

## Sigma's 29th International Nursing Research Congress

### Opposites Attract: A Unique Partnership Between Nursing and Construction Management Students

Deborah Spoerner, DNP, MSN, RN, CPNP

Rebecca Johnson, MBA, RN, CPN

M. Erin Hoying, MSN, RN, CPN

**Abby Berg, MSN**

*School of Nursing, Purdue University, West Lafayette, IN, USA*

Background: Combined service learning (SL) and interprofessional education (IPE) experiences can advance student learning outside traditional classroom boundaries and unify professional values and beliefs. Service learning occurs when there is a balance between learning goals and service outcomes (Furco, 1996). IPE promotes teamwork and collaboration, and can lead to a better understanding of essential roles, responsibilities, and relationships for effective collaboration (Murdoch, Epp, & Vinek, 2017). Undergraduate students participating in combined SL and IPE experiences report appreciation for the work of others, respect for interprofessional teamwork, and confidence in the ability to work in partnership with other professions.

In a recent report from the American Academy of Colleges of nursing, *The New Era of Academic Nursing*, there is a call for academic nursing to cultivate teaching strategies which prepare future nurses for the changing healthcare practice (AACN, 2016). As nursing education moves into the future, there has been an increasing shift towards preparing nurses to practice in an interdisciplinary practice. Nurses will no longer be siloed into roles, but instead work in a collaborative role. IPE is an exemplar strategy which can be utilized. Currently, IPE in healthcare and even across healthcare into other disciplines when focused on population health issues is guided by Interprofessional Education Collaborative (IPEC, 2016).

While not uncommon for IPE and SL to be linked in the education setting as a teaching strategy, usually the collaboration is between like minded disciplines. For instance, nursing students working with other healthcare professionals, such as medical students. The uniqueness of this IPE and SL was the collaboration of students from differing disciplines. For the purpose of this project, undergraduate nursing and construction management students partnered and engaged in service learning with a local child development center to design and construct a natural playscape.

Project Implementation: Eight interdisciplinary student teams were required to work collaboratively, apply principles of their respective professions, participate in reflection activities, and develop a professional proposal for a natural playscape. Nursing students applied principles of growth and development throughout the project, while construction management students applied principles of design. The final proposals were presented to the community partner, course instructors, and classroom peers. The community partner ultimately selected aspects of the proposals to implement at the child development center.

Reflection activities were an integral piece which allowed students to link the experience to their current and newly acquired knowledge. Schmidt and Brown (2016) recommend having continuous reflective activities throughout the experience; this allows students to disseminate the challenges, questions, and insights which were gained over the experience. In addition, Schmidt and Brown (2016) endorse multiple delivery methods of reflection be utilized before, during, and after the experience. The use of a reflection matrix allows for organization of the activities. In addition to written reflective activities before and during the project, the students created a video journal which served as a reflection of their experience in SL and IPE.

Results: Following the project, students submitted anonymous surveys to discuss the efficacy of combined SL and IPE as an educational strategy for nursing students. Survey questions addressed the impact of the project on teamwork, communication, problem solving, and how the project may benefit students in their future career. The aspects of teamwork, communication and problem solving are not new topics for healthcare related IPE projects but what do student responses reveal? Will the feedback responses be similar to those produced in a similar study where students reflected issues with time restraints when collaborating with other disciplines, were course objective met through this IPE experience as they were in this study, and is there an appreciation for the benefits of learning to enhance their communication skills across professions? (Leander, 2014).

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**Title:**

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**References:**

American Association of Colleges of Nursing. (2016). *Advancing healthcare transformation: A new era for academic nursing*. Washington, DC: American Association of Colleges of Nursing.

Bridges, D.R., Davidson, R.A., Odegard, P.S., Maki, I.V., & Tomkowiak, J. (2011, April). Interprofessional collaboration: three best practice models of interprofessional education. *Medical Education Online*, 16(10), doi: 10.3402/meo.v.16i036035

Diane R. Bridges, MSN, RN, CCM,<sup>1,\*</sup> Richard A. Davidson, MD, MPH,<sup>2</sup> Peggy Soule Odegard, PharmD, BCPS, CDE, FASCP,<sup>3</sup> Ian V. Maki, MPH,<sup>3</sup> and John Tomkowiak, MD, MOL<sup>4</sup>

Furco, A. (1996). *Expanding Boundaries: Serving and Learning*. Florida Campus Compact. Interprofessional Education Collaborative (2016). *Core competencies for interprofessional collaborative practice: 2016 update*. Washington DC: Interprofessional Education Collaborative.

Leander, S.A., Maloney, S.M., Ruebling, I., Banks, R., Pole, D., & Kettenbach, G. (2014, September). The power of many minds working together. Qualitative study of an interprofessional service-learning capstone course. *Journal of Research in Interprofessional Practice & Education*, 4(2), 1-17.

Murdoch, N.L., Epp, S., & Vinek, J. (2017). Teaching and learning activities to educate nursing Students for interprofessional collaboration: A Scoping review. *Journal of Interprofessional Care*, 31(6), 744-753, DOI: 10.1080-13561820.2017.1356807.

Schmidt, N.A., & Brown, J.M. (2016). Service learning in undergraduate nursing education: strategies to facilitate meaningful reflection. *Journal of Professional Nursing*, 32(2),100-106. doi:10.1016/j.profnurs.2015.06.006.

**Abstract Summary:**

Undergraduate nursing and construction management students partnered and engaged in service learning (SL) with a local child care center to design a natural playscape. In undergraduate nursing

education, combining SL and interprofessional education appears to be a worthwhile method to facilitate learning, enhance learner socialization, and positively impact the community.

**Content Outline:**

Background: Service Learning and Interprofessional Education are joined together in an unlikely partnership between bachelor level nursing and construction management students in hopes of creating an enhanced learning environment ripe for improvement on interprofessional communication and practice.

Project Implementation: Nursing students, construction management students and the child development center community partner were partnered together in order to build a natural playscape. Nursing students provided the growth and development expertise, construction management students provided the technical expertise and the community partner, a local child development center, acted as the customer so that each party had defined roles.

Throughout the project, students were assigned various reflection activities central to service learning and interprofessional education goals. Students were allowed an opportunity to present their designs and suggestions to the community partner, build a portion of their product and show a video journal reflection of their experience.

Results: Final results from the project are outstanding. Themes that are expected revolve around teamwork, communication and problem solving.

First Author

Deborah Spoerner, DNP, MSN, RN, CPNP  
Purdue University  
School of Nursing  
Clinical Assistant Professor  
West Lafayette IN  
USA

**Professional Experience:** ACADEMIC EXPERIENCE Clinical Assistant Professor 2006-present Purdue University West Lafayette, IN · Coordinator, Senior level · Pediatric Nursing Coordinator · Pediatric Nursing Lecture and Clinical for BSN, PNP, FNP programs · Pediatric Nursing Lecture and Clinical for Accelerated Second Degree Informatics, Genetics, Simulation, Service Learning, Int Indiana University, Continuing Lecturer 1989-1992

**Author Summary:** Deborah Spoerner holds more than 30 years of pediatric nursing experience. Beyond teaching at the undergraduate and graduate level, she continues to provide health promotion for pediatric patients as a Pediatric Nurse Practitioner. Her research focuses on improving health systems through identifying populations at risk.

Second Secondary Presenting Author

***Corresponding Secondary Presenting Author***

Rebecca Johnson, MBA, RN, CPN  
Purdue University  
School of Nursing  
Continuing Lecturer  
West Lafayette, IN  
USA

**Professional Experience:** Rebecca received her Registered Nurse License from Marian University in 2012 and took her first nursing job at Peyton Manning Children's Hospital in Indianapolis, IN. Since 2012 Rebecca has worked primarily as an RN in either Pediatric or Emergency Room settings. It was while nursing in Pediatrics that Rebecca realized she had a true drive to help others in their path to becoming a nurse. She began as a Limited Term Lecturer for Pediatrics in 2015 and is now a Continuing Lecturer with a focus on Fundamentals and Pediatric Nursing.

**Author Summary:** Since 2012 Rebecca has worked primarily as an RN in either Pediatric or Emergency Room settings. It was while nursing in Pediatrics that Rebecca realized she had a true drive to help others in their path to becoming a nurse. She began as a Limited Term Lecturer for Pediatrics in 2015 and is now a Continuing Lecturer with a focus on Fundamentals and Pediatric Nursing.

Third Secondary Presenting Author

***Corresponding Secondary Presenting Author***

M. Erin Hoying, MSN, RN, CPN  
Purdue University  
School of Nursing  
Continuing Lecturer  
West Lafayette IN  
USA

**Professional Experience:** Erin has 15 years of bedside experience in pediatrics and pediatric care management. She has been an educator for 1.5 years teaching in foundations and pediatrics.

**Author Summary:** M. Erin has been an educator for a little over a year. She has taught in both the foundation and pediatric course. She has her Master's in Nursing Education which has prepared her for incorporating evidence based education strategies into undergraduate nursing education.

Fourth Primary Presenting Author

***Primary Presenting Author***

Abby Berg, MSN  
Purdue University  
School of Nursing  
Clinical Assistant Professor  
West Lafayette IN  
USA

**Professional Experience:** Abby Berg is a clinical assistant professor at Purdue University School of Nursing, the Coordinator of Purdue's Second Degree Nursing Program, and a Certified Pediatric Nurse Practitioner. Her current primary areas of teaching include Nursing Practice Foundations and Pediatric Nursing courses. In addition, she practices part time as a PNP in primary care. Her scholarship focuses on innovative nursing education strategies, specifically using technology to enhance learning outcomes.

**Author Summary:** Abby Berg is a clinical assistant professor at Purdue University School of Nursing, the Coordinator of Purdue's Second Degree Nursing Program, and a Certified Pediatric Nurse Practitioner. Her current primary areas of teaching include Nursing Practice Foundations and Pediatric Nursing courses. In addition, she practices part time as a PNP in primary care. Her scholarship focuses on innovative nursing education strategies, specifically using technology to enhance learning outcomes.