

## EXPERIENCE EXCHANGE

# Utilizing learning communities to enhance classroom and clinical synergy across the curriculum

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## ABSTRACT

There is evidence that nursing students do not perceive themselves to be engaged in learner-centric environments. High-impact educational practices are effective pedagogies that are embraced in nursing education. This paper describes the implementation of one high impact education practice, curriculum-based learning communities, within a cohort of undergraduate nursing students. Student feedback and perceptions of the program were assessed using focus groups and analyzed for themes. Curriculum-based learning communities were regarded positively by student participants. Through program participation, students were able to articulate a professional identity and described being able to connect issues in population and systems-based care to patients across a variety of clinical settings. Outcomes of program participation are discussed with implications for future research.

**Key Words:** Learning community, High impact educational practice, Nursing education

## 1. INTRODUCTION AND BACKGROUND

The American Association of Colleges of Nursing (AACN) Essentials<sup>[1]</sup> emphasize the importance of immersion or synthesis experiences to integrate previous learning and demonstrate competence in a variety of contexts; such experiences must mimic professional practice. The revised Essentials build on the nursing discipline and provide a framework for educating nurses that integrates liberal education to meet core competencies for professional nursing practice. The domains and accompanying competencies are applicable to diverse patient populations and settings in which nurses practice. The 10 domains are broad and distinct areas that together represent the professional practice of nursing and include, knowledge for nursing practice; person-centered care; population health; scholarship for nursing practice; quality and safety; interprofessional partnerships; systems-based practice; informatics and healthcare technologies; professionalism; personal, professional, and leadership development.<sup>[1]</sup>

The movement to competency-based education poses new opportunities for nurse educators to desaturate the curriculum while optimizing the transfer of competence across clinical settings, particularly those underutilized in undergraduate nursing education such as community and ambulatory care settings.

### Background

Student engagement is critical to support learning and personal development. Decades of research support that student learning outcomes are optimized when students are actively engaged in educationally purposeful activities. The National Survey of Student Engagement (NSSE) is a national assessment of first and senior year students' participation in activities that support learning and personal development. This annual survey most recently assessed 531 colleges and universities representing 294,507 undergraduate students, with over 6 million students completing the survey since 2000.<sup>[2]</sup>

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The NSSE instrument has five subscales and 41 total items; subscales assess high impact educational practices that lead to student engagement including: 1) level of academic challenge, 2) student interactions with faculty, 3) supportive campus environment, 4) active and collaborative learning, and 5) enriching educational experiences.

Derived from the NSSE, a series of practices are described as “high impact.” High impact educational practices are purposeful educational activities that support deep learning as well as personal and practical gains. While the benefits of participating in HIPs are positive for all students, underrepresented students tend to benefit even more from HIPs participation, yet are less likely to participate.<sup>[3]</sup> The NSSE reports on student engagement through six types of HIPs: service-learning, learning community, research with faculty, internship or field experience, study abroad, and culminating senior experience.

A secondary analysis of the 2003 NSSE dataset indicated that nursing students perceive themselves as significantly more academically challenged than peers in health professions and education.<sup>[4]</sup> Furthermore, despite rigorous nursing curricula, nursing students did not perceive themselves to be engaged in interactive, student-centered educational environments. Nursing students perceived themselves spending significantly less time than education students in learning activities such as making presentations, tutoring others, and discourse within classes.<sup>[4]</sup> A similar analysis was repeated with the 2010 NSSE and found no improvement in active and collaborative student engagement.<sup>[5]</sup> This finding aligns with evidence that suggests educators continue to use teacher-centered teaching models, and that nursing students perceive interactive lectures as being the most engaging and effective for learning.<sup>[6]</sup> The use of strategies to enhance student engagement as described by the NSSE are described in the nursing education literature.<sup>[7]</sup> Of the six HIPs,<sup>[3]</sup> there is little evidence of the use of learning communities in nursing education literature.

Learning communities (LCs) are a type of HIP that are present on campuses of all sizes, and are implemented to enhance student learning, improve student experience, and increase retention. LCs can focus on interest groups within the university community or be linked to curriculum-based learning within or across disciplines. Within curriculum-based LCs, curriculum manipulation is deliberate and seeks to explore connections and deep questions among students and faculty. Regardless of the model, curriculum-based LCs span at least two courses and can be introduced at any student level. A variety of curriculum-based LC models can be used to drive the experience, and this flexibility is desirable, as program and university needs vary.<sup>[8]</sup> The three models

from which curriculum-based LCs have emerged include: embedded cohort, multiple linked courses, and coordinated studies.<sup>[8]</sup> The purpose of this paper is to describe the development and implementation of an embedded cohort model in a traditional baccalaureate nursing program.

## 2. METHODS

This project was selected as one of 42 institutions awarded funding from 2018 through a Health Resource Services Administration Nurse Education, Practice, Quality, Retention, Registered Nurses in Primary Care (HRSA-NEPQR-RNPC) training program to educate BSN students with the skills needed to work in primary care settings. The Undergraduate Primary Care and Rural Education (UPCARE) project immersed students in rural, primary care clinics over four semesters, precepted by Enhanced Primary Care registered nurses (EPCRN), who are RNs practicing at the top of scope of licensure in primary care settings. Fully admitted undergraduate nursing students were recruited to apply to be UPCARE scholars and were selected by the project faculty based on demographics and desire to work with underserved clients in primary care settings. UPCARE scholars received a stipend and were enrolled in small scholar cohorts of 8-16 students, and completed 150 direct care hours in rural, primary care settings. In addition to longitudinal clinical learning experiences, another high-impact educational practice, this project emphasized the learning community as a modality to enhance peer interaction and faculty mentorship. The project created opportunities for students to reflect on their EPCRN practice experiences in addressing social determinants of health in underserved, rural communities.

Each UPCARE scholar cohort met monthly across all four semesters in the project, spanning the entire BSN program. Participants were required to attend each monthly seminar which was one to two hours in duration depending on the objectives. Participation in the UPCARE learning community was not associated with a course grade. The existing BSN curriculum was used as a framework to develop learning community outcomes that were scaffolded by semester and project faculty developed a series of monthly seminars. Cohorts began with assessing the rural community in which they would work and the role of the registered nurse in various settings. As participant cohorts progressed in the program, they expanded their focus to examine the role of the nurse working at top of scope in collaborative settings that addressed client and population health needs related to: rural health, substance use disorder, health policy and advocacy, inter-professional collaborative practice, population health, and chronic disease prevention and control. Each seminar was designed to promote student engagement beyond the clinical

course experience, with emphasis on the EPCRN role working in an interprofessional team to provide high quality care in underserved settings. Seminars also provided space for students to reflect on their own personal experiences.

Participants examined the impact of rurality on health access and outcomes, and used community health needs assessment data to deepen their understanding of population health priorities as well as resource availability and gaps. Interprofessional clinical learning experiences in community-based mental health care provided rich opportunities for faculty-led seminars to examine students' perceptions of collaborative practice and their role as a member of the care team. Seminars examined mental health stigma and community-based agencies led discussions on substance use disorder topics including peer-led recovery programs, and the intersection of law enforcement and health care. Professional development seminars analyzed the enhanced primary care registered nurse role and explored nurse sensitive outcome indicators in ambulatory care settings. Scholar cohorts worked in their learning communities to develop presentations on their clinical work which were presented at the local and state level and professional nursing conferences.

Upon UPCARE project completion, scholars participated in focus group interviews to reflect on their perceptions of their personal and professional development as an UPCARE scholar. Approval from the Institutional Review Board was obtained. A series of semi-structured focus group questions were designed by the project faculty to assess participant experiences and growth in the program, perceptions of the EPCRN role, and perceived synthesis between curricular and UPCARE program experiences. The focus group sessions were de-identified, recorded, and analyzed for themes by two project faculty. Scholars described not only co-curricular learning gains but also the value of teamwork and professional identity formation through participation in the learning community.

### 3. RESULTS

There were 6 total UPCARE cohorts that were formed with 56 total student-scholar participants. Overall, participants were mostly female (95.7%) and white (78.7%), with the second largest demographic being Asian students (10.6%). The age range of program participants was 19 to 22 years old at the entry of the program. Three scholars (6.4%) were English as a second language speakers and seven (14.9%) reported being fluent in a language other than English.

Scholars described the learning community as positively shaping their overall nursing education experience and perceived a greater level of camaraderie within the cohort as

compared to non-UPCARE peers in the nursing program. The learning community provided an intimate and unique experience with peers who had similar interests in working with underserved populations in primary care. Shared interests in primary care and rural health enriched discussion and fostered collaboration within each cohort. Scholars reflected on the value of diversity within a team as a contributor to professional growth and enhanced teamwork. Faculty-led seminars fostered the development of mentoring relationships which led to students reporting that they felt supported and likely to seek help or advice.

Participation in the UPCARE learning community changed scholars' perceptions of nursing practice and the importance of advocacy for patients and the profession. Scholars described the learning community's early focus on population and systems-based care as a facilitator to providing patient-centered care regardless of the clinical setting throughout their nursing program experience. Scholars self-appraised an increased level of preparedness in being able to assess and address social determinants of health in other clinical learning and simulation experiences as compared to their nursing school peers.

### 4. DISCUSSION

Nursing education is rapidly evolving to address pressing issues in healthcare including access, equity, quality, value, and safety. The AACN Essentials emphasize the development of competence as central to developing practice ready nurse-graduates. Teaching-learning strategies need to incorporate competency domains that span knowledge, skills, attitudes, and behaviors. To thrive in complex, and ever-changing healthcare environments, faculty and students must be actively and intentionally engaged in professional development.

This project described the use of curriculum-based learning communities to augment the educational experience of traditional undergraduate nursing students. Student reflections from the experience were gathered using focus group interviews. While the findings from the focus group interviews provided rich information, there were limitations. The qualitative, descriptive design allowed for exploration and reflection of participant experience in the program. There was no quantitative assessment to determine the specific contribution of learning community participation on individual attributes such as knowledge, attitude, skill or confidence. Although program participants appraised their clinical performance as higher than that of their peers, the lack of a comparison group does limit the interpretation of these findings. Despite project faculty efforts to prioritize underrepresented groups in this project, the generalizability of the findings may be

limited due to the homogeneous sample.

Embedded, curriculum-based learning communities with a clear connection to the curriculum contribute to enhanced academic achievement and persistence towards academic goals as well as academic and social engagement, with students being more likely to take risks and engage in the classroom.<sup>[8]</sup> Efforts to optimize student engagement and motivation to learn must span beyond teaching-learning strategies and more broadly assess the effectiveness of program and curriculum design on student outcomes. As nurse educators look to engage diverse groups of learners, institutional gaps and barriers to learning for students from underrepresented groups must be a consideration in program planning and assessment.<sup>[9]</sup> Furthermore, more research is needed to describe outcomes of participation in high-impact educational experiences for underrepresented student groups.<sup>[9]</sup>

The UPCARE learning community integrated students' knowledge from classroom and clinical experiences, and actively engaged students in the formation of their professional identity. This program innovation deepened students' understanding of healthcare systems, access, equity, and value in a rural, underserved setting. Further research is needed to define measurable student learning outcomes that align with competencies, such as those outlined by AACN.<sup>[11]</sup> The project faculty were active members of the curriculum committee and used the existing curriculum framework in aligning student learning outcomes to learning community experiences as students progressed in the UPCARE project. Curriculum-based, embedded cohort models are one high-impact practice that are adaptable across programs and can be responsive to curriculum change and revision. Further research is needed to determine the contribution of such approaches on competency development and the value in enhancing students' nursing program experience.

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### AUTHORS CONTRIBUTIONS

Dr. Christina Lam was responsible for data collection and drafting the manuscript. Dr. Tina Switzer was responsible

for project implementation and editing of the manuscript. Dr. Erika Metzler-Sawin was project director and was involved in all phases of project design, implementation, evaluation and preparation of this manuscript. Dr. Jamie Robinson was responsible for design, data collection, and data analysis for this manuscript. All authors read and approved the final manuscript and agreed to the final author order listing for this manuscript.

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The authors declare they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### DATA SHARING STATEMENT

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