UNIVERSITY *of* ROCHESTER
MEDICAL CENTER

May 15, 2023

AACN Innovations in Professional Nursing Award
AACN Membership Committee
American Association of Colleges of Nursing
655 K Street NW
Suite 750
Washington, DC, 20001

Dear AACN Membership Committee:

The transition to competency-based health professions education and the increasing complexity of healthcare delivery, among other drivers, requires a reimagination of nursing education for 21st century healthcare. The University of Rochester School of Nursing has responded to this consequential need with strategic investment in creating technology-rich active learning environments that foster the development of critical thinking skills and clinical judgment in our students. A key development in the school's digital transformation was the introduction of the iROC (Redefining our Classroom) mobile learning program that supports high-quality, technology-enhanced instruction and assessment of learning in multiple environments. Built on three pillars – high-impact pedagogy, dynamic learning environments, and a reimagined faculty role – we showcase our activities and accomplishments to support faculty role transition as facilitators of student learning and self-discovery.

Achieving transformational change in nursing education cannot happen without faculty commitment and competence in employing teaching/learning practices and creating learning environments that will prepare nimble, adaptive, systems thinkers for the realities of contemporary nursing practice. Faculty development efforts involving embedded instructional design course support, hands-on education sessions, and the creation of faculty resources over the past five years in our baccalaureate program have transformed the classroom and redesigned the faculty role to support student learning and self-discovery. We believe these activities exemplify the criteria for the AACN Innovations in Professional Nursing Award.   Please feel free to contact us with a request for additional information or to answer any questions

Sincerely,

Lisa Kitko, PhD, RN, FAHA, FAAN
Dean and Professor of Nursing
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Lydia D. Rotondo, DNP, RN, CNS, FNAP
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Redefining Our Classroom through Faculty Development

<u>Description of the programmatic innovation</u>
In 2018, the University of Rochester School of Nursing (URSON) launched the **Redefining Our Classroom (iROC)** mobile learning initiative to achieve our vision for 21st-century nursing education practices. The iROC program is underpinned by three pillars - *exemplary digital learning environments*, *faculty as facilitators of learning*, and *authentic learning practices*. This application highlights efforts taken to support the faculty development pillar. Critical to this effort has been the formation of our mobile learning group and education innovation team (EdIT). Since program inception, the mobile learning group, an interprofessional team including administrative and academic program leadership finance, information technology, faculty, and instructional design (ID), has guided the strategic transformation of teaching practices and the implementation of educational technologies in diverse learning environments to better prepare nurses for practice. EdIT consists of instructional designers (faculty and staff) who are embedded in each academic program. An assigned EdIT member works with individual course faculty to support faculty development, spur curricular innovation, and strengthen digital literacy.

A multi-faceted approach has been utilized to personalize faculty development in the Accelerated Bachelor's Program for Non-Nurses (APNN). For example, a monthly contact hour series, *Educational Strategies to Prepare Students for Practice*, is an interactive session where EdIT overviews best practices in teaching and learning and offers faculty hands-on support to apply the strategy to their courses. *Clinical Instructor Orientation and Lab Faculty Bootcamps* ensure consistency and establish expectations to facilitate student learning in these technology-enhanced experiential learning environments.

Additionally, each didactic course has an *assigned instructional designer* to support curricular innovation and facilitation in active learning environments. Responses from URSON faculty on the 2022 University of Rochester Teaching with Technology Faculty Survey reflect the success of our ongoing efforts to promote teaching effectiveness in technology-rich learning environments. Seventy-two URSON faculty (67% response rate) completed the survey. Seventy-five percent rated the use of technology as "very important" to their teaching with another 20% rating it as important. Over half cited a primary motivation for incorporating more technology in their teaching to increase student engagement and accessibility. Seventy-three percent responded that a SON staff member is available to offer education-technology assistance. Similarly, qualitative feedback demonstrated that faculty feel supported in technology-enhanced teaching environments to ensure sustained teaching effectiveness.

> It [technology] definitely expands my creativity when incorporating student activities. Even teaching in-person, using technology in class discussions enables introverted students time for processing and allows them to bring their voice to the discussion. The Education Innovation Team at SON...approach should be replicated across the university. An amazing resource that drives Innovation!

<u>Serves as a catalyst for change within the curriculum and/or educational mission of the institution.</u>
Five years after launching the iROC program, digital technology has transformed the way our students learn and how our faculty teach, fostering an environment of discovery in the classroom. From day one, students are provided iPad training sessions to get comfortable with navigating and using the apps and pre-loaded digital books. Students gain foundational course knowledge

through pre-learning assignments and are able to apply their knowledge during classroom activities. This collaborative atmosphere facilitates critical thinking and collaboration as students learn how to care for patients and successfully transfer classroom learning to practice settings. Increasing faculty comfort, confidence, and competence with technology integration in the classroom has been pivotal to program success and has resulted in widespread commitment to digital transformation and ongoing academic innovation efforts.

Digital Transformation

Achievement of digital transformation is measured by two key performance indicators- the addition of embedded instructional design in our APNN program and the integration of education technology in our classroom (teaching/learning strategies) based on rating using the Substitution, Augmentation, Modification, Redefinition (SAMR) Framework (Puentedura, 2010) of Technology Integration. Table 1 provides examples of technology integration at each level.

- **Embedded instructional design:** EdIT support has been central to the success of our iROC mobile learning program and a key part of the academic innovation infrastructure created to accelerate faculty adoption of active learning strategies and the use of digital technologies within a competency-based education paradigm. Table 2 illustrates progress made in embedding instructional design support in the APNN program since 2019.
- **Technology integration:** By applying the SAMR Framework (Puentedura, 2010), we can assess the progressive adoption of teaching technology integration in the classroom demonstrated by an incremental increase in the percentage of courses at the M-R levels (transformed) and a corresponding decrease in courses at the S-A SAMR levels. The years included in this data set reflect the implementation of the iROC mobile learning in the APNN program with a progressive increase in M-R level courses (APNN- 100%). See Table 2.

Table 1   SAMR Model of Technology Integration with Examples

Level	Definition	Example
Substitution	Technology replaces a prior learning activity without any functional change to the content.	Replacing pen and paper quiz with online test.
Augmentation	Addition of interactive digital enhancements provides more independent and student-centric learning without changing content.	Addition of Kahoot! application during class allows students to assess understanding of content; addition of Panopto video clarifies complex concepts.
Modification	Technology is used to redesign tasks that go beyond traditional classroom limits; fosters peer interaction and engagement.	Students create VoiceThread presentation or participate in a Yellowdig discussion of a clinical case study.
Redefinition	Technology is used to connect the classroom and real world to create new learning activities not possible without technology.	Students use Docucare (an academic electronic medical record) for barcode medication administration; interactive telehealth case study incorporating public health data.

Table 2   Embedded EdIT Support and Digital Transformation

Digital Transformation in the APNN Program (iROC implementation)				
EdIT Support	**2019-20**	**2020-21**	**2021-22**	**2022-23**
APNN courses w/ embedded ID	25% (N=12)	67% (N=12)	92% (N=13)	**100%** (N=13)
SAMR level	**2019-20**	**2020-21**	**2021-22**	**2022-23**
APNN courses w/ embedded ID	25% (N=12)	67% (N=12)	92% (N=13)	**100%** (N=13)
% S-A levels	67%	25%	15%	0%
% M-R levels	33%	75%	85%	**100%**

Potential for replication and dissemination.
Our focus on technology-enabled transformative teaching/learning practices is demonstrated by significant investment in faculty development and faculty support to enhance our students' educational experience. Based on our successful approach, we have been invited to present this structure and evaluation methods nationally and internationally at events such as, the Apple Reimagining Nursing webinar (2021), the Apple Innovation Summit (2023), and Lippincott Innovation Summit (2023). In addition, we achieved Apple Distinguished School recognition in October 2021. Faculty have also demonstrated success with implementing active learning strategies enhanced by educational technologies and have disseminated their work at various national conferences where they have networked with faculty from other institutions about adoption of these practices (2019, N=6; 2020, N=2; 2021, N=5; 2022, N=7; 2023 (Jan.- April), N=2).

Has involved teams of faculty when possible (e.g., across programs, disciplines). Is consistent with AACN's mission and vision.
The interprofessional iROC program, fully supported by SON leadership, utilizes a team approach including experts in curriculum design and educational technologies as recommended by AACN in the 2019 *AACN White Paper- Vision of Academic Nursing*. Faculty teaching in the APNN program are fully committed to implementing evidence-based, equitable, and inclusive teaching strategies/assessments to support student success. Additionally, this catalyst for change in nursing education has positively influenced future nurse educators in the master's in nursing education program to incorporate innovative best practices as they are often precepted by faculty in the APNN program.

Demonstrates advancement of professional nursing education
Faculty development, as a pillar of the iROC program, has revitalized and redefined how faculty facilitate active learning in a digital age. This transformation has inspired faculty to engage in ongoing advancement opportunities such as attaining NLN CNE or CNEcl certification (2019, total N=4; 2020, total N=7; 2021, total N=10; 2022, total N=14), Apple Educator certification (N=12), and dissemination of best practices (see above).