

Collaborating to Build Capacity and Cultural Competence with a Virtual Prenatal Care Clinic

Lisa Young DNP, APRN

Yvonne Weideman, DNP, RN

Joan Such Lockhart, PhD, RN, ANEF, FAAN

Faye Grund, PhD, APRN

Mark Fridline, PhD

Marie Panas, MSN, RN



Disclosures

- The authors of the presentation have identified no potential conflicts of interest.

Introduction

Support for this project was provided by the Robert Wood Johnson Foundation New Careers in Nursing Innovation Grant



***Funded by
The New Careers in Nursing Program***

***An initiative of American Association of Colleges of
Nursing and the Robert Wood Johnson Foundation.***



Objectives

- Appraise the impact that population health has on nursing education program outcomes.
- Discuss the virtual prenatal care experience for students from two universities.
- Describe how Virtual Simulation Experience (VSE) strengthened the cultural competence of Accelerated Second Degree (ASD) nursing students.
- Summarize the collaboration of the students, faculty and community members throughout the cultural virtual simulation project.
- Discuss future implications for virtual simulation experiences for nursing and interprofessional educational experiences..

The Necessity for Cultural Education

The need to increase cultural content in curricula

- Healthy People 2020
- Institute of Medicine Report
- Department of Health and Human Services
- Meet the needs of a changing, diverse society



The Necessity for Cultural Education

- Negative impacts
 - Exacerbation of health disparities
 - Increase in expenditures
 - Jeopardize patient safety
 - Negative influence clinical outcomes



Department of Health and Human Services [DHHS]. (2014). *Culturally competent nursing care: A cornerstone of caring*. Retrieved from <https://ccnm.thinkculturalhealth.hhs.gov/>

The Dilemma



- Limited population characteristics
- Faculty
 - Shortage
 - Expertise in specialties
- Clinical Placement
 - Limited sites and specialty areas
 - Limited exposure to diverse population
- Finances and travel restrictions



Current Teaching Methods

- Integrate cultural content in lecture material
- Integrate cultural content in clinical activities
- Extended immersion experiences
- Service learning experiences

Jeffreys' Cultural Competence and Confidence Model

- *Cultural competence*: multidimensional learning process
- Integrates transcultural self-efficacy (TSE) into three educational dimensions
 - - cognitive
 - - practical
 - - affective
- As transcultural self-efficacy increases, the desire to provide culturally competent care increases.

The Innovation Project

- Collaboration
 - Duquesne University & Ashland University
 - Behavioral/Community & Maternal Health Faculty
- Clinical (Virtual Simulation Experience)
 - Amish (rural Ohio)
 - Underserved African American (urban SW PA)



The Innovation Purpose

- Design, implement, and evaluate a VSE that transcended geographic barriers by providing ASD student access to diverse cultures while strengthening their ability to provide culturally congruent care

Specific Aims

- Measure the VSE effectiveness on students' perceived clinical cultural competence (TSE)
- Determine students' abilities to formulate culturally appropriate care plans to promote health in prenatal clients from diverse backgrounds
- Evaluate the perceptions of project stakeholders related to sharing faculty expertise and resources

Literature Review

- Giddens, Shuster, & Roehrig (2010)
- Giddens, North, Rogers, & Fogg (2012)
- Halter, Grund, Fridline, See, Young, & Reece (2014)
- Jeffreys & Dogan (2012)
- Larsen & Rief (2011)
- Lee (2014)
- Weideman & Culleiton (2014)

The Intervention

- Students
 - 17 pre-assigned groups
 - 8-10 students per group
- Community Members
 - 3 previous Amish community members
 - 3 African American community members
- Active Learning Interactions
 - Between/among students
 - Between/among students and community members
 - Group-developed cultural care plans (2)
 - Debriefing session

The Intervention

- Modules in Blackboard™ - each unfolding over 2 weeks
- Population
 - Amish
 - Underserved African American
- Videos
 - Prenatal
 - Postnatal
- Interviews
 - Assessment findings
 - Cultural preferences



Tools

Transcultural Self-Efficacy Test (TSET)

- 83-item tool developed by Marianne Jeffreys (2010)
- Measures students' confidence for performing general transcultural nursing skills among diverse client populations
- Chronbach's alpha (0.92-0.98); test-retest (0.64-0.75)



TSET Subscales

- Cognitive Subscale (25 questions)
 - Self-efficacy rating **knowledge** about the ways cultural factors may influence nursing care.
- Practical Subscale (28 questions)
 - Self-efficacy rating about **interviewing** clients of different cultural backgrounds to learn their values and beliefs.
- Affective Subscale (30 questions)
 - Self-efficacy rating the **values, attitudes, and beliefs** concerning cultural awareness, acceptance, appreciation, recognition, and advocacy.

Nursing Plan of Care

- Purpose: Identify and prioritize health care needs and nursing interventions
- Collaborative project within each student group
- Grading rubric (50 points total)
 - Cultural assessment findings (10)
 - Patient access to care (10)
 - Key health teaching practices (10)
 - Health teaching needs (10)
 - Realistic culture-focused care (10)



Post-Course Evaluations

- Student survey (5-point Likert scale & open ended)
- Community Members - phone discussion
- Project Team – phone discussion

Results

Demographics

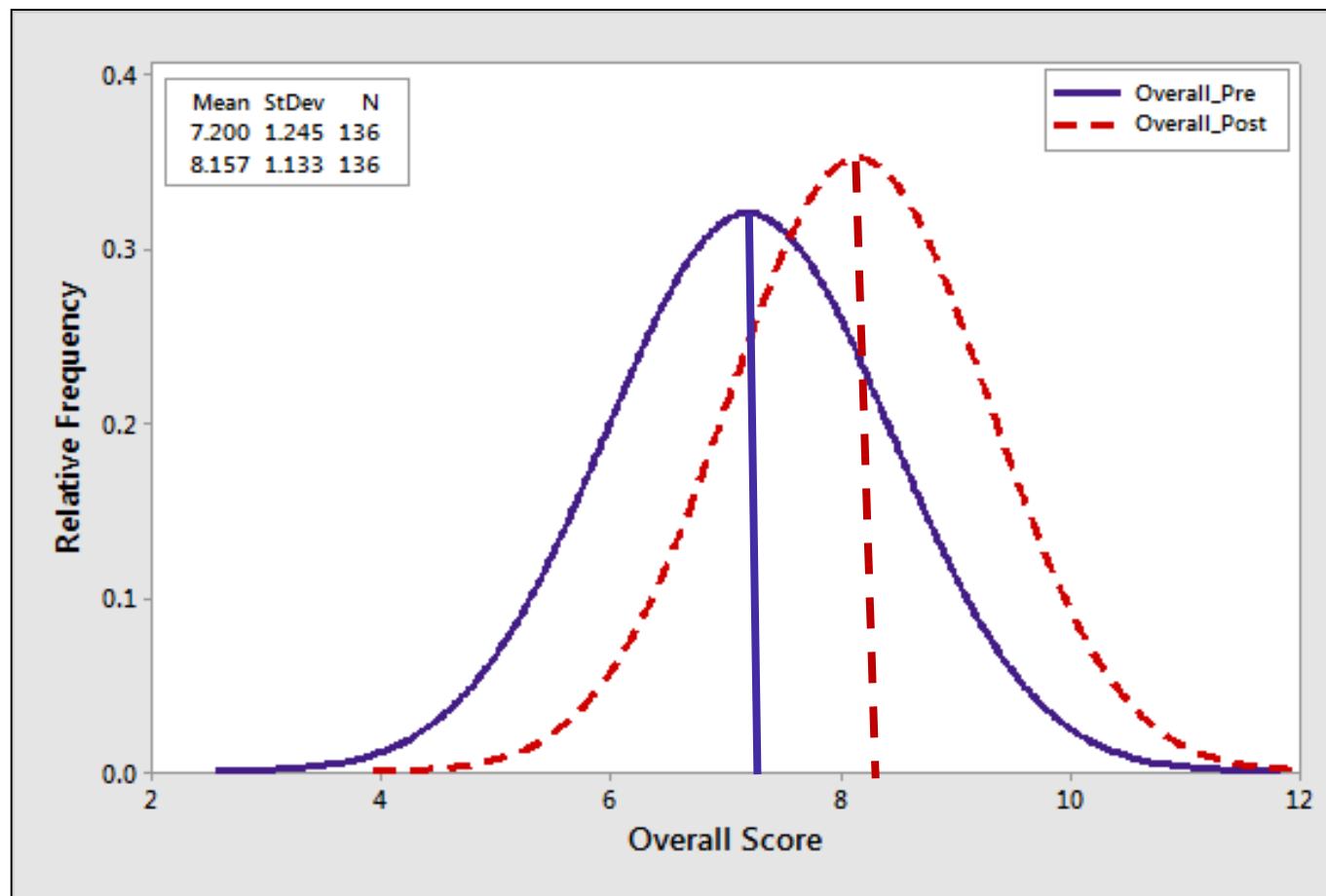
- Ashland University (n=28)
- Duquesne University (n=113)
- Collaborative groups (8)
- Non-collaborative groups (9)
- Female (82%), <26 years of age (66%), non-Hispanic White (83%)



Aim 1

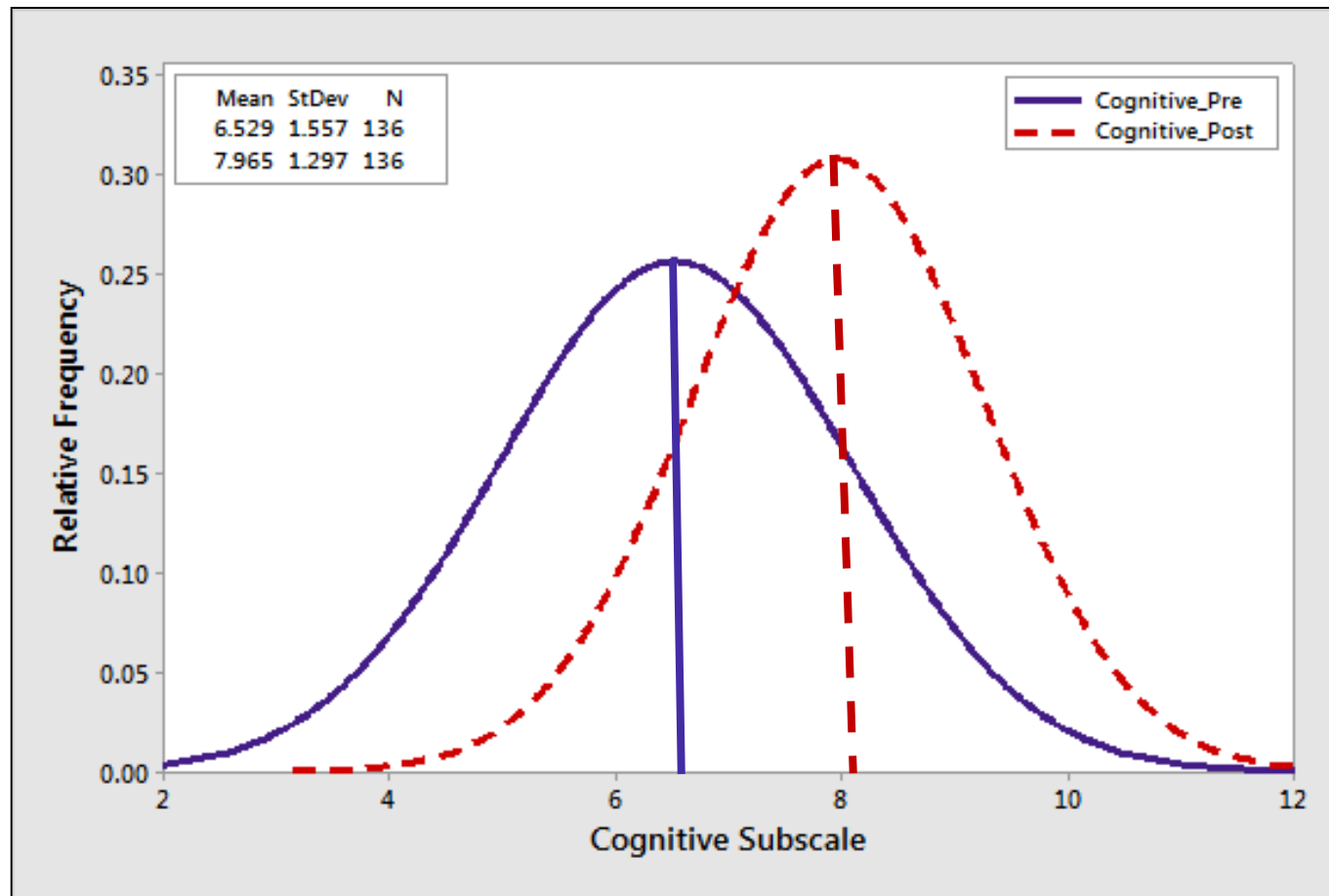
Effectiveness of VSE on Students'
Perceived Clinical Cultural Competence

Distribution of Overall Scores



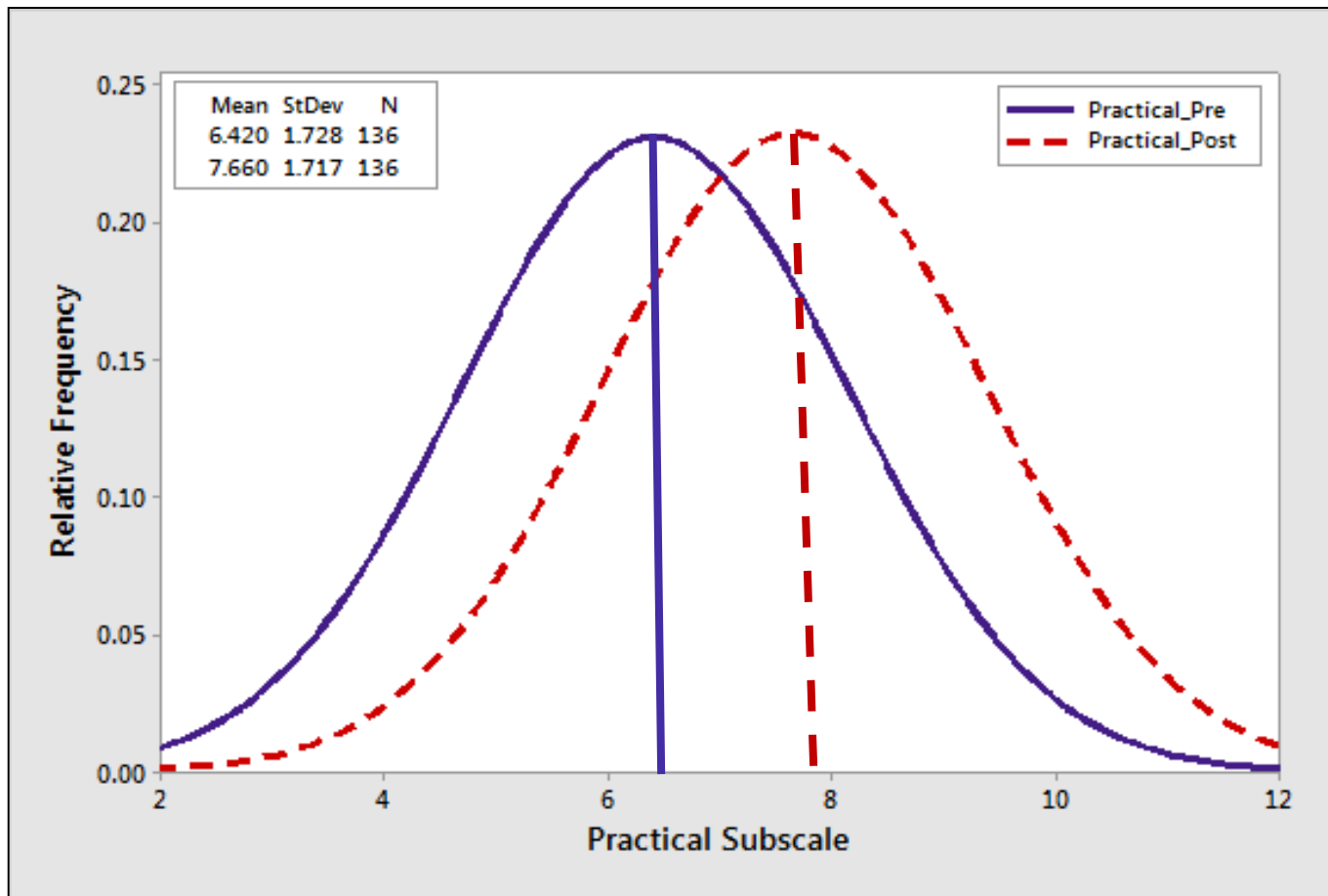
*Statistically significant ($p < .05$)

Distribution of Cognitive Subscale Scores



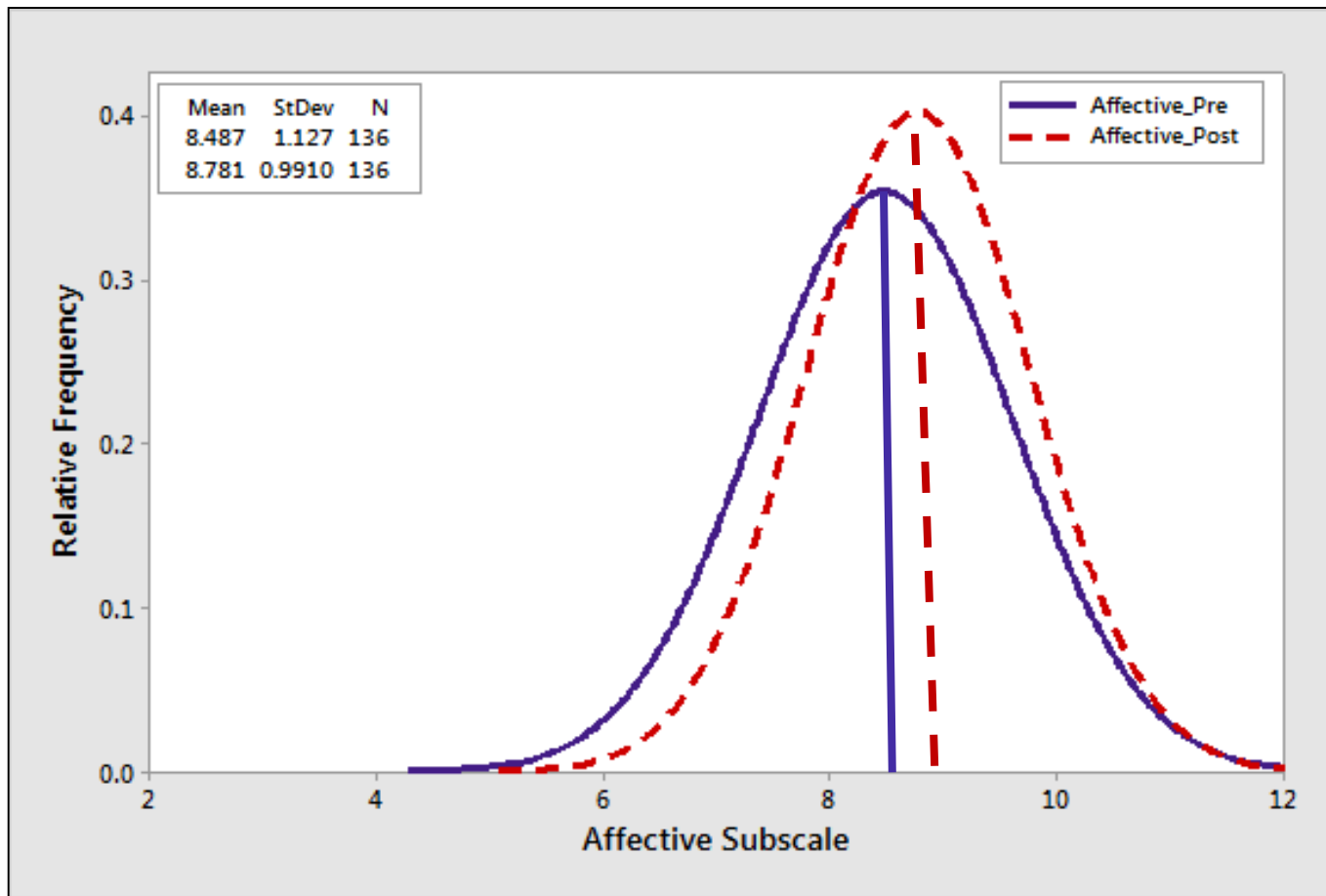
*Statistically significant ($p < .05$)

Distribution of Practical Subscale Scores



*Statistically significant ($p < .05$)

Distribution of Affective Subscale Scores



*Statistically significant ($p < .05$)

Aim 2

Students' Abilities to Formulate
Culturally Appropriate Plans of Care

Plan of Care Results

Subset	Type	Mean	SD	Std. Error Mean
Incorporates findings from cultural assessment	Amish	9.12	.485	.118
	African American	9.35	.493	.119
Demonstrate understanding of virtual patient's access to care	Amish	9.94	.243	.059
	African American	9.41	.712	.173
Incorporates cultural health practices such as folk medicine, if appropriate	Amish	9.12	.781	.189
	African American	8.82	.636	.159
Identifies key health teaching needs of virtual patient and appropriate delivery method	Amish	8.71	.920	.223
	African American	8.82	.636	.154
Is realistic given the virtual patient's scenario and culture	Amish	8.76	.664	.161
	African American	9.12	.697	.169
Plan of Care Rubric Score	Amish	45.65	2.029	.492
	African American	45.53	2.154	.522

Aim 3

Perceptions of Project Stakeholders

Post Course Student Evaluation

Post Course Student Evaluation Question	Collaboration		No Collaboration		Mean Difference
	Mean	SD	Mean	SD	
Overall, the Virtual prenatal community module helped me meet the learning objectives.	3.35	1.130	3.49	1.132	-0.14
Overall, the Virtual prenatal community module helped strengthen my understanding related to the influence of culture on health.	3.58	1.063	3.65	1.135	-0.07
The Virtual prenatal community module helped me understand the prenatal health needs of underserved African-American women.	3.47	1.165	3.41	1.237	0.06
The Virtual prenatal community module helped be understand the prenatal needs of Amish women.	3.77	1.031	3.86	1.060	-0.09
Directions and tools used in the Virtual prenatal community module were clear and organized.	2.96	1.277	3.27	1.253	-0.31
I would recommend the Virtual prenatal community module to my colleagues.	2.68	1.359	2.80	1.348	-0.12

Post Course Student Evaluation Students in Collaborative Group

Post Course Student Evaluation Question	Ashland		Duquesne		Mean Difference
	Mean	SD	Mean	SD	
Collaborating with nursing students from another school of nursing was of value to me in the Virtual prenatal community module.	2.85	1.347	2.65	1.687	0.20

Qualitative Analysis

- **Students**
 - Most helpful-interaction with “real patients”
 - Lesson learned-assumptions that are made about cultures
- **Faculty**
 - Value of shared expertise and knowledge
 - Sharing of resources
- **Community Members**
 - Enjoyed the interaction with students
 - Took more time than they expected



Discussion

- Students' cultural competence was strengthened through the VSE, specifically
 - Knowledge
 - Interviewing clients
 - Values, beliefs, and attitudes
- Plan of care
 - Access to care
 - Health teaching needs
 - Incorporate cultural practices
 - Provide realistic care



Limitations

- Blackboard more familiar to Duquesne students
- Sample size discrepancy between schools
- Timing of project and length (over 7 weeks)
- Lack control group

Lessons Learned

- Logistics: Reconsider the scheduling and time allotted for project design, implementation, and evaluation
- Provide pre-project practice session for students unfamiliar with Blackboard
- Design strategies to minimize time commitment for community members
- Include learning activities to address/prevent stereotypical comments by students with clients

Future Research

- Expand the variety of VSEs
- Collaborate with interdisciplinary healthcare teams



Conclusions

- **Population Health:** Cultural competence can be impacted through intentional interventions.
- **Collaboration:**
 - The VSE was an innovative way to build capacity and increase the students exposure to culturally diverse populations
 - Collaboration helps students to gain access to diverse population and gain cultural competence
- **Cultural Competence:**
 - TSE scores significantly increased after participating in the VSE
 - Care plans demonstrated integration of culturally competent care.

References

- American Association of College of Nursing. (2014). *Nursing shortage*. Retrieved from <http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage>
- Department of Health and Human Services [DHHS]. (2014). *Culturally competent nursing care: A cornerstone of caring*. Retrieved from <https://ccnm.thinkculturalhealth.hhs.gov/>
- Hayden, J., Smiley, R., Alexander, M., Kardong-Edgren, S., & Jeffries, P. (2014). The NCSBN national simulation study: A longitudinal, randomized, controlled study replacing clinical hours with simulation hours in prelicensure nursing education. *Journal of Nursing Regulation* (5) 2, S1-66.
- Jeffreys, M. (2010). *Teaching cultural competence in nursing and health care*. (2ed.). New York, NY: Springer Publishing Company.
- National Council of State Boards of Nursing, (2013). *NCLEX RN examination: Detailed test plan for the national council licensure examination for registered nurses*. Chicago, IL

