

USING A SIMULATED EHR TO FLIP THE LAB

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Continuing Nursing Education



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DISCLOSURES

Conflict of Interest

- Nicole Smith (INACSL Conference presenter) reports no conflict of interest
- Mary Pat Ulicny (INACSL Conference presenter) reports no conflict of interest
- Julia Greenawalt (INACSL Conference Administrator & Nurse Planner) reports no conflict of interest
- Leann Horsley (INACSL Lead Nurse Planner) reports no conflict of interest

Successful Completion

- Attend 90% of session
- Complete online evaluation



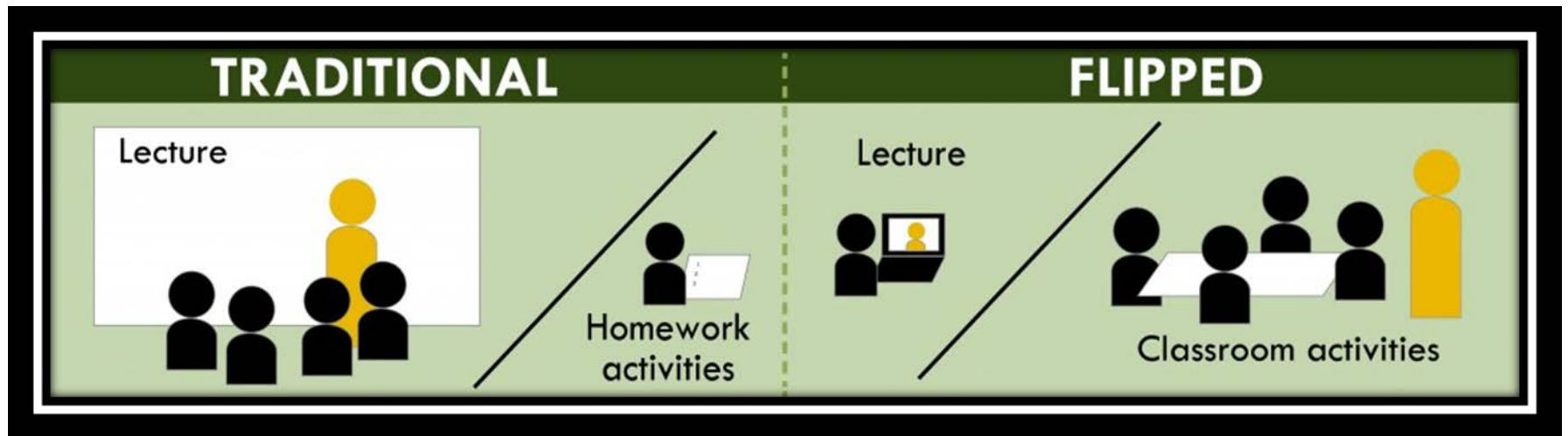
OBJECTIVES

Upon completion of this presentation, participants will be able to:

- 1. Describe a Flipped lab teaching approach.**
- 2. Identify one way a simulated EHR can be used to Flip the Lab.**
- 3. Develop a plan to incorporate Flipped teaching approaches into the laboratory setting.**

FLIPPED PEDAGOGY

- Use of technology to move lecture outside the classroom
- Moves homework and practice inside the classroom
- In-person class time used for active learning



LAB PHILOSOPHY

Simulation Lab at University of Maryland School of Nursing Shady Grove Campus

- **Students: Undergraduate Nursing Students**
- **One hour and 50 minutes scheduled lab sessions**
- **Active learning (Simulation)**
- **Self-directed learning**
- **Hands-on Psychomotor practice**

LAB REALITY

Nursing
Professor

Nursing
Student



TRANSFORMATION NEEDED

NLN Vision Series (2015)

- Reframe how nursing students are taught
- Use technology in creative and innovative ways

IOM Recommendations

- Wider use of information technology and use of Electronic Health Records

NLN call for transformation (2008)

- “Are nurse educators preparing technology-savvy nurses who can use informatics tools to provide safe, patient-centered, quality care based on evidence?”
 - The simple answer is no”



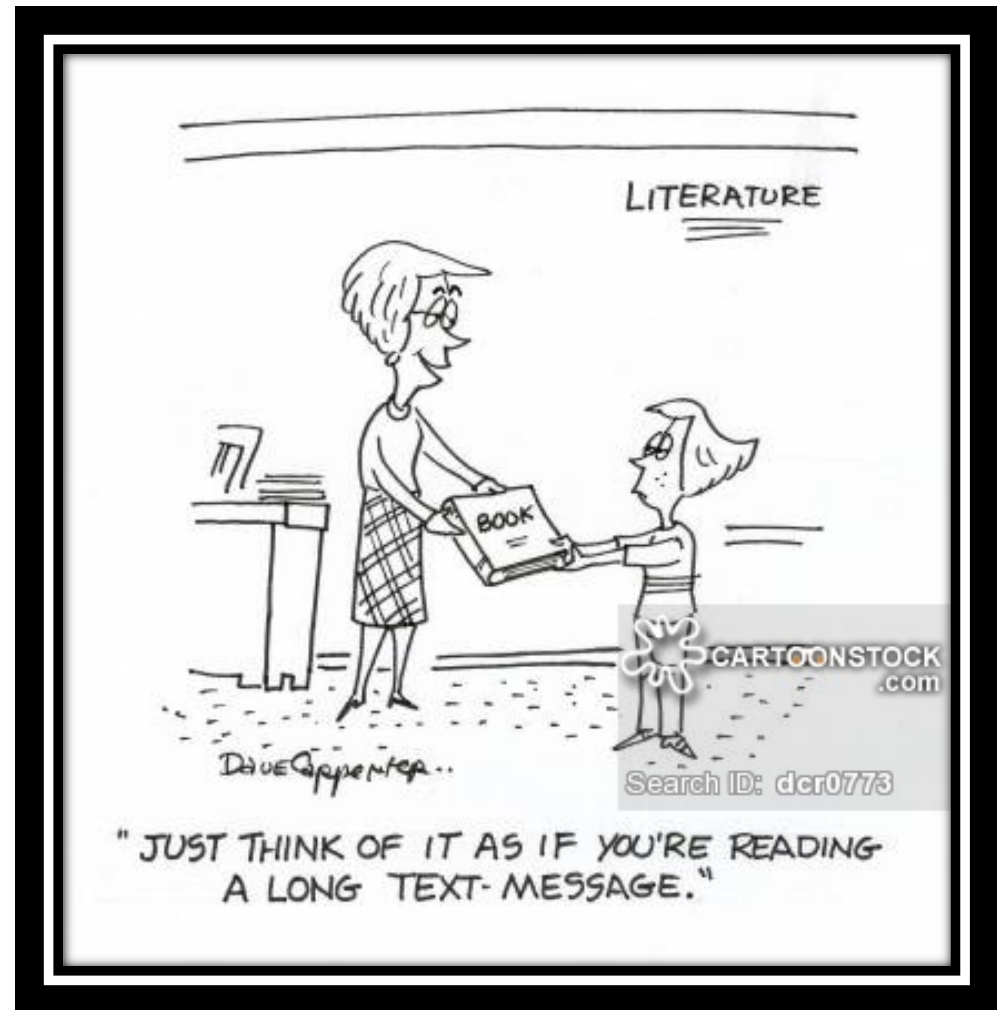
TEACHING MILLENIALS

Millennials

- Born: 1980-1995

Generation Z

- Born 1996-2010



PRE-LAB ACTIVITIES

Simulation: Pre-Lab Activity-Lab 6

Monday, March 28, 2016 14:20

Show Learning Tips

Hide Instructions

Review

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Instructions

View patient Jane Fondas flowsheet and note the last fingerstick glucose. Pre-lab Questions: 1. What angle should you insert a subcutaneous injection? 2. What important laboratory data must be noted before administering insulin? 3. List 2 different types of insulin. 4. Can NPH insulin and Regular insulin be mixed in one syringe? 5. In what order should NPH and Regular insulin be combined in one syringe? 6. Based on Jane Fondas last fingerstick glucose, how much insulin should you administer to Jane Fonda? Refer to the sliding scale dosing in the MAR.

Fonda, Jane

MRN: 4109725406

Allergies: None

Gender: Female

DOB: 6/7/XX

Age: 84 Years

Height: 65 in

Weight: 165 lb

Diagnosis: Stroke 

Isolation Precaution: Standard

Adv Directive: No Code

Adm Provider: Dr. Tia Strokes, Admitting Physician

Facility: USG General Hospital

Room: XXX Bed: X

Adm On: 3/28/2016 01:51 [0.5 day(s)]

Patient Info

Assessment

ADLs

Notes

Nursing Dx

Orders

MAR

IO

Vital Signs

Diagnostics

Immunizations

Flowsheet

Demographics

Current Visit

Previous Visits

Current Care Providers

Admission Assessment

Allergies

Demographics

Medical Record Number: 4109725406

Date of Birth: 6/7/XX

SSN:

Gender: Female

Age: 84 Years

Height: 65 in

Weight: 165 lb

Marital Status:

Religion:

Race: White

Ethnic Category: Not Hispanic or Latino

Ethnicity:

Primary Language:

Occupation:

Employer:

Insurance:

Address:

15 Pointe Road
Rockville, MD 20850

Home Phone:

Work Phone:

Aliases:

Next Of Kin:



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PRE-LAB ACTIVITY EXPECTATIONS

- **Students complete before coming to lab**
- **Complete independently**
- **Use textbook, skills videos, lecture content**

FEEDBACK

MRN: **Allergies 1: Aspirin**

Full Assignment

11/24/2015 15:32 furosemide

11/24/2015 15:32 insulin (regular)

Save Feedback

Remember to save each piece of feedback individually or your feedback will be lost. You can leave the chart and come back later to complete your evaluation—but don't forget to save as you go!

Order Summary

Medication	Order Status	Timing	Ordered On	Department	Provider	Due At
insulin (regular) See Notes Subcutaneous (SC)	Active	Scheduled	11/24/2015 15:32	Pharmacy	Michael Ruth, Admitting Physician	11/24/2015 19:35

[View Order Detail](#)

Administration History

Time Administered	Administered By	Notes	Administered
11/24/2015 15:35	Samantha Fine, SN	Patient received 4 units of regular insulin in the stomach because she reported receiving her last injection in her left arm. Patient was educated on the purpose and side effects of the drug and understood that the dosing was based on her last blood glucose reading which was high. Patient also reported no pain.	Yes

- Quick Feedback
- Just-in time



PRE-LAB ACTIVITY LOGISTICS

Questions within simulated EHR link to content objectives

Assist with navigating EHR and preparing for psychomotor skills practice

Answers reviewed during first 3 minutes of lab.

5-10 minute demonstrations given if needed

- Immediately followed by psychomotor skills practice
- Facilitated by instructor

SAMPLE QUESTIONS

Diabetes/Subcutaneous Injections/Capillary Blood Glucose Checks

- What important laboratory data must be noted before administering insulin?
- Based on Ms.Fondas last fingerstick glucose, how much insulin should you administer? Refer to the sliding scale dosing in the MAR.
- What angle should you insert a subcutaneous injection?

Answers found either within the textbook, required skills videos or simulated EHR

STUDENT FEEDBACK

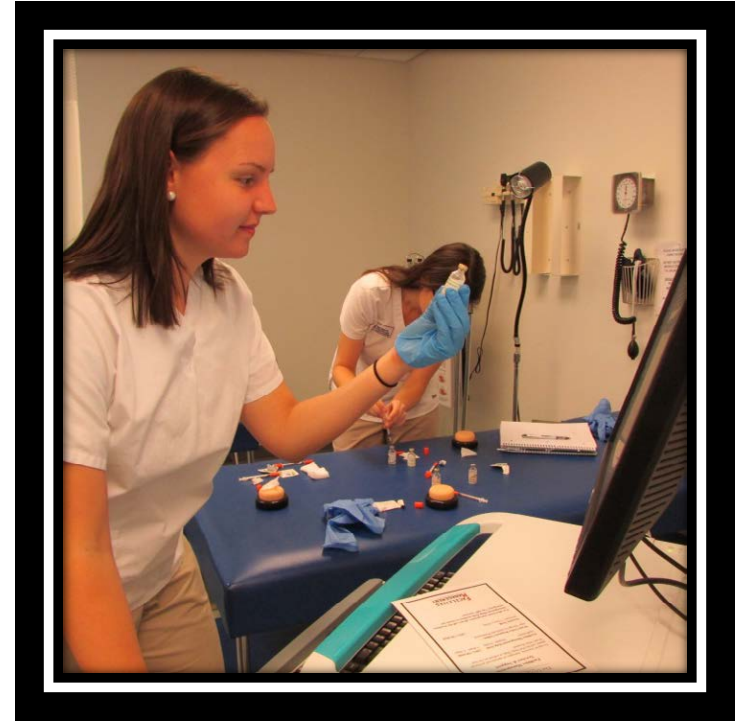
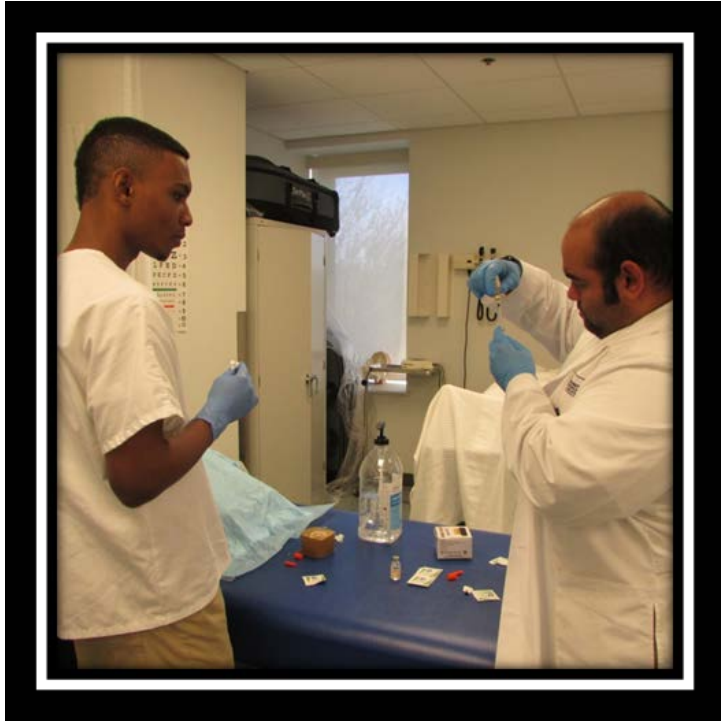
“Prelab questions were incredibly valuable”

“Prelab questions weren’t too difficult but they ensured I came into lab with an adequate and preliminary understanding.”

“Forced me to learn and read about the lesson before coming to class”

“Helped me to get familiar with [EHR]”

PSYCHOMOTOR SUCCESS



QUESTIONS



REFERENCES

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