CONNECTS: <u>Capacity Optimized</u> <u>Neural Network Extending Clinical,</u> <u>Theory, and Skills</u>



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Director, Bridwell Simulation Center



CONNECTS:

DISCLOSURES:

- □ No conflict of interest
- ☐ Grant awarded by Taxes Higher Education Coordinating Board.
- ☐ Awarded \$115,000 to support construction, equipment and materials.

LEARNING OBJECTIVES:

- ☐ Discuss ways to promote student and program success.
- □ Create innovative ways to connect theory, technology and skills with participants
- □ Describe ways to link content, clinical skills, clinical reasoning and student learning evaluation.

MISSION:

Facilitate learning for multidisciplinary healthcare providers in an innovative environment which stimulates clinical imagination and competence.



J.S. Bridwell Regional Simulation Center

VALUES

- Build strong clinical skills and clinical imagination
- Augment lifelong learning
- Promote safe, compassionate, and quality patient care for the healthcare consumer.



SIMULATION CENTER

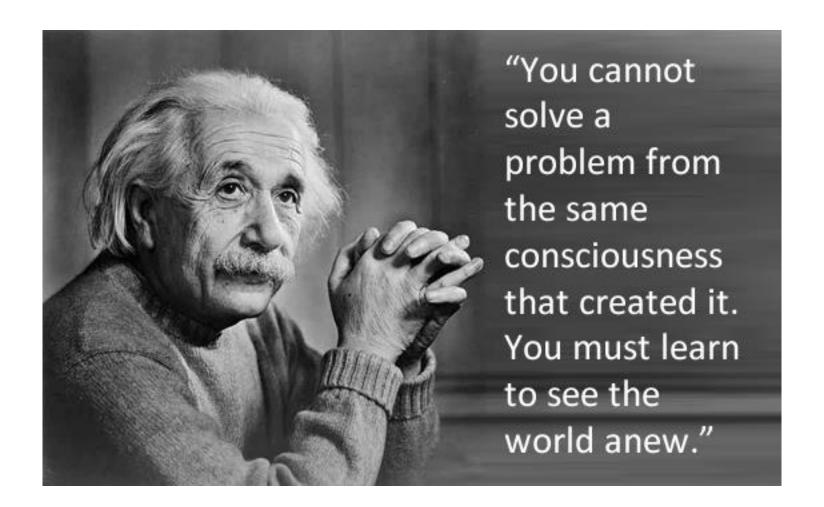
- History: J.S. Bridwell Simulation Center is shared by a local community college, local healthcare system and the Wilson School of Nursing.
- Created by a grant awarded in 2004 by the Texas Higher Education Coordinating Board.
- ♦ BSN prepared educators who are clinically strong to provide competency education and validation.
- ♦ Accepted more students into program. And reduce amount of time faculty spend in validations.

This has resulted in faculty who teach theory courses to NOT be trained in creative ways to integrate simulation experiences in courses.

TODAY

- 7 courses totaling 127 hours per student
- Add more hours increase utilization of center
- Reduce the number of direct patient care experiences

- 1 Director
- 1 secretary
- 4 Full time BSN educators
- 1 part-time BSN educator
- Director and Fulltime educators have MSN



CONNECTS: BUILDING CAPACITY FOR BUILDING SKILLS

DR. KATHLEEN M. WILLIAMSON, RN CHAIR, ASSOCIATE PROFESSOR CONNECTS PROJECT DIRECTOR

CAPACITY

- **♦**Optimize space
- ◆Utilize supportive technology
- Extend clinical opportunities



- Link clinical, theory and skills
- **◆BSN** educators

RELIANCE ON SIMULATION CENTER

- Patient areas shrinking
- Increase use of acute care simulations
- Scheduling with all partners
- Simulation center is at maximum capacity

UTILIZATION

	2005	2014	
MSU	12,072 hours	21,427 hours	77% increase
All	15,398 hours	24,777 hours	61% increase

Need: Creative way to use space and be innovative in the way simulation is designed and implemented at the simulation center.

Need: Use center to its fullest maximum capacity.

REASON:

- **◆**Lack of efficient use of current space, access to computers, task trainers, and technology to develop innovative alternative types of simulation experiences.
- ◆Faculty training to develop scenarios/educational lessons in a more strategic way in courses.
- **◆**Expand simulation to courses that currently do not use the simulation center.
- **◆**Adjust the hours of operation.
- ◆Make more usable square footage available.



- 1) Reconstruct space to increase capacity and use.
- 2) Faculty Development in using the newly acquired technology.
- 3) Reduce the hours in clinical practice
- 4) Be more efficient and provide a quality experience.



CONNECTS: SIMULATION AS AN INSTRUMENT

MELODY CHANDLER, MSN, RN DIRECTOR, J.S. BRIDWELL REGIONAL SIMULATION CENTER

UNIQUE MATRICES

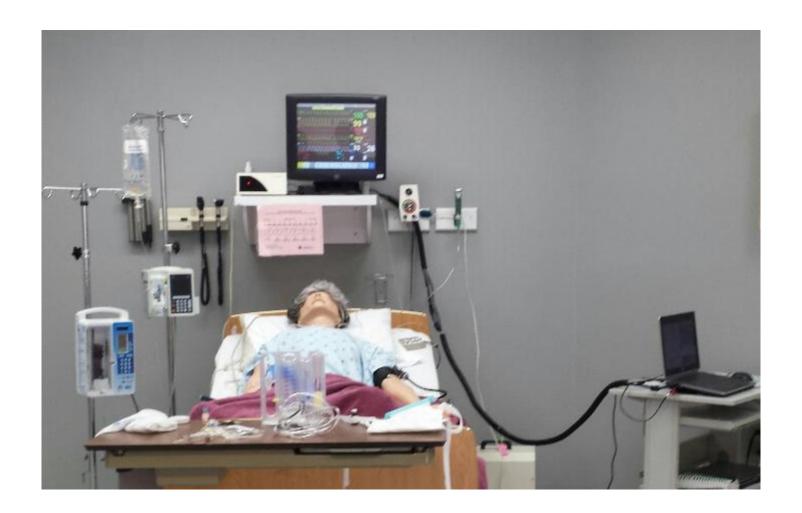
- Diverse level of learners
- Consortium partnership's affect on simulation and creating unique, realistic, evidence based clinical environments
- Sim staff personnel as facilitators







REALISTIC PATIENT CARE ENVIRONMENT



EVIDENCE BASED SIMULATIONS

Linking CLASSROOM to SIMULATION to CLINICAL ENVIRONMENT

- Realistic patient care simulations are developed based on course specific learning objectives which provides a connection between classroom didactic and scenario objectives
- Nursing actions and interventions are governed by current evidence based practice and care guidelines in coordination with consortium partner
- BSN educators function as expert nurses to guide simulations

Learner Confidence

- Learners allowed time to practice in safe environment
- Full time staff allows for intimate learning environment

LIMITATIONS

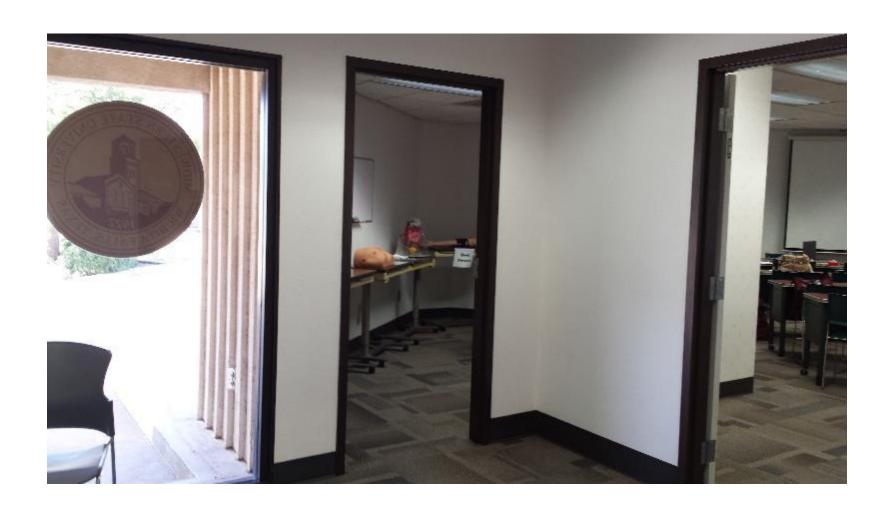
- "Maximum Capacity" versus "Maximize Capacity"
 - Use of case scenario driven simulation is at capacity
 - Simulation rooms are used throughout the day
 - Task trainer equipment is in use throughout the day
 - Limited availability of electronic healthcare technology at the simulation center
 - BSN educators are scheduled throughout the day



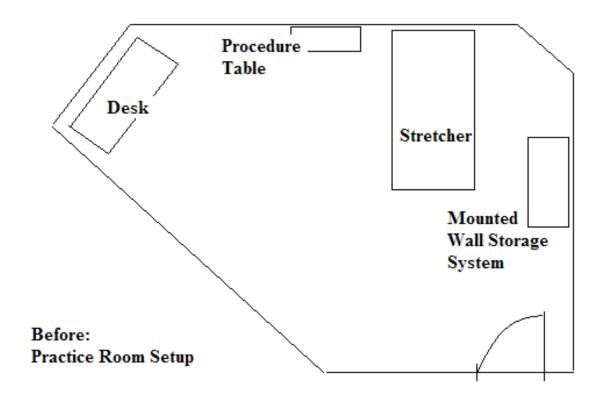
SIMULATION CENTER LOBBY



ACCESS INCREASED



BEFORE



MULTIPURPOSE PRACTICE ROOM



BENEFITS

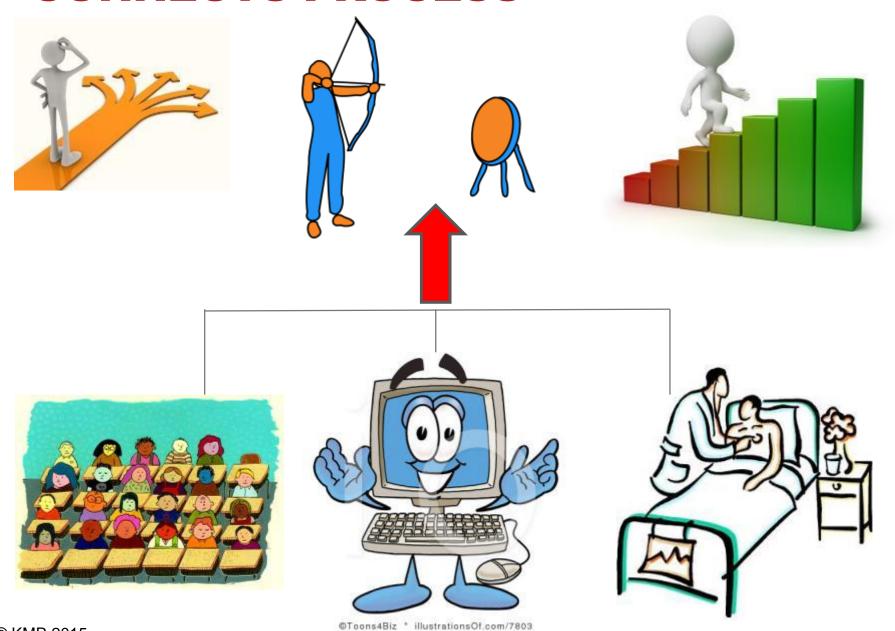
- Provides increased access while simultaneously partnering learning activities with advanced technologies
 - Increased faculty participation
 - Increased availability of task trainers for practice
 - Audio visual recording system for self evaluation
 - Electronic medication dispensing system
 - Mobile technology for bedside charting and managing electronic medical record



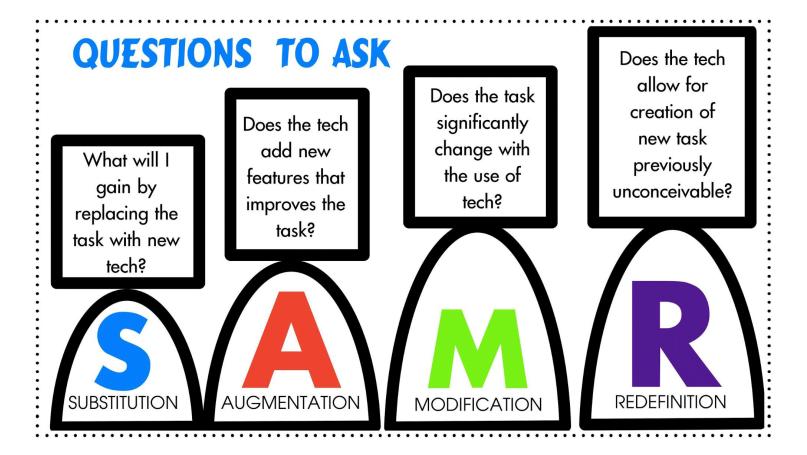
CONNECTS: MAKING THE CONNECTION

ROBIN LOCKHART, MSN, RN
UNDERGRADUATE PROGRAM
DIRECTOR

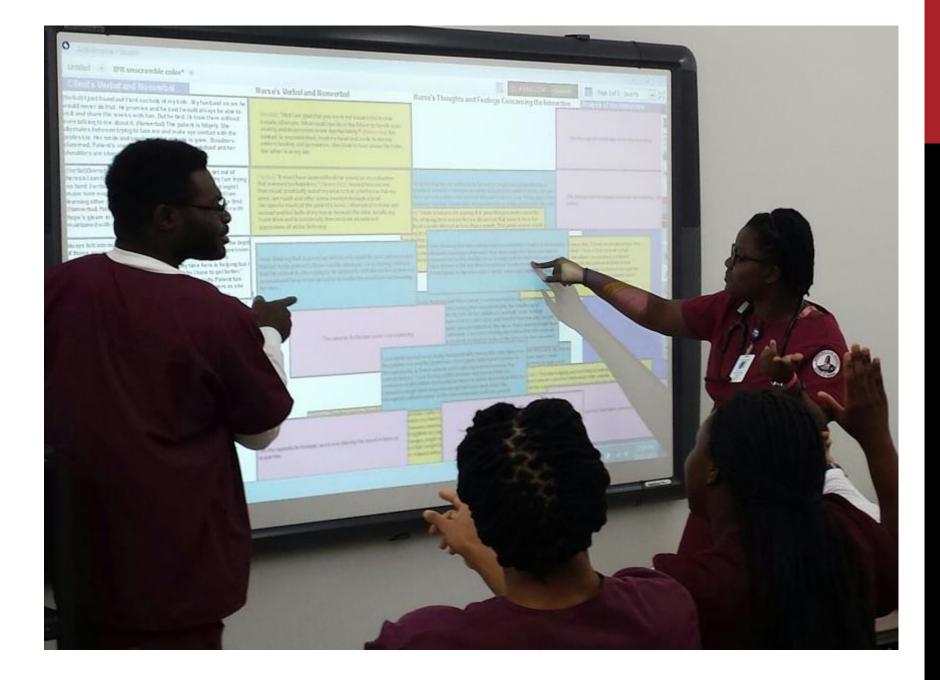
CONNECTS PROCESS



DR. RUBEN PUENTEDURA'S MODEL



Brown, P. (2015, February 6) https://www.edsurge.com/news/2015-02-06-a-guide-for-bringing-the-samr-model-to-ipads





Questions/Comments



Thank you!