



Enhancing Interprofessional Communication: An Interprofessional Academic Simulation Experience

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Background & Purpose

Effective interprofessional (IP) communication has been cited as a crucial element in supporting patient safety. Schools that educate and train healthcare professionals face many challenges when trying to bring students of multiple disciplines together to learn how to work together before entering practice. IP experiences have been shown to promote "autonomous motivation for IP collaboration". The purpose of this IP simulation was to bring baccalaureate nursing students (BSN) and doctoral physical therapy (DPT) students together to collaborate in a simulated patient care scenario.

Objectives

- ✓ Demonstrate interprofessional communication skills for safe and effective team work
- ✓ Demonstrate integration and application of case base model of care
- ✓ Demonstrate integration and application skills for impact of pathology, patho-physiology and evaluation, treatment, and plan of care for a patient in the acute care setting
- ✓ Demonstrate reflective practice in evaluating personal and interprofessional collaboration



Logistics

- ✓ Deciding appropriate point in each program where students would be able to engage with members of another profession
- ✓ Aligning student schedules
- ✓ Formulating learning objectives with a focus on interprofessional communication
- ✓ Designing an experience to include 3 different patient scenarios that involved collaborative effort between care providers
- ✓ Determining need to employ and train standardized patients since scenarios involved transferring or ambulating patients

Simulation-Based Learning Experience (SBLE)

- ✓ Learners: 77 DPT students; 12 BSN students
- ✓ SBLE repeated 7 times: approximately 18 students per group
- ✓ All 3 patient scenarios ran in two open-ward style rooms simultaneously
- ✓ Student Scenario Ratio: 2 DPT students: 1 BSN student
- ✓ Open-ward rooms video and debrief sessions were video taped for education purposes
- ✓ All students complete pre-assessment using SPICE 2* and ICCAS**
- ✓ All students complete post-assessment using SPICE 2, ICCAS, W(e)Learn Program Assessment Scale

Standardized Patient Scenarios:

- #1: Cerebral vascular accident and aspiration pneumonia; needs to be transferred to chair to eat breakfast.
- #2: Heart failure and congestive obstructive pulmonary disease; needs to be transferred to bedside commode.
- #3: Cholecystectomy; needs to ambulate to the bathroom.

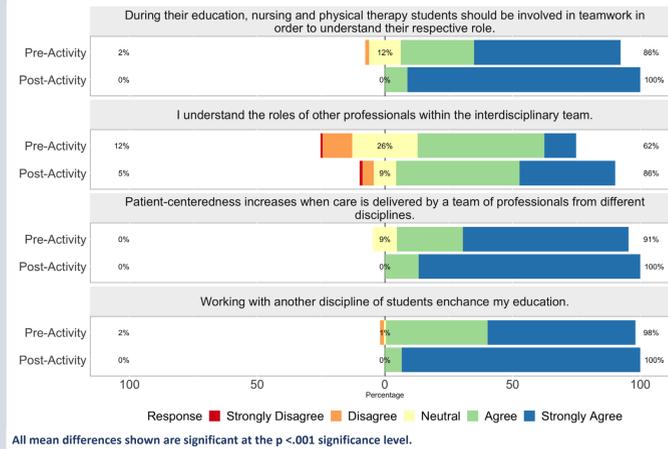
Session Outline

- ✓ Prebrief: 30 minutes
- ✓ Simulation Experience: 30 minutes
- ✓ Debrief: 30 minutes utilizing the plus/delta approach and progressing with additional questions. Debriefing was facilitated by faculty from both disciplines.

*Student Perception of Physician-Pharmacist Interprofessional Clinical Education
**Interprofessional Collaborative Competencies Attainment Survey

Methods and Results

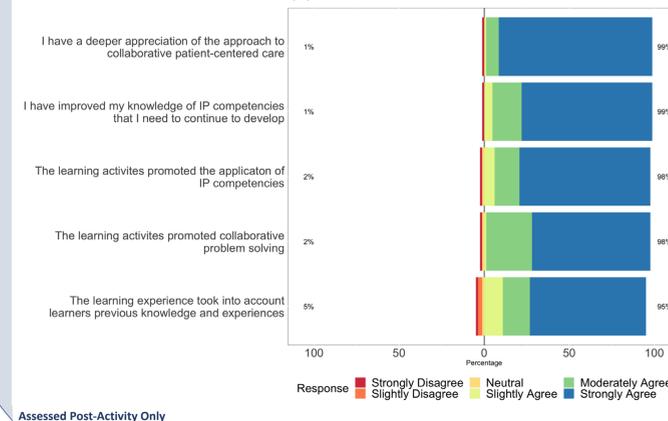
SPICE 2 Results



ICCAS Results



W(e) Learn Results



Considerations for Instruments

- ✓ No validated interprofessional assessment tools for nursing and physical therapy students
- ✓ Consideration of students' time commitment to complete the tools
- ✓ Process for collecting completed instruments
- ✓ Surveying controls
- ✓ Analyzing data

All students completed pre- and post-SBLE surveys:

SPICE 2*

Purpose: Measure medical and pharmacy students' perceptions of IPE experience in experimental education settings

- ✓ 10 items
- ✓ 4 IP Teamwork
- ✓ 3 Roles/Responsibilities
- ✓ 3 Patient Outcomes
- ✓ Given Pre- and Post-activity

ICCAS**

Purpose: Assess change in IP-collaboration-related competencies in healthcare students and practicing clinicians before and after IPE training interventions

- ✓ 20 items
- ✓ Given Pre- and Post-activity

W(e)Learn IP Program Assessment Scale

Purpose: Designed to provide learner feedback to faculty and program administration regarding structure, content, service, and outcomes of the program

- ✓ 30 items
- ✓ Given Post-activity only



Discussion

- ✓ Implementing this interprofessional simulation was challenging but highly rewarding
- ✓ Based off this initial experience the simulation was repeated again this past Spring with a new cohort and plan are to repeat for years to come
- ✓ Recommend using SPICE 2 and ICCAS, but feel the W(e)Learn was burdensome and could be done with fewer than 30 items



Conclusion

This was a great opportunity for the 2 professional programs to come together by using simulated patient-case scenarios to improve and enhance communication and understanding or healthcare roles.

Analysis of pre- and post-SBLE responses for both the SPICE-2 and ICCAS indicated that there was no difference between BSN and DPT students at pre- or post-activity testing, which we interpreted to mean that the students were well-matched.

SPICE-2: Comparing post- to pre-SBLE responses revealed that all participants reported more positive attitudes toward IP health care teams and the team approach to patient care post-SBLE. Interestingly, DPT students experienced more change toward positive attitudes post-activity than did BSN students; we hypothesize that this can be attributed to differences in clinical experiences, which DPT students had not yet experienced.

ICCAS: Students reported greater IP collaborative competencies post-SBLE.

W(e)Learn: Student responses indicated that this SBLE was a valuable and positive learning experience.

DPT students on long term clinicals will be surveyed for carryover of the IP SBLE to evaluate interprofessional communication. Plan to implement this IP SBLE each Spring semester.

References

Archibald, D., Trumpower, D., & MacDonald, C. J. (2014). Validation of the interprofessional collaborative competency attainment survey (ICCAS). *Journal of Interprofessional Care, 28*(6), 553-558. doi: 10.3109/13561820.2014.917407

Casimiro, L., MacDonald, C. J., Thompson, T. L., & Stodel, E. J. (2009). Grounding theories of W(e)Learn: A framework for online interprofessional education. *Journal of Interprofessional Care, 23*(4), 390-400. doi: 10.1080/13561820902744098

Decker, S., Anderson, M., Boese, T., Epps, C., McCarthy, J., Motela, I., Palaganas, J., Perry, C., & Puga, F. (2015). Standards of Best Practice: Simulation Standard VIII: Simulation-Enhanced Interprofessional Education (Sim-IPE). *Clinical Simulation in Nursing, 11*, 293-297. doi: 10.1016/j.ecns.2015.03.010

Dominguez, D. G., Fike, D. S., MacLaughlin, E. J., & Zorek, J. A. (2015). A comparison of the validity of two instruments assessing health professional student perceptions of interprofessional education and practice. *Journal of Interprofessional Care, 29*(2), 144-149. doi: 10.3109/13561820.2014.947360

Gaspar, M. L., & Dillon, P. M. (2012). *Clinical simulations for nursing education: Instructor volume*. Philadelphia, PA: F. A. Davis Company.

National Center for Interprofessional Practice and Education. (2018). *Assessment and evaluation*. Retrieved from: <https://nexusipe.org/advancing/assessment-evaluation>

Smith, L. M., Keiser, M., Turkelson, C., Yorke, A. M., Sachs, B., & Berg, K. (2018). Simulated interprofessional education discharge planning meeting to improve skills necessary for effective interprofessional practice. *Professional Case Management, 23*(2), 75-83. doi: 10.1097/NCM.0000000000000250

Zorek, J. A., Fike, D. S., Eickhoff, J. C., Engle, J. A., MacLaughlin, E. J., Dominguez, D. G., & Seibert, C. S. (2016). Refinement and validation of the student perceptions of physician-pharmacist interprofessional clinical education instrument. *American Journal of Pharmaceutical Education, 80*(3), Article 47.

