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# Applying The Flipped Classroom Model To Interprofessional Simulation

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HEALTH SCIENCES  
DIVISION



South Dakota State University



INSTITUTE FOR TRANSFORMATIVE  
INTERPROFESSIONAL EDUCATION



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# Disclosures

- **The presenters have no known financial or other conflicts of interest to disclose.**

# Objectives

1. Describe the flipped classroom and how it can be used in interprofessional healthcare simulation.
2. Apply best practices for integrating the flipped classroom model in simulation-based education.
3. Recognize the limitations and challenges related to implementation of the flipped classroom approach to interprofessional education.

# Today's Agenda

1. Introduction
2. Examples
3. Group work
4. Tips
5. Post-test and evaluation

# Flipped Classroom: Out-of-Class Work

[Flipped Classroom Video](#)

# Readiness Assurance Test

1. 3 Questions
2. Answers Derived from Assigned Work
3. Ensures Prepared Learners
4. Individual, in groups or both

1. This is your second year teaching in Higher Education. Now that you are familiar with your lecture and the course, you would like to try flipping the classroom. You are concerned that students will arrive unprepared for the session. What method ensures that all students come to the flipped classroom prepared to learn?

- A. Readiness Assurance Test
- B. Just-in-Time Learning
- C. Think-Pair-Share
- D. Peer Teaching



2. A colleague sent you an abstract describing a physiology lecture that was “flipped.” It seems like a lot of preparation for a single, flipped classroom session. What are the potential advantages of the flipped classroom? (Check all that apply)

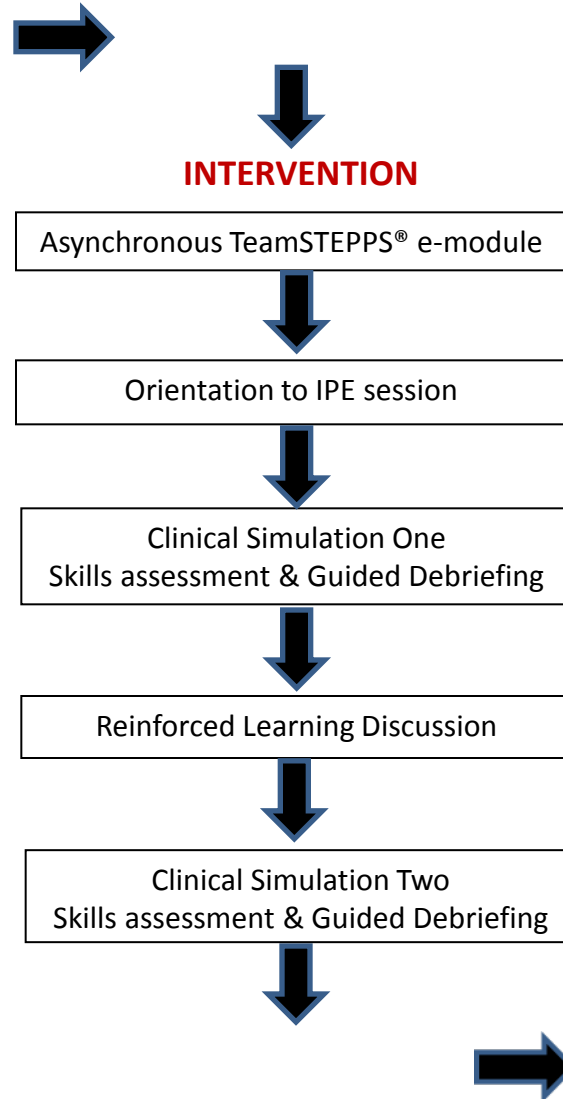
- A. More efficient use of instructor time
- B. More efficient use of student time
- C. Allows for peer teaching in class
- D. Increases student satisfaction

3. This is your first year teaching at your university. The new curriculum requires a “flipped classroom” approach. Which of the following will promote active learning in your flipped classroom session? (Check all that apply)

- A. Audience Response System
- B. Team-based Learning
- C. Simulation
- D. Videos

## PRE-TEST

One week prior to session  
TeamSTEPPS® Fundamentals Exam  
Self-Efficacy Survey



**Example 1**  
**Focus:**  
**90% Teamwork**  
**10% Management**

\*Horsley T, Reed T, Muccino K, Quinones D, Siddall V, McCarthy J, "Developing a Foundation for Interprofessional Education within Nursing and Medical Curricula". *Nurse Educator*, 2016;41(5):234-238.

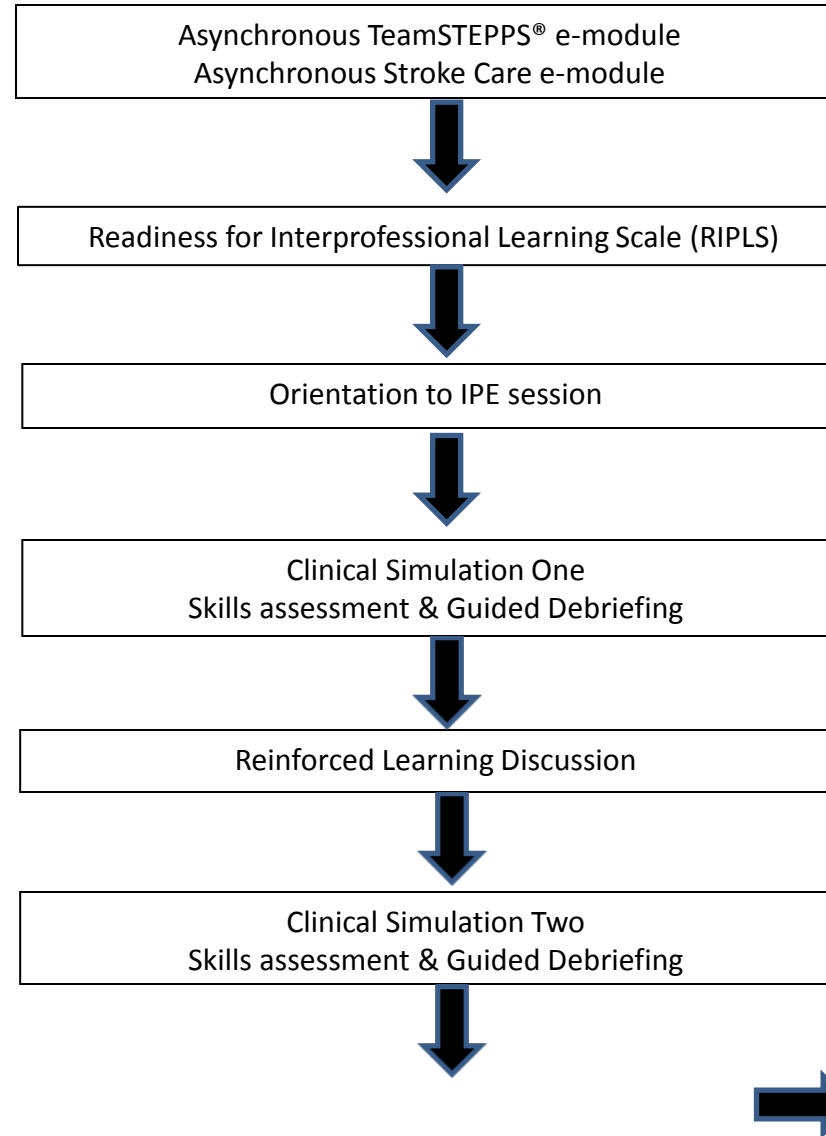
\*Reed T, Horsley T, Muccino K, Quinones D, Siddall V, McCarthy J, Adams W, "Simulation Using TeamSTEPPS to Promote Interprofessional Education and Collaborative Practice." Manuscript published ahead-of-print in *Nurse Educator*, December 2016  
[http://journals.lww.com/nurseeducatoronline/Abstract/publishahead/Simulation\\_Using\\_TeamSTEPPS\\_to\\_Promote.99766.aspx](http://journals.lww.com/nurseeducatoronline/Abstract/publishahead/Simulation_Using_TeamSTEPPS_to_Promote.99766.aspx)

## POST-TEST

TeamSTEPPS® Fundamentals Exam  
Self-Efficacy survey  
Session evaluation



## INTERVENTION



**Example 2**  
**Focus:**  
**50% Teamwork**  
**50% Management**

## POST-SESSION SURVEY

University of Washington Post-Assessment: Interprofessional Team Simulation Training

# Group Plenary: Opportunities



# Group Plenary: Pitfalls and Solutions

# Consider

1. When should the flipped model be used in interprofessional healthcare simulation?
2. What is the role of the interprofessional faculty?
3. What are appropriate pre-simulation activities and what are the best delivery methods for these activities? Are these delivery methods accessible by all disciplines?
4. How might the flipped model benefit the debriefing session?

# Tips

1. Students- hold accountable through peer evaluation or quiz that counts
2. Staff, residents- apply what they know; tie to milestones (professionalism); provide CE or teaching credits for online work for professional staff
3. Carefully select pre-work- manageable; align with very specific learning objectives
4. Put onus on learner to make up missed content-forces faculty to keep up too
5. Record podcasts using a program that makes editing easy (e.g. Techsmith's Camtasia)
6. Modules can be made interactive. Consult an instructional design team if available or collaborate and use resources that are available to you.

# Post-test and Session Evaluation

1. Which of the following characterizes the flipped classroom?
  - A. In-class activities apply what was learned out-of-class
  - B. Students produce learning materials for out-of-class work
  - C. In-class activities following out-of-class work include lectures
  - D. The instructor meets with students synchronously online

2. Your Dean is concerned that the pre-work will double the amount of curriculum time for the students without actually being beneficial. You think you have a strong argument against these concerns. Which of the following statements regarding pre-work can you use as evidence of simulation best practices supported by research? (Select all that apply)

- A. Activities are distributed over more than one day
- B. Curriculum content is overwhelming
- C. Pre-training is involved
- D. Students sleep less



3. Which of the following are limitations or challenges when applying the flipped classroom approach to simulation? (Select all that apply)
- A. Flipping the entire curriculum is essential for success
  - B. Students may come unprepared for class
  - C. It takes more time for an instructor to flip a classroom the first time they do it
  - D. You need to be a technology expert to flip a classroom

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