

Session Objectives

Participants will be able to:

- Describe how ARISE open educational resources (OER) create contextual learning environments and actively engage students in the process of transformational learning
- Explain how ARISE teaching plans integrate the INACSL Standards of Best Practice and can be used for "debriefing across the curriculum"
- Walkthrough how to use ARISE scenarios on an iPad



Meet the Team



Margaret Dickens, EdD, RN
Project Director



Kim Ernstmeier,
RN, MSN, ANP-BC, CHSE
Instructional Designer



Theresa Meinen,
RRT, MS, CHSE
Instructional Designer



Ryan LeDuc
Programmer



Sara Pertz
Project Manager &
Multimedia Specialist



Charles Leffingwell
Designer & Programmer



Shayne VanderBent
Digital Graphic Designer



Greg Cedarblade
Programmer



ARISE Project

- "Augmented Reality Integrated Simulation Education"
- Included as the Learning Technology component of a Department of Labor TAACCCT grant
- 16 Wisconsin Technical Colleges
- Multiple Health Occupation Disciplines
- Open Educational Resource
- Deliverables: 150 Simulations
- Open-source apple app/software platform for creating and playing mobile games and interactive stories.



Why Augmented Reality?



ACTE
at
Lynchburg

Poll Question #1

- How familiar are you with Augmented Reality?
 - Very Familiar
 - Familiar
 - I know a little about it
 - I have no idea what you are talking about!

ACTE
at
Lynchburg

What is Augmented Reality?



ACTE
at
Lynchburg

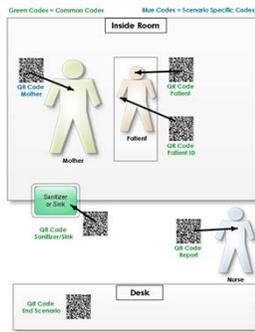
Poll Question #2

• Have you ever used Augmented Reality in healthcare simulation?

- Yes
- No
- I have no idea!



The QR Codes



Augmented Reality in Healthcare Simulation

- Patient-centered videos
- High-quality images
- Heart, Lung, & Bowel sounds in anatomically correct locations
- Communication with health care team and family members
- Dynamic chart forms
- "Hot spots"



Theory-based Learning

- Eric Bauman**
Games and Simulation
Robust tools to provide structured spaces that simulate authentic practice
- Patricia Benner**
Novice to Expert
Notice, Advanced Beginner, Competent, Proficient, Expert
- David Kolb**
Cycle of Experiential Learning
*Act, Reflect, Abstract
Conceptualization, Active Experimentation*

ACTE

Conceptual Model

Storyline

Serious Games → Clinical Case Study → Simulation → Real World Experience

ACTE

Storylines

Storylines are individual patient stories as they experience health events. Storylines cross disciplines and follow patient stories throughout healthcare settings. Videos add context and engagement.

To date have completed

- 13 story lines
- 115 simulations
- 27 serious games
- 9 case studies

Total = 151

ACTE

Storylines

- Pediatric Pain
- Wound Management
- Typical Chest Pain Male
- Atypical Chest Pain Female
- End of Life
- Pediatric Asthma
- Heart Failure
- OB
- Newborn
- Therapeutic Communication
- Virtual Ventilator
- Assessment
- Community AED



Storyline Levels

Storylines cross disciplines and follow a patient through various settings.



They are divided into levels

- Level 1: *Basic Assessment & Basic Intervention*
- Level 2: *Advanced Assessment & Complex Intervention*
- Level 3: *Complication Identification & Treatment*
- Level 4: *Crisis & Intervention*



Demonstration

GoPro Video



Serious Games

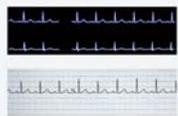
Instructions: Interpret the image and select the correct response.



What is the fetal font?

- Horizontal >
- Longitudinal >
- Transverse >
- Vertical >

Instructions: Interpret the rhythm and select the correct response.



What is the rate of this rhythm?

- About 60 >
- About 80 >
- About 90 >
- About 100 >

ACTE
of
LINCUM

Serious Games

SCHIZOPHRENIA

Beneath this is a video.



Richard Green MD, Park S. Hoopes

LEARNING OBJECTIVE

1. Implement Metacognitive techniques with a patient experiencing acute schizophrenia.



Time: 25:10min

Control Challenge

Continue

ACTE
of
LINCUM

Demonstration

Serious Game

ACTE
of
LINCUM

Poll Question #3

- What is your role in simulation?
 - Simulation Director
 - Simulation Specialist (primary role is simulation)
 - Simulation Technician
 - Educator – novice to beginner in simulation
 - Educator – competent in simulation
 - Educator – proficient to expert in simulation
 - Non simulation user



Teaching Plans

- Objectives & Supplies
- Linked to program outcomes & state-wide curriculum
- Pre-brief Guide
- Simulation States
- De-brief Guide

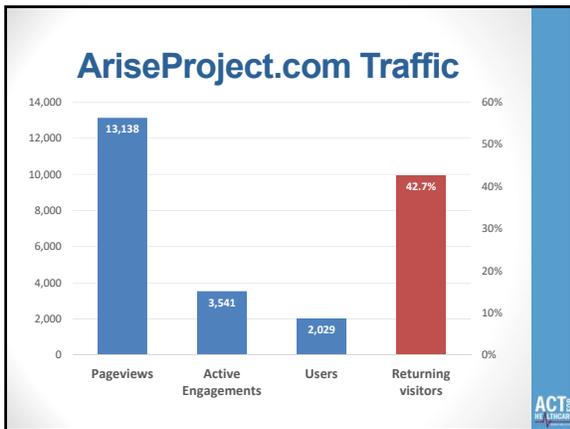


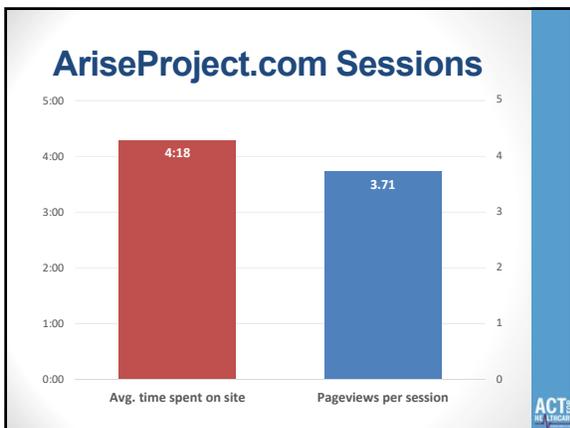
Demonstration

Pediatric Asthma RT – Level 1

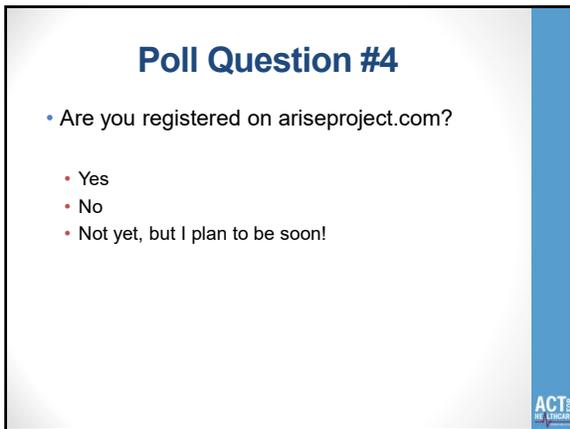


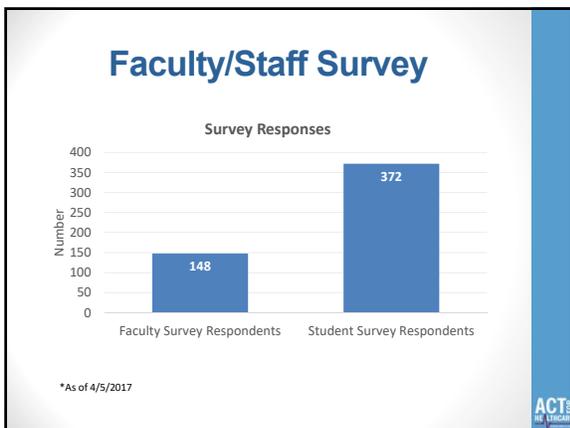


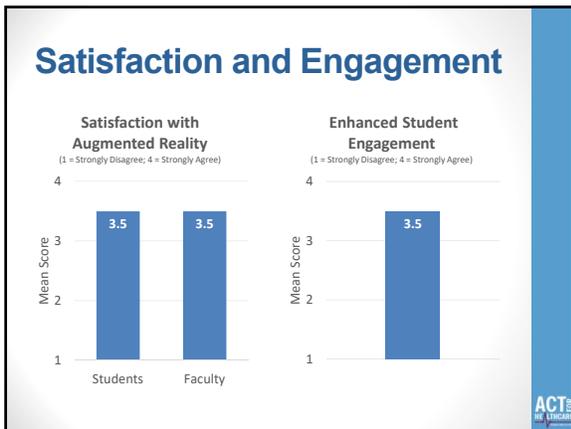


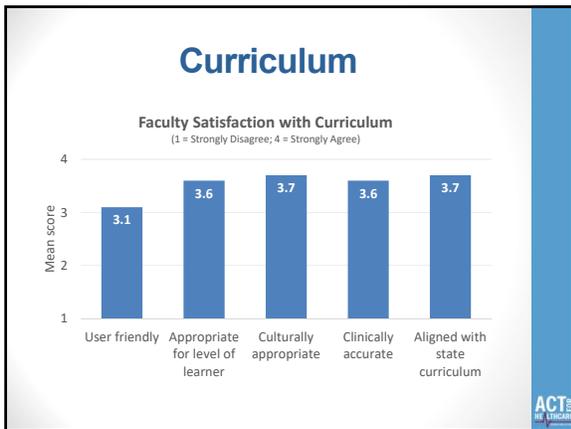












What we've learned along the way...

- Faculty need freedom to incorporate into varied settings (classroom, pre-simulation, high and low fidelity)
- Students need freedom to make choices and experience consequences
- Subject matter experts are needed in both the design phase and review process
- Adding technology to learning requires planning and training
- Caution: Wi-Fi matters

ACTE
HE EDUCATION



Contact Information

- Theresa Meinen, MS, RRT, CHSE
 - (715) 832-0232
 - tmeinen2@cvtc.edu
- Kim Ernstmeyer, RN, MSN, APN-BC, CHSE
 - (715) 833-6344
 - kernstmeyer@cvtc.edu

www.ariseproject.com
