



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



UNDERSTAND THE REASON
TO USE FLIPPED
CLASSROOM PEDAGOGY



EXPLORE ACTIVE LEARNING
TECHNIQUES



CONSIDER WAYS TO USE IN
YOUR CLASSES





MEDICAL SCHOOL
DEPARTMENT OF LEARNING HEALTH SCIENCES
DIVISION OF PROFESSIONAL EDUCATION
UNIVERSITY OF MICHIGAN

Poll Everywhere

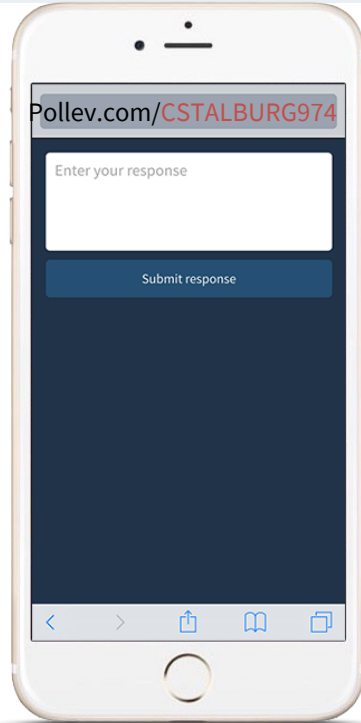
- Please take out your phones or computers if available
- Using Poll Everywhere to answer
- You must first join the session



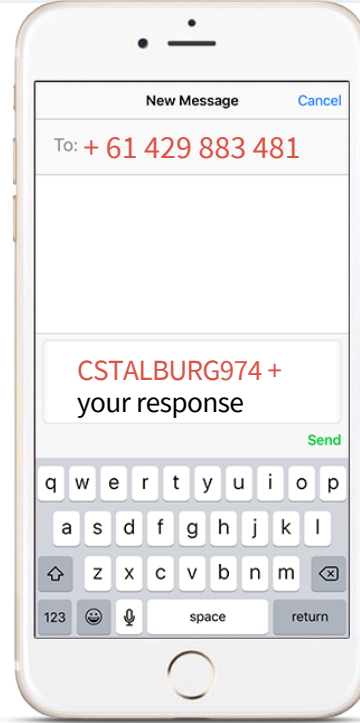
Responding with Poll Everywhere

To use the web:

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Web voting



Text voting

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

This article was published in the following Dove Press journal:
Advances in Medical Education and Practice

Teshale Biku¹
Tangute Demas²
Negute Woldehawariat¹
Meazat Getahun²
Altayework Mekonnen²

¹Operating Theater Nursing Education Department, St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia; ²Surgical Nursing Education Department, St. Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

Background: The recent expansion of higher education institutions in Ethiopia provides an opportunity for many citizens who did not previously have access to higher or university level education. This opportunity, however, comes with its own challenges, such as ensuring that minimum standards are set and maintaining quality where pedagogical concerns are compromised. The aim of this study is to explore the effect of teaching without pedagogical training, in St. Paul's Hospital Millennium Medical College (SPHMMC), Addis Ababa, Ethiopia.

Methods: An institutional-based qualitative phenomenological study was conducted through an in-depth interview, using purposive sampling techniques. Participants were instructors and students selected from SPHMMC who had participated in the teaching or learning process or at least 24 months. Owing to data saturation, only 16 instructors and seven students were interviewed, using open-ended and semi-structured questions. Tape recorders and field notes were used. Based on thematic aggregation, the content of the responses was analyzed.

- 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

RESEARCH ARTICLE

Open Access

Frontline learning of medical teaching: “you pick up as you go through work and practice”



W. Hartford^{1*}, L. Nimmon^{1,2} and T. Stenfors³

Abstract

Background: Few medical teachers have received formal teaching education. Along with individual and organizational barriers to participation in teacher training programs, increasing numbers and altered distribution of physicians away from major teaching centers have increased the difficulty of attendance. Furthermore, it is not known if traditional faculty development formats are the optimal learning options given findings from existing studies document both positive and negative outcomes. There is a gap in research that explores how medical teachers learn to teach and also limited research regarding how medical teachers actually teach. The purpose of this study was to provide insight into how physicians describe their teaching of trainees, and the nature of their teaching development and improvement to inform faculty development programs.

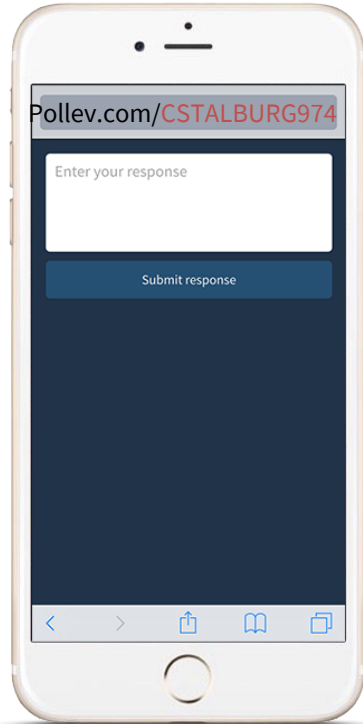
Methods: Semi-structured interviews were conducted with 36 physicians, with a broad range of teaching experience, purposefully selected from five disciplines: Internal Medicine, Pediatrics, Psychiatry, Surgery, and Family Medicine. A qualitative, inductive approach was used to analyse the data.



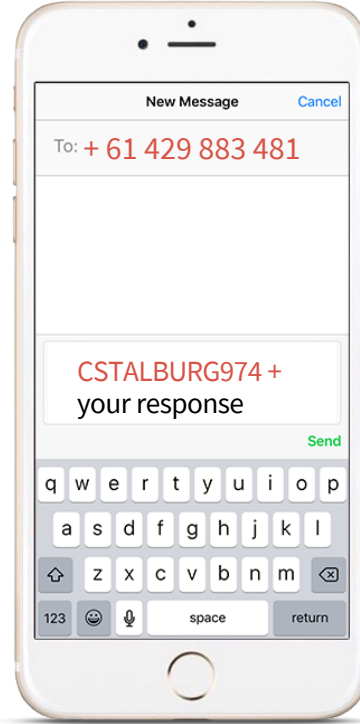
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Where do you do most of your teaching?

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*

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*



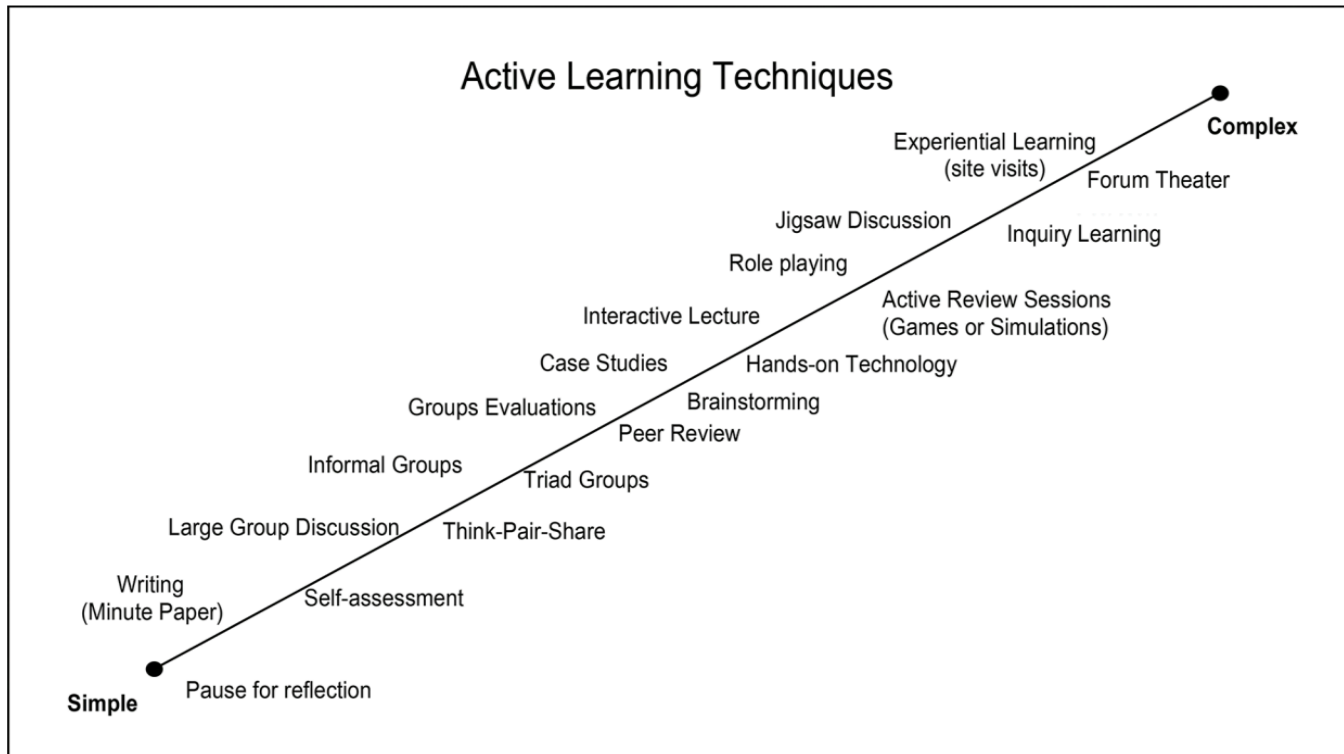
Now what!?





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



REFLECTION

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



MINUTE PAPERS

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

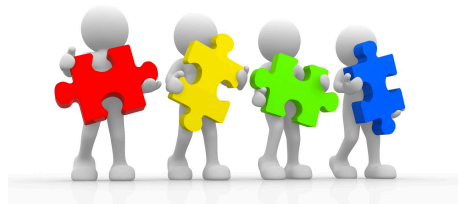
Use real-life stories that describe a medical issue
Students then work through the cases to learn specifics
EXAMPLE: UPCOMING WORKSHOP ON JUNE 11, 2019



Pedagogical Techniques



JIGSAW
DISCUSSION



Individual experts




Groups teach one another
their piece of the puzzle



Everyone learns the whole



The background features a large, irregular splash of orange and brown watercolor paint on a white surface. The splash is centered and has a textured, feathered edge. The text is overlaid on the darkest part of the splash.

What have I
modeled so far?

REVIEW

The Flipped Classroom – From Theory to Practice in Health Professional Education

Adam M. Persky, PhD, Jacqueline E. McLaughlin, PhD, MS

Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Submitted January 22, 2016; accepted June 28, 2016; published August 2017.

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 Gharkholonarehe, PharmD, Christopher A. Davidson, ME, LaToya M. Griffin, PhD, Denise A. Esserman, PhD, and Russell J. Mumper, PhD

Academic Medicine, Vol. 89, No. 2 / February 2014

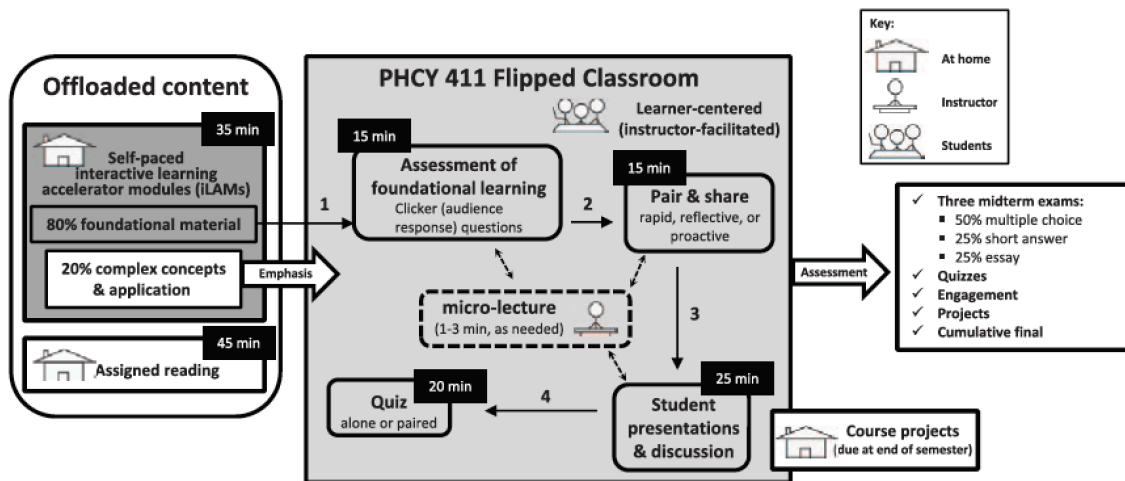


Figure 1 Flipped classroom format for the Basic Pharmaceutics II (PHCY 411) course offered in 2012 at the University of North Carolina Eshelman School of Pharmacy. Important features included offloaded content and student-centered learning which were designed to align with Bloom's Taxonomy of Learning.^{33,34}

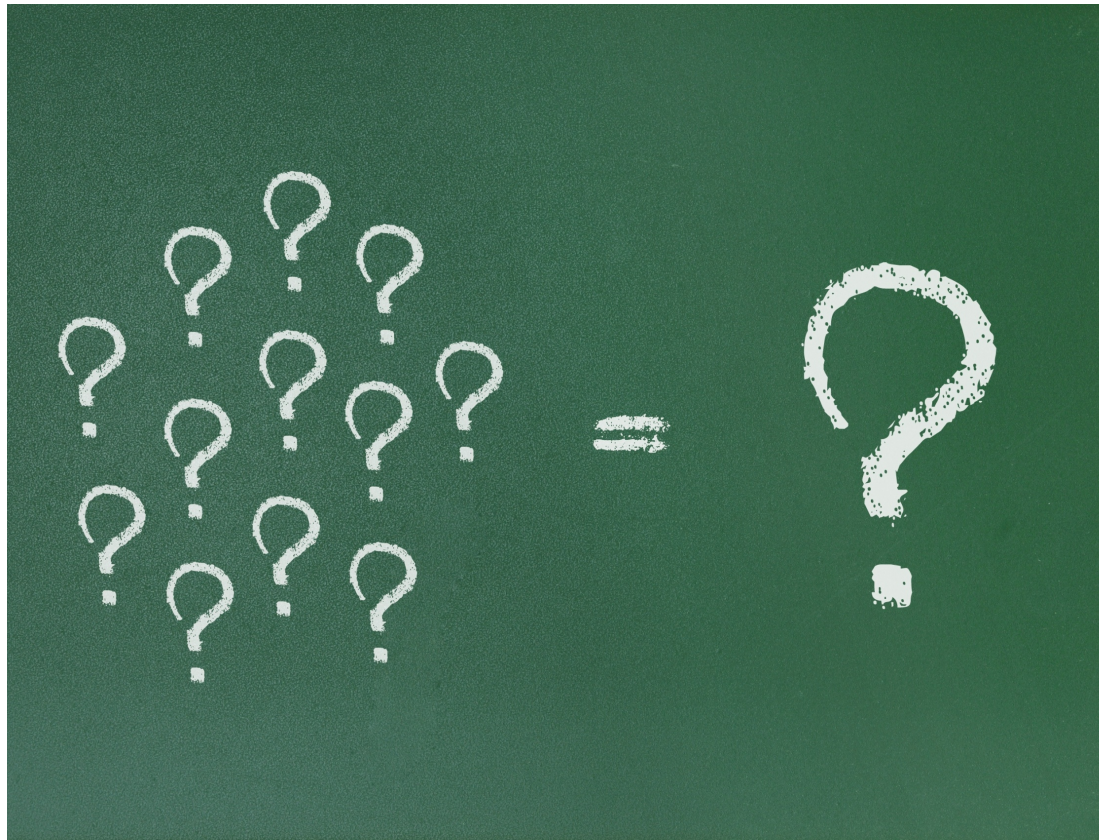


Consider ways to use in your classes





Share your ideas



A hand holding a white marker is shown writing the words "thank you!" in a white, chalk-like font on a blackboard. The hand is positioned on the right side of the frame, with the marker tip touching the end of the word "you!". The background is a solid black color.

thank you!



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