

# **NURSING SKILLS VIDEO “SELFIES”:**

## **An Innovative Teaching and Learning Strategy for Undergraduate Nursing Students to Master Critical Clinical Skills**

**Cynthia Sterling-Fox, RN, MSN, FNP-C, Ph.D. Student**

**Pamela Charles, RN**

**Ophalyn Gariando, RN**

**Julius Smith, RN**

# Smartphones



Ever changing, advancing features, challenge  
to keep up  
Babyboomers and Generation X smartphone  
technology

# Smartphones enhance nursing practice

- E-health and Nursing: **Using Smartphones to Enhance Nursing Practice.** Wyatt, T. & Krauskopf, P. (June 2012). *Online Journal of Nursing Informatics (OJNI)*, 16 (2).

**mHealth: Technology for nursing practice, education, and research** Willa Doswell<sup>1</sup>, Betty Braxter<sup>1</sup>, Annette DeVito Dabbs<sup>2</sup>, Wendy Nilsen<sup>3</sup>, Mary Lou Klem<sup>4</sup>

# Technology for nursing practice, education and research

- smartphone adoption, various operating systems for smartphones, and highlight more commonly used applications by nurses.
- Describe usefulness .....for the implementation of mobile health technologies within nursing practice, education, and research.

# IMPORTANCE OF SKILLS

- Facilities want skilled, confident nurses
- Skills' proficiency of the nursing staff is associated with healthcare outcomes (Aiken, et. al., 2008; Needleman & Hassmiller, 2009; Bloomfield, 2010; Duffield, et. al., 2010; McHugh & Lake, 2010; Aiken, et. al., 2012).
- Faculty responsibility to ensure graduate nurses attain the **skillset knowledge** and are **competent** with respect to the clinical skills (Barnsteiner, et. al., 2013; Cho & Choi, 2018).

# IMPORTANCE OF SKILLS

QSEN's primary goal was to “address the challenge of preparing future nurses with the **knowledge, skills, and attitudes (KSAs)** necessary to continuously improve the **quality and safety** of the health care systems in which they work.” (Cronenwett et al., 2007; Sullivan, et. al., 2009; Jones, 2013; Barnsteiner, et. al., 2013; Cho, et. al., 2018).

## Faculty:

- either locate, design or create teaching and learning strategies that assist nursing students in attaining clinical skills proficiency in the clinical learning laboratory environment (Gregory, et. al., 2014; Young, et. al., 2014; Ball, et. al., 2015; Wilson, Harwood & Oudshoorn, 2015; Chicca & Shellenbarger, 2018).



# Nursing Programs

- Lecture
- Clinical
- Skills Lab



# Problem

## Significance of strategy (Students)

- historically waited until 1-2 weeks before the practicum to return to the Skills Lab to practice skills.
- spent less than 10 hours/semester practicing skills
- lacked confidence in performing skills during end of semester practicum and in the clinically setting
- lacked confidence in sequencing skills (NCLEX)





# Problem

## Significance of strategy (faculty)

No effective system to do the following:

- determine the quality of time students spent practicing in the Lab.
- assess performance of nursing skills until the end of semester Practicum.
- verify participation or attendance of practice sessions (beyond the sign-in sheets).
- give feedback on performance improvement after skills practice session.

# PURPOSE

- To use of hand-held devices (smartphones/ipads) to enhance student learning outcomes in the skills lab
- To assess the use of electronic devices to:
  - increase the length of time students spend practicing skills
  - Increase mastery of skills
  - enhance the ability to list skills in order in which they are performed (sequencing)
  - increase confidence in performance of skills

# TARGET LEARNERS

Students in the AAS degree Nursing program

## DEMOGRAPHICS

<b>GENDER</b>	Male (4)      Female (11)
<b>AGE</b>	< 25 = 3 25-30 = 4 31-40 = 6 41-50 = 1 >50 = 1
<b>NATIONALITY</b>	African American = 12 Hispanic = 1 Russian = 1 Polish = 1
<b>EDUCATION</b>	High school diploma = 15 2 year degree = 2 4 year degree = 1 Graduate or Post graduate degree = N/A
<b>EMPLOYMENT HISTORY</b>	Currently working = 12 Not currently working = 3

# PARTICIPANTS

- 15 Nursing Students enrolled in the AAS/RN Program at Medgar Evers College.
- 1 Faculty, 1 consultant
- Two Clinical Laboratory Technicians
  - Sign in/out
  - supervise and work with the students during skills practice in the Skills Lab.



# WHAT WE DID

- 15 students
  - Randomly assigned to groups of 3
  - Receive instruction on how to perform skill (video, demonstration and return demonstration by student)

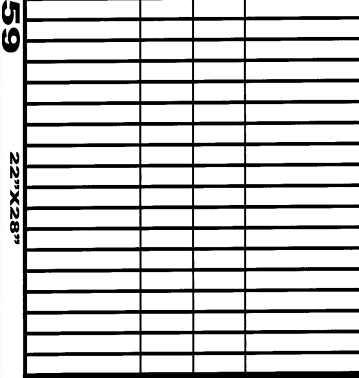



Independently (another day):

- Sign in and indicate "time-in" in Skills Lab
- Pre Test – Scrambled order of skill check list
- List skills on the check list in the order in which they will perform

# WHAT WE DID

- Practice the skills
- Make video
- Complete Post Test – unscramble the list
- Sign out "time-out" of Skills Lab
- Send video to instructor (private Youtube (permission))

## WHAT WE USED:

- **SKILLS LAB**
  - Mannequins
  - beds
  - computers with internet access
  - smart board/cell phones
  - **MATERIALS:**
  - Kardex with each students' name, date and time for signing in and out of Skills Lab
  - Pre-tests containing 6-10 items
  - All equipment for Skills (detailed below)
  - Smart phones for video creation (ONE PER 3 STUDENTS/GROUPS OF 3)
  - Access to Youtube
  - Rubrics for grading skills
- 
- 
- 
- 

[illegible]



# SKILLS:

## 1. Insertion of Foley Catheter

- Foley catheter insertion Tray
- Clean gloves, pads (chucks), wash-cloths, soap, water

## 2. Changing IV fluid bag

- IV Fluid bag
- IV pole
- Infusion pump
- IV tubing



## 3. Identify and Check 12 Cranial Nerves

- coffee, cinnamon
- salt, sugar,
- Snellen Chart
- penlight
- tongue blade
- tuning fork
- hammer

<b>I Olfactory</b> Smell 	<b>II Optic</b> Vision 	<b>III Oculomotor</b> Upward Medial Downward In 
<b>IV Trochlear</b> Down and In 	<b>V Trigeminal</b> Touch Forehead and Cheek Clench Teeth 	<b>VI Abducens</b> Look Side to Side 
<b>VII Facial</b> Taste for the Anterior 2/3 of Tongue Smile 	<b>VIII Acoustic</b> Hearing Equilibrium 	<b>IX Glossopharyngeal</b> Posterior 1/3 of the Tongue Speech 
<b>X Vagus</b> Slowed Heart Rate Defecation 	<b>XI Spinal Accessory</b> Shoulder Shrug 	<b>XII Hypoglossal</b> Tongue Movement 

[youtube.com/user/jb71567](https://youtube.com/user/jb71567)

# Students at practice



- videos to faculty

- Faculty showed videos to class

# Students at practice



videos to faculty

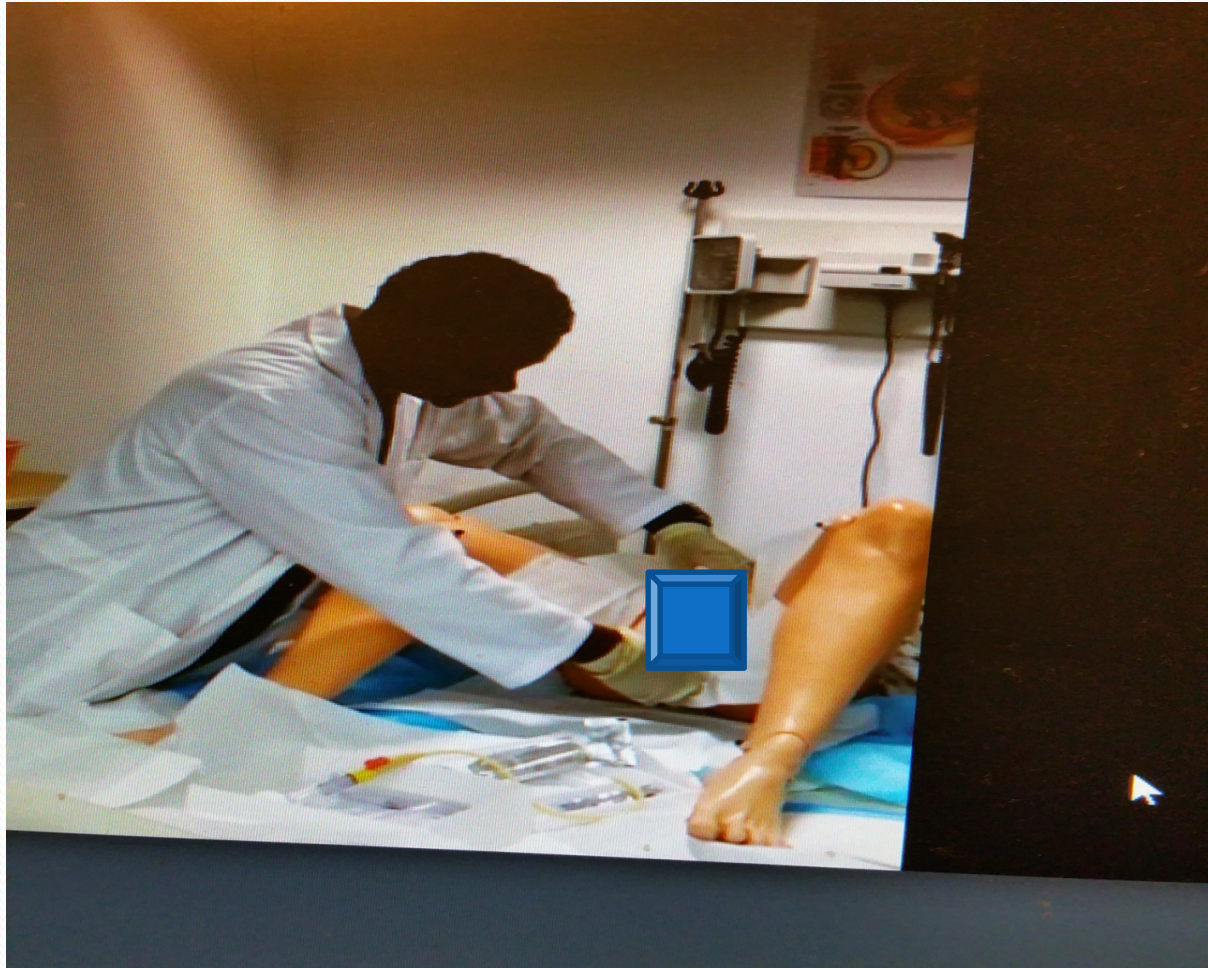
Faculty showed  
videos to class



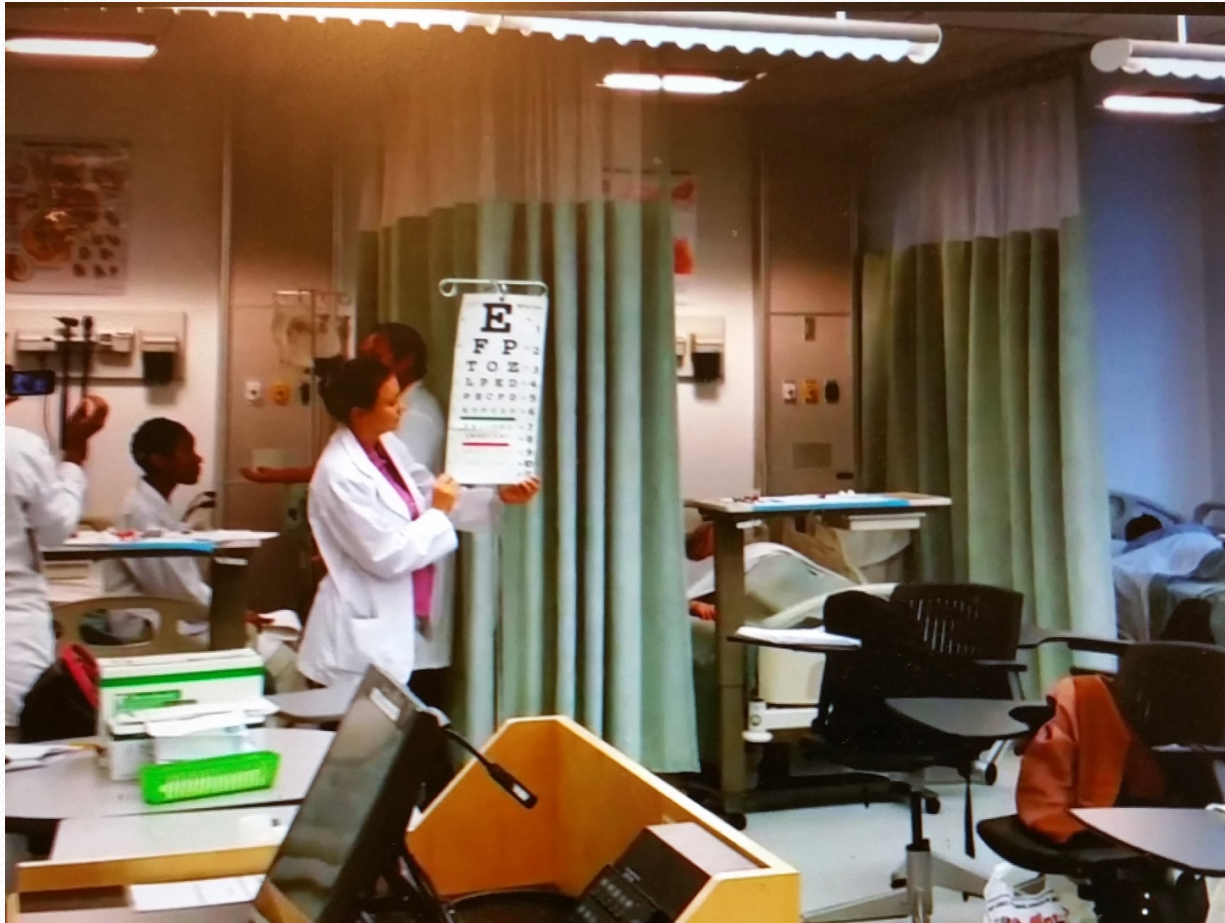
# Students at practice

videos to faculty

showed videos to  
class



# Students at practice



videos to  
faculty

Faculty  
showed videos  
to class



# FOLLOW UP SKILLS LAB

First to student in the video

what do you think?

Critique yourself

Then to the class

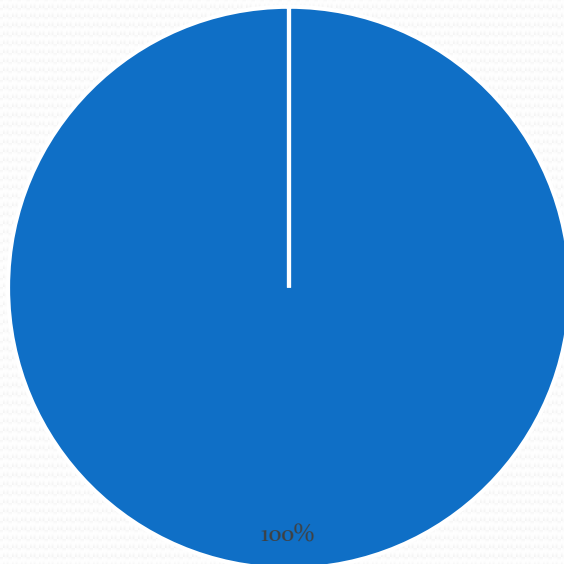
Critique

best way to learn!



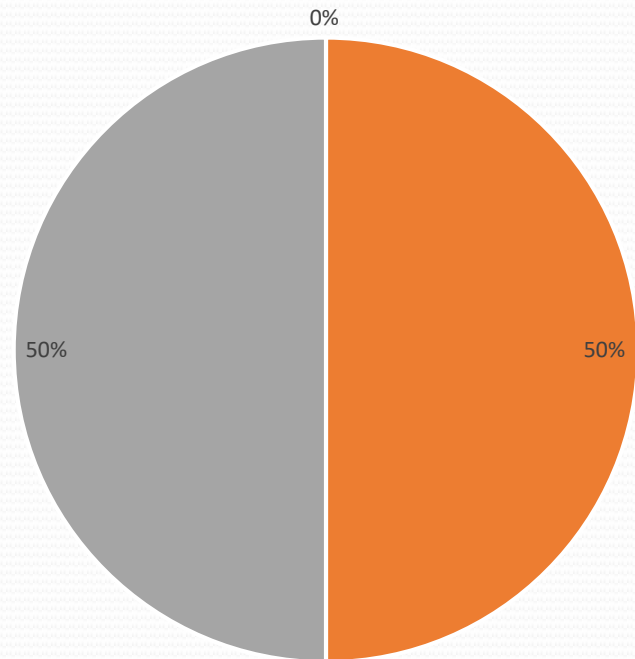
# FINDINGS

PERCENTAGE OF STUDENTS  
PRACTICING 1ST AND 2ND WEEK  
AFTER LEARNING SKILL



- Students who Practiced
- students who didn't practice

TIME PRACTICED PER SKILL

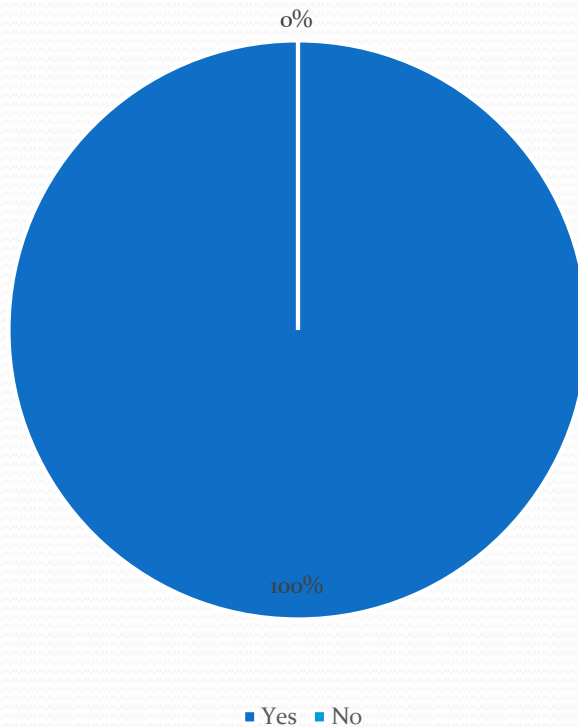


- 0-2 hrs
- 3-4 hrs
- >4 hrs

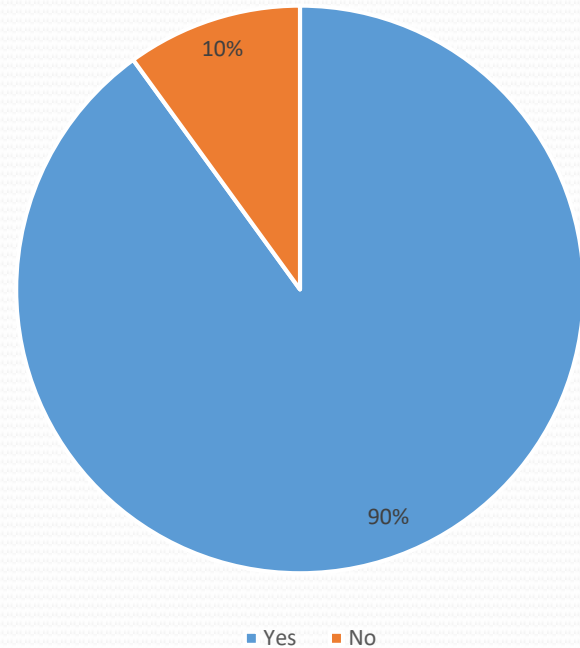


# FINDINGS

**STUDENTS WHO  
RECOMMEND SELFIES**

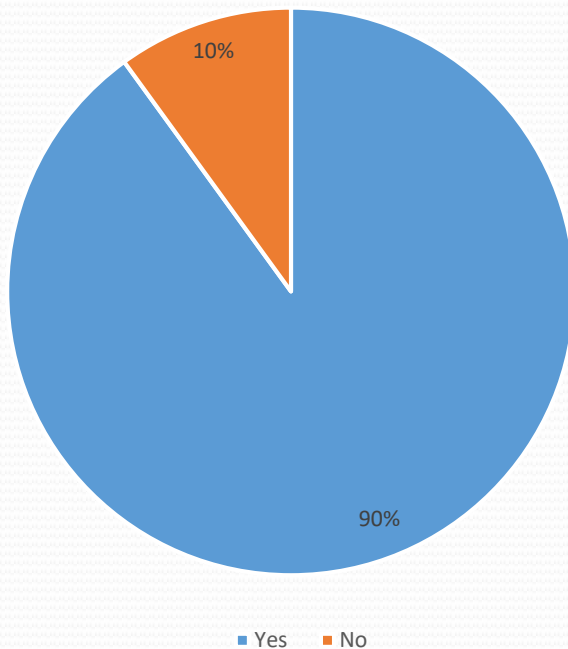


**RECOMMEND INCLUSION IN  
CURRICULUM**

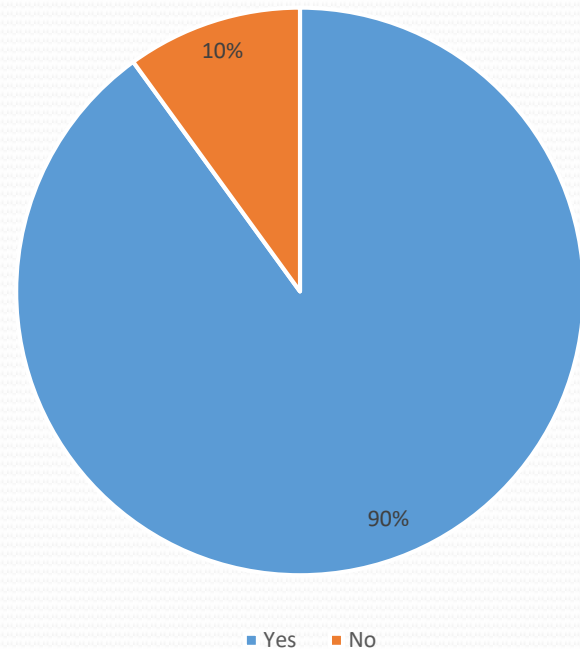


# FINDINGS

## INCREASED SELF CONFIDENCE TO PERFORM SKILLS

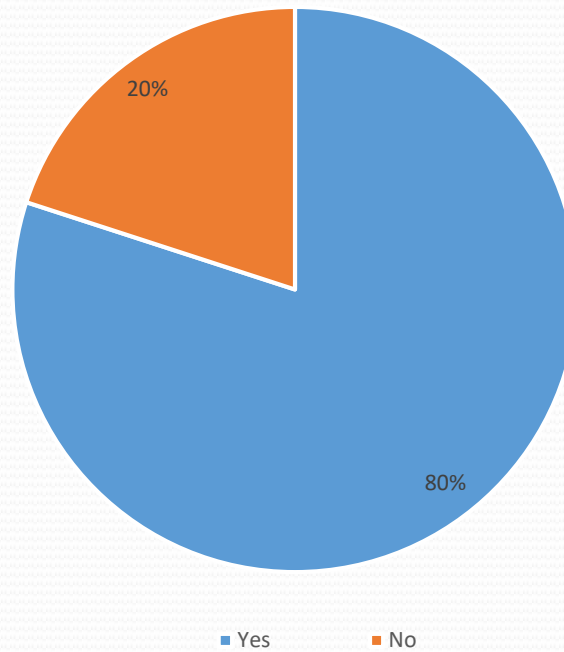


## INCREASED ABILITY TO LIST SKILLS



# FINDINGS

## DOING SELFIES WERE FUN & ENJOYABLE



# SUMMARY OF FINDINGS

- 100% Practiced 1st & 2nd weeks after learning skills
- 50% spent > 3-4 hrs practicing assigned skills
- 50% spent >4 hrs practicing skills
- 100% recommend selfies
- 90% recommend inclusion in curriculum
- 90% increased self confidence to perform skills
- 90% increased ability to list skills
- 80% doing selfies were fun & enjoyable

# CONCLUSIONS

## Nursing Videos “Selfies”:

- encouraged students to practice skill during after skills lab (not the week before practicum).
- Increased length of time spent practicing skills throughout the semester.

# CONCLUSIONS

- Increased students' confidence to perform skills in the clinical setting.
- Improved students' performance of skills during practicum.
- Increased confidence in listing skills in correct order performed (sequencing).

# Students' Reflections

- **“hesitant and anxious about being in front of camera”**
- **“It was amazing experience and the best way to apply the theory in practice and get yourself ready for safe and professional practice”**
- **Natalya P.**



# Student's Reflections

**“Implementations of new ideas along with the experience can be somewhat nerve wrecking”**

**“the implementation of recording skills video for assessment should be added to the curriculum of skills lab and in doing so improve the skills of future nurse.”**

by Mojo.....

# IMPLICATIONS FOR STUDENTS

## Nursing Skills Video “Selfies”

- Facilitate peer evaluation
- Refine and perfect skills
- Self-assessment to improve skills performance



# IMPLICATIONS FOR FACULTY

- Performance improvement
- Provide evidence that students are continually practicing nursing skills
- Implemented across the curriculum in nursing schools
- Potentially improve NCLEX scores (list in order in which you would perform).

# LESSONS LEARNED

- Small group of 15 (cannot generalize)
- Did not utilize 1:1 “selfies”. May use group of 2
- Students slow
- Videos were long
- Time consuming (written exams)
- Could mean faculty large # of videos to review

# FUTURE





# Acknowledgement

**Pamela Charles, RN**

**Ophalyn Gariando, RN**

**Julius Smith, RN**

**All nursing students, faculty and staff of MEC**