real-life stories that describe a medical issue
Students then work through the cases to learn specifics
EXAMPLE: UPCOMING WORKSHOP ON JUNE 11, 2019
Pedagogical Techniques

JIGSAW DISCUSSION

Individual experts

Groups teach one another their piece of the puzzle

Everyone learns the whole
What have I modeled so far?
Table 1: Evidence-based tips for Developing Video or Reading Material
Table 2: Average Times of Reading and Listening and Conversion to Student Study Time
Table 3: Common Assessment Approaches in the Flipped Classroom
Table 4: Summary of Recommendations
The Flipped Classroom: A Course Redesign to Foster Learning and Engagement in a Health Professions School

Jacqueline E. McLaughlin, PhD, MS, Mary T. Roth, PharmD, MHS, Dylan M. Glatt, Nastaran Gharkholonareh, PharmD, Christopher A. Davidson, ME, LaToya M. Griffin, PhD, Denise A. Esserman, PhD, and Russell J. Mumper, PhD

Figure 1 Flipped classroom format for the Basic Pharmaceutics II (PHCY 411) course offered in 2012 at the University of North Carolina Eshelman School of Pharmacy. Important features included offloaded content and student-centered learning which were designed to align with Bloom’s Taxonomy of Learning.33,34
Consider ways to use in your classes
Share your ideas
thank you!