From Virtual Worlds to Real Success: Immersive Learning's Impact on NCLEX and New Graduate Practice Readiness

Amber Santos DNP, MBA, RN, CNE
Assistant Professor
Director of Innovation and Immersive Learning

1

I have no financial disclosure or conflict of interest with the material in this presentation.

2

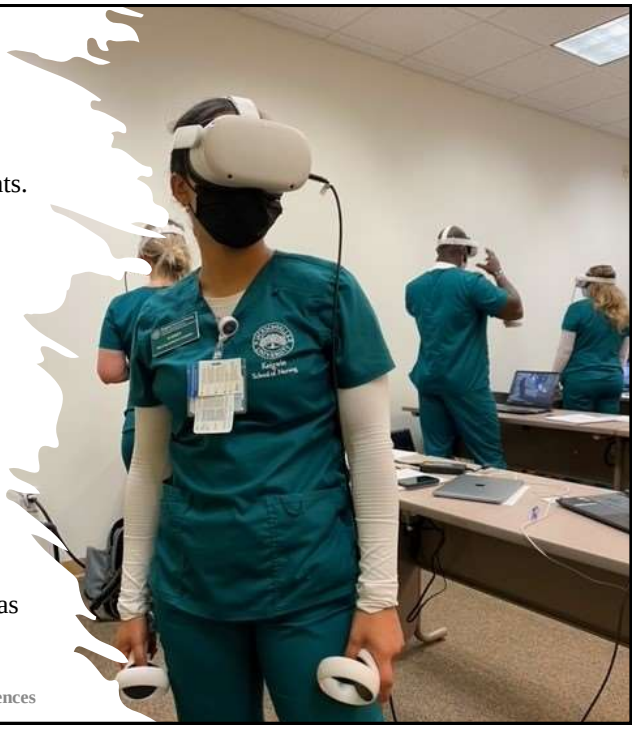
Objectives

- Describe immersive learning.
- Discuss the value of immersive learning for today's learner and the benefits in nursing education.
- Examine the project implemented and review data.
- Examine lessons learned and future utilization of immersive learning.

3

What is Immersive Learning(IL)?

- Utilizes technology to create fully simulated environments.
- Students are immersed into a virtual dialogue.
- 100% of learner's thinking capacity is required.
- Highly engaged learning experiences.
- Simulates real-world scenarios in a safe environment.
- Performance in a virtual work environment can be used as an indicator of performance in a real work environment.



Please see handouts for references

4

The Value of Immersive Learning

- The world is becoming increasingly technological
- Active learning
  - Artificial intelligence and its impact on nursing education
- Personalized learning
- Better knowledge retention
  - Bridge the academic-practice gap
- Provides stimulating visualizations
  - Evokes an emotion
- Focused immersion
  - minimizes distractions to enhance engagement

Please see handouts for references

5

Today's Learner

- Traditional pedagogies aren't enough.
- Crucial to incorporate technology in some way for the modern learners.
- Need to be motivated.
- Desire for more realistic, engaging content.
  - directly connecting to their coursework

Gen Z

- Crave autonomy and instant feedback.
- Bite-sized learning (micro-lessons).
  - Lessons that are time-efficient.
- Grew up with personalized experiences (Netflix) and they want their education to be similar.

Please see handouts for references

6

Funding

Funding for this project was awarded from the Florida Department of Education through the EPIC (Entrepreneurism, Policy, Innovation, and Commerce) Program at Jacksonville University.

Project Question

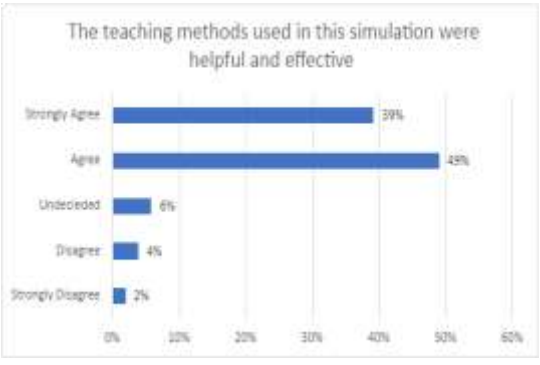
Does the Utilization of Immersive Learning within a Traditional BSN program increase NCLEX-RN and New Graduate Practice Readiness?

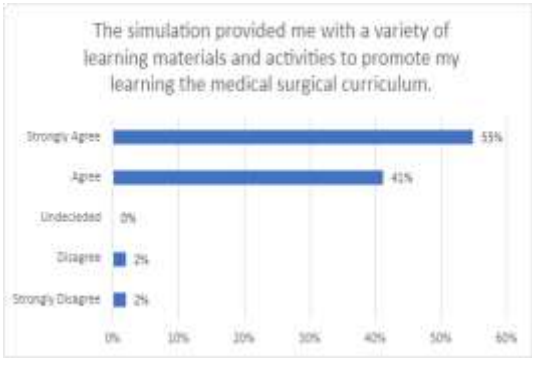
Project Overview

- Immersive learning was incorporated into:
  - critical care clinical
  - leadership/transition to practice didactic course
  - synthesis/practicum clinical course
- Virtual Reality and Virtual Clinical Experiences
- The National League for Nursing Student Satisfaction and Self-Confidence in Learning survey
- NCLEX-RN comprehensive predictor exams (x3)
- Student Success Specialist
- Micro-lessons
- NCLEX-RN individualized study plan

9

The National League for Nursing Student Satisfaction and Self-Confidence in Learning survey

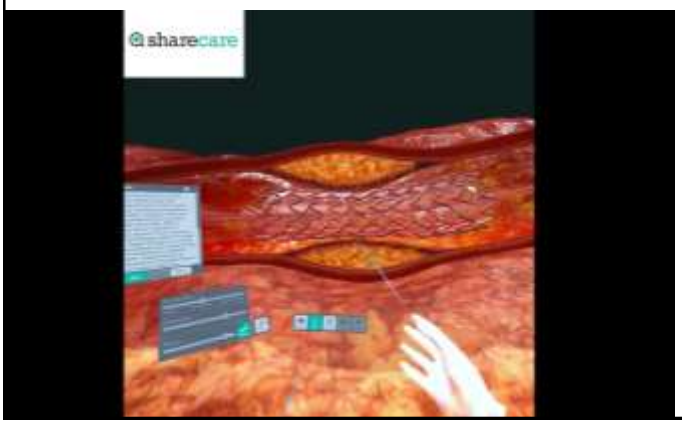




https://www.nln.org/docs/default-source/uploadedfiles/default-document-library/instrument-2-satisfaction-and-self-confidence-in-learning.pdf

10

Virtual Reality



11

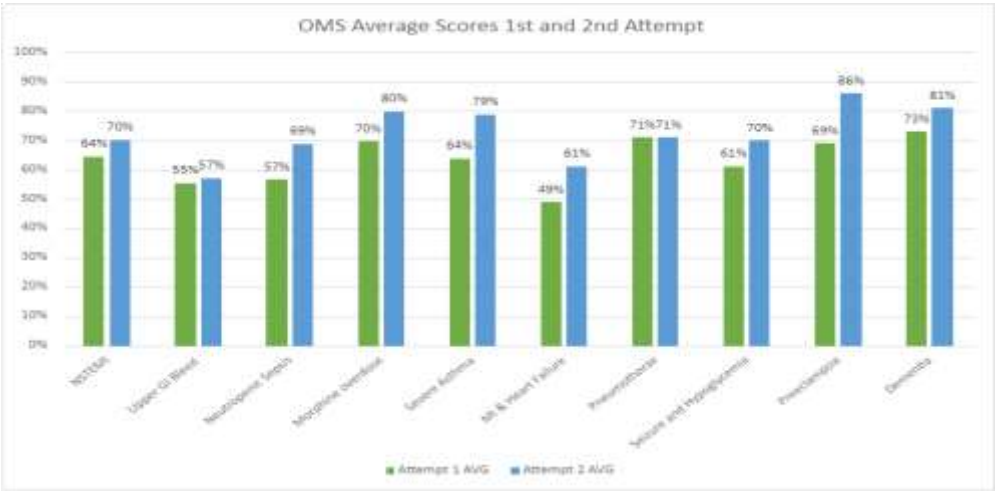
Virtual Reality

Oxford Medical Simulation

12

Virtual Reality

Oxford Medical Simulation



13

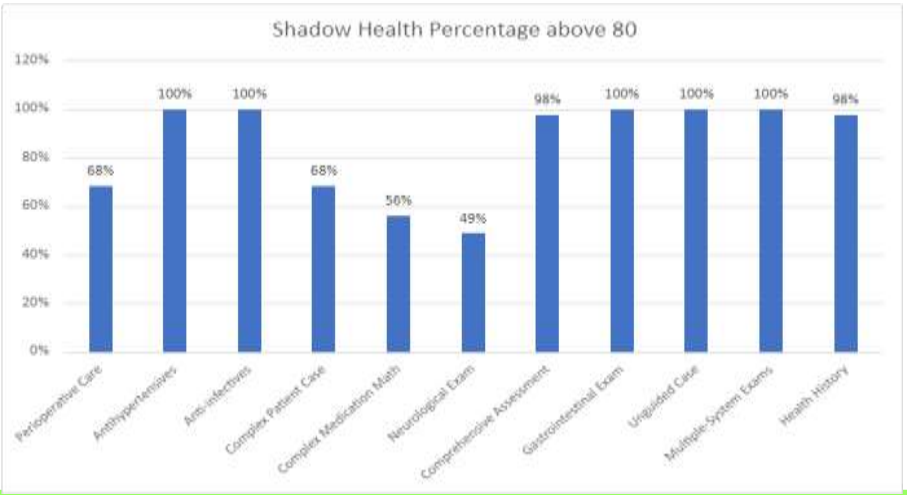
Virtual Patient Simulations

Shadow Health

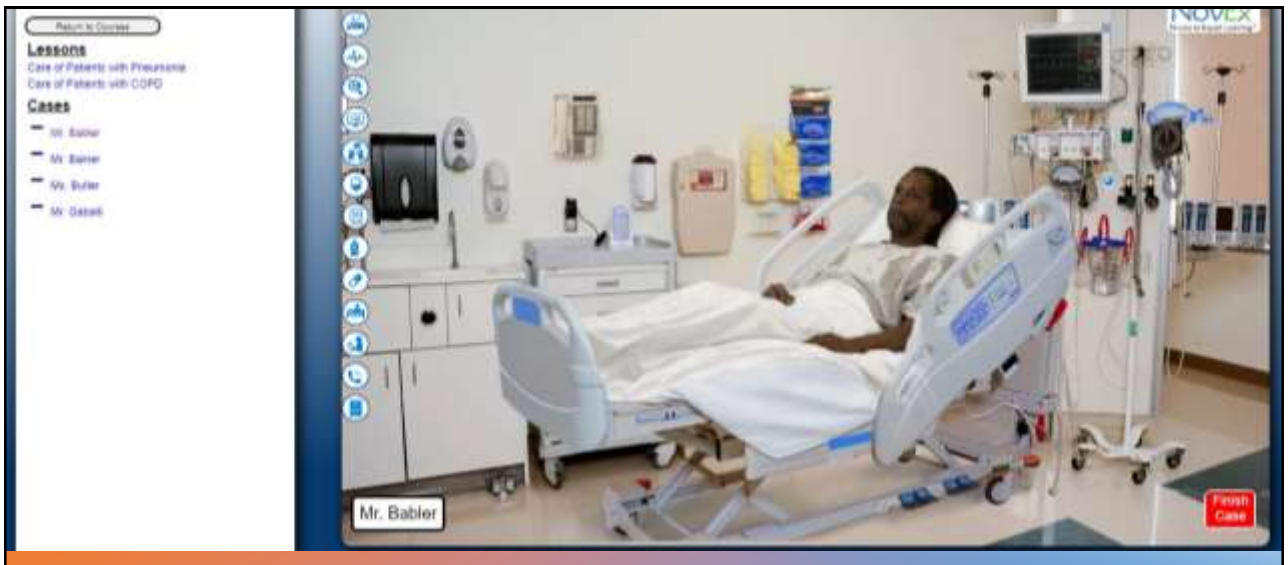
14

Virtual Patient Simulations

Shadow Health



15



Clinical Thinking and Reasoning

NovEx Novice to Expert Learning

16

JACKSONVILLE UNIVERSITY

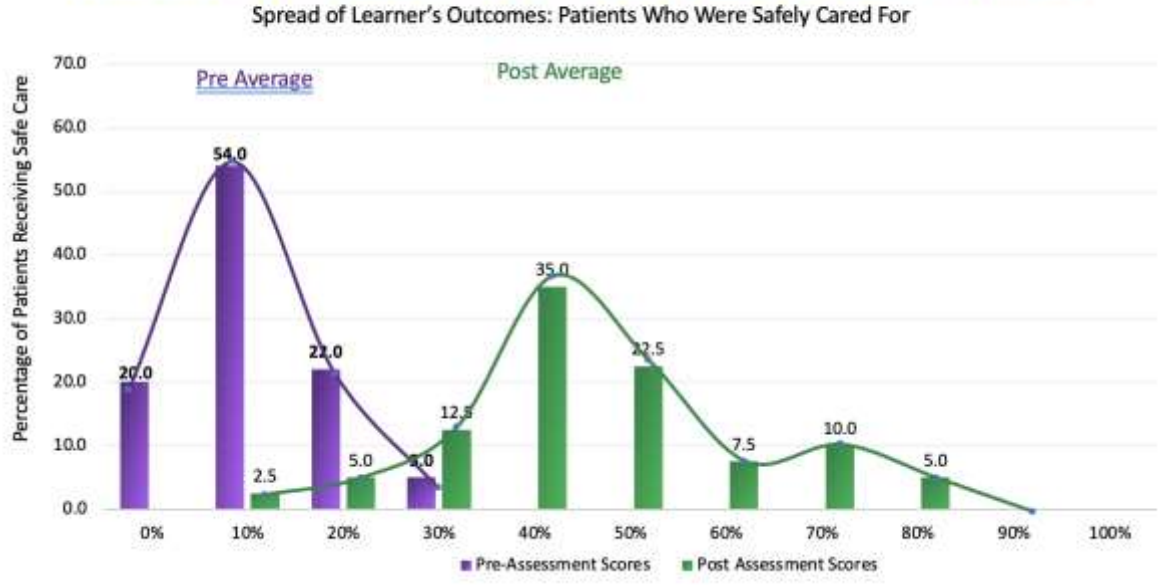
Pre- vs. Post Assessment: Virtual Clinical Performance Scores*

*Requires ALL required interventions are completed and in order of priority care

17

JACKSONVILLE UNIVERSITY

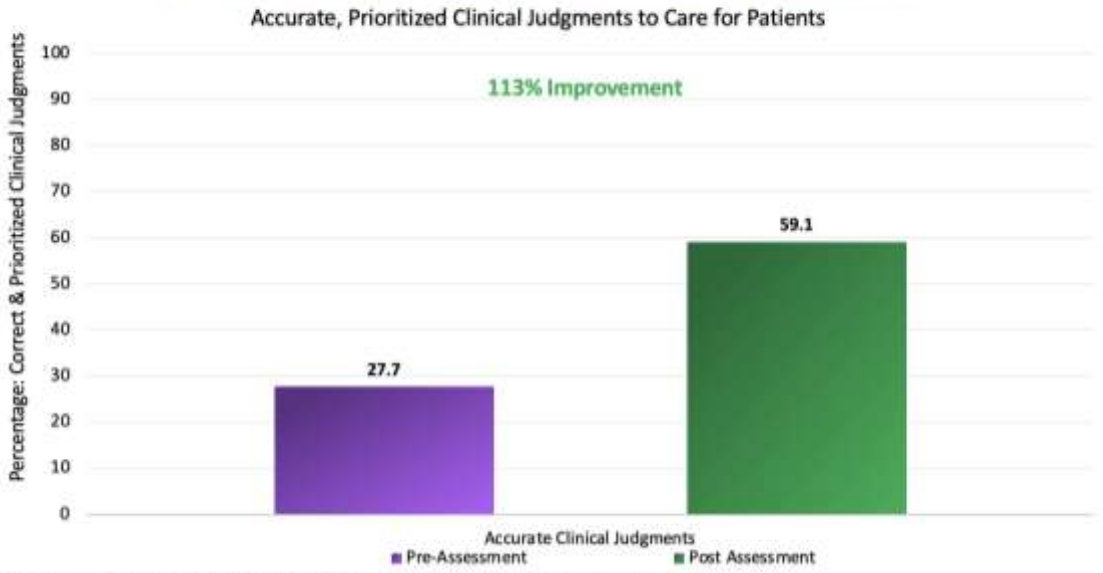
Pre- vs. Post Assessments: Spread of Lowest-Highest Pass Scores



18

JACKSONVILLE UNIVERSITY

Pre- vs. Post Assessment: Clinical Judgments*

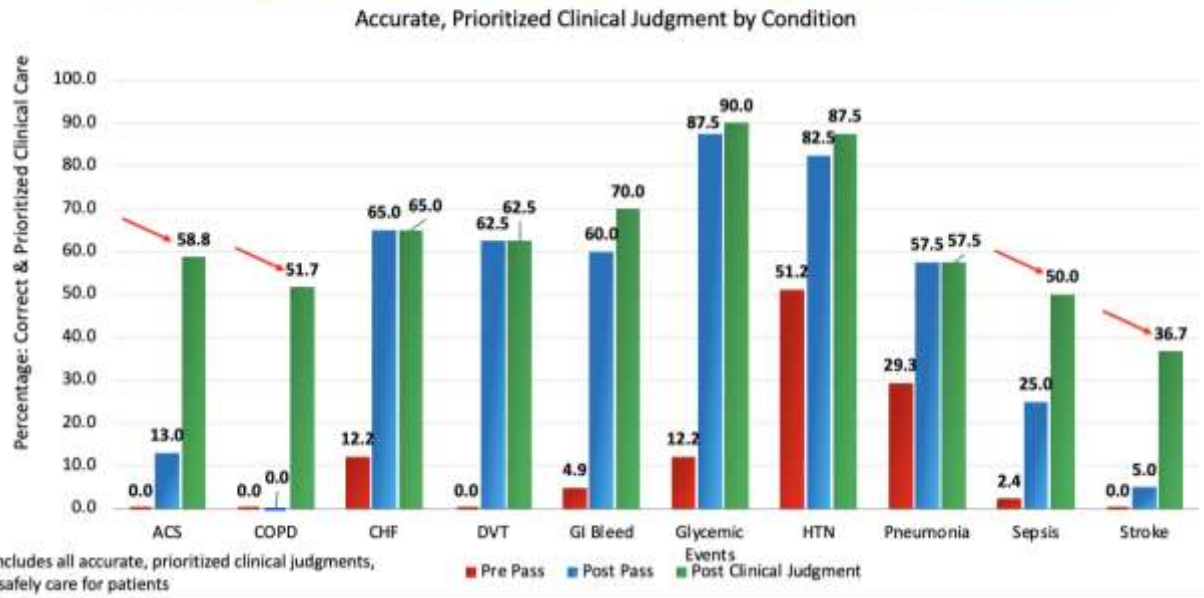


* Includes ANY accurate, prioritized clinical judgments, whether completing all required care or not

19

JACKSONVILLE UNIVERSITY

Pre vs Post Pass & Clinical Judgment Scores* by Condition



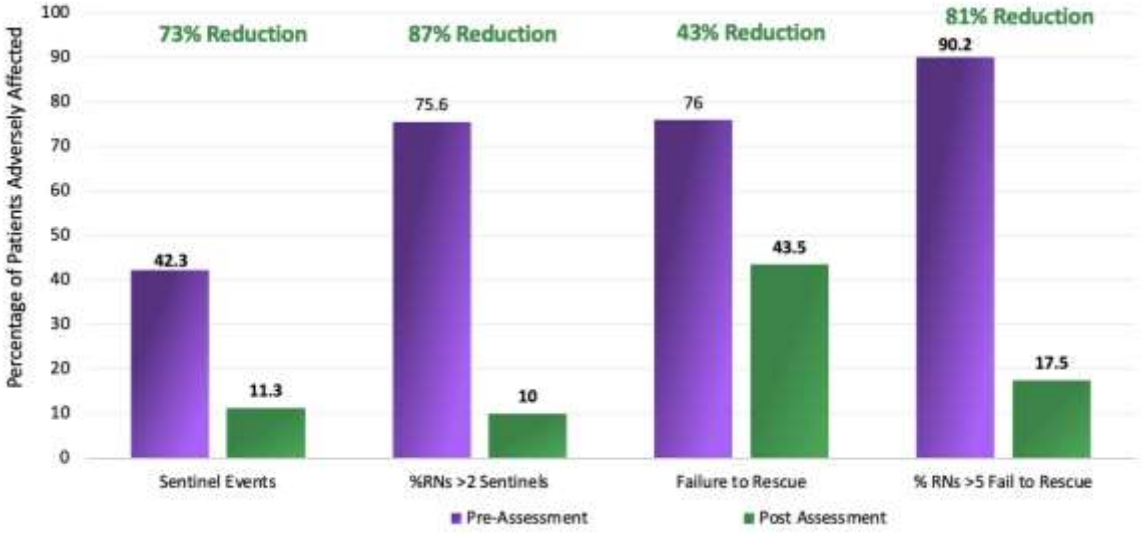
* Includes all accurate, prioritized clinical judgments, To safely care for patients

20

JACKSONVILLE UNIVERSITY

Pre- vs. Post Assessment: Patient Safety

Accurate, Prioritized Clinical Judgments re: Patient Safety

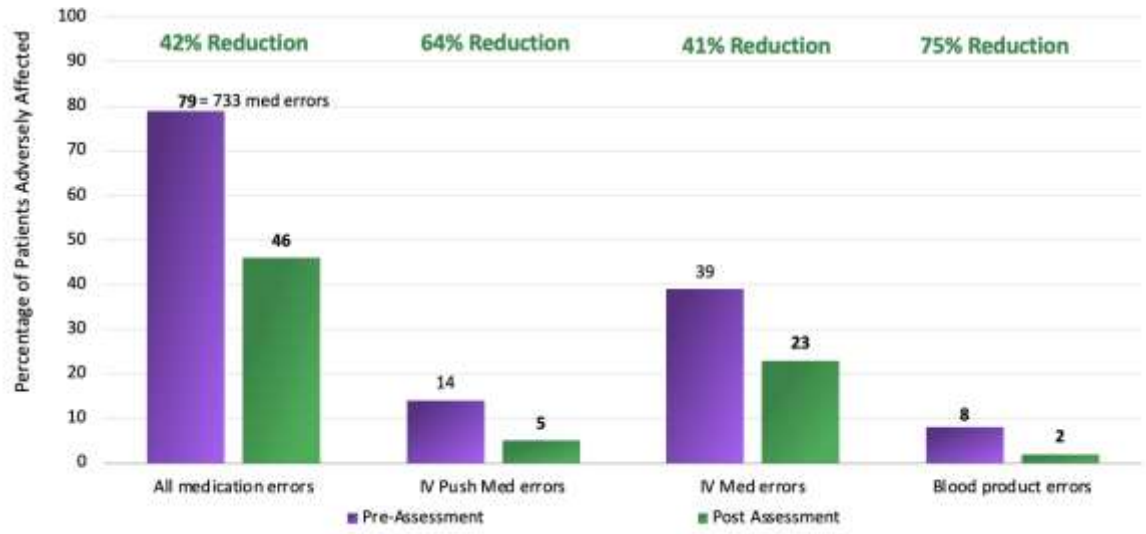


21

JACKSONVILLE UNIVERSITY

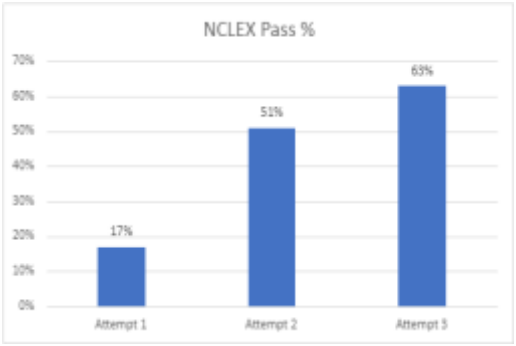
Pre- vs. Post Assessment: Medication Errors

Patient Safety re: % of Patients Receiving Medication Errors



22

NCLEX-RN Predictor Exam Scores



	Pass NCLEX %-Probability of passing NCLEX 1	Pass NCLEX %-Probability of passing NCLEX 2	Pass NCLEX %-Probability of passing NCLEX 3	Attempt 1 --> 2	Attempt 2 --> 3
Student 1	53%	57%	92%	Improved	Improved
Student 2	87%	80%	97%	Improved	Improved
Student 3	87%	50%	89%	Didn't Improve	Improved
Student 4	22%	43%	39%	Improved	Didn't Improve
Student 5	92%	99%	93%	Improved	Didn't Improve
Student 6	92%	99%	98%	Improved	Didn't Improve
Student 7	53%	90%	93%	Improved	Improved
Student 8	78%	96%	98%	Improved	Improved
Student 9	95%	99%	99%	Improved	Improved
Student 10	43%	67%	80%	Improved	Improved
Student 11	97%	99%	99%	Improved	Improved
Student 12	87%	86%	80%	Improved	Didn't Improve
Student 13	57%	96%	99%	Improved	Improved
Student 14	43%	46%	48%	Improved	Didn't Improve
Student 15	14%	75%	75%	Improved	Improved
Student 16	82%	93%	98%	Improved	Improved
Student 17	84%	92%	99%	Improved	Improved
Student 18	16%	70%	84%	Improved	Improved
Student 19	86%	98%	99%	Improved	Improved
Student 20	73%	93%	96%	Improved	Improved
Student 21	96%	99%	98%	Improved	Didn't Improve
Student 22	78%	96%	96%	Improved	Improved
Student 23	84%	90%	93%	Improved	Improved
Student 24	20%	86%	92%	Improved	Improved
Student 25	30%	78%	80%	Improved	Improved
Student 26	70%	82%	93%	Improved	Improved
Student 27	86%	93%	93%	Improved	Improved
Student 28	89%	92%	93%	Improved	Improved
Student 29	4%	34%	74%	Improved	Didn't Improve
Student 30	80%	99%	99%	Improved	Didn't Improve
Student 31	88%	90%	97%	Improved	Improved
Student 32	14%	64%	67%	Improved	Improved
Student 33	27%	36%	67%	Improved	Improved
Student 34	98%	99%	99%	Improved	Didn't Improve
Student 35	53%	70%	70%	Improved	Improved
Student 36	80%	90%	98%	Improved	Improved
Student 37	39%	75%	88%	Improved	Improved
Student 38	98%	99%	99%	Improved	Improved
Student 39	75%	89%	82%	Improved	Didn't Improve
Student 40	89%	89%	93%	Improved	Improved
Student 41	75%	89%	84%	Improved	Didn't Improve

23

Lessons Learned

VR Equipment and Software

Timing

Beneficial for both Students AND Faculty

24

Questions?

Contact information: asantos1@ju.edu

25

Please feel free to take a complete reference list provided by presenter.

Thank you!

26