

PROBLEM

THEORETICAL FRAMEWORKS

PROPOSED CURRICULUM PLAN

- A gap between faculty development, AI Innovation, and Caring Science
- AI advancements are rapidly transforming healthcare, nursing education, digital learning technologies, competency-based education (CBE), simulation science, predictive analytics, and data-informed teaching practices.
- Nursing faculty must be prepared not only to use technology competently, but to preserve and elevate the caring-human connection, ethical practice, and person-centered nursing education.

BACKGROUND/INTRODUCTION

- Despite rapid advancements in artificial intelligence (AI), digital health technologies, simulation science, and data-driven education, many nursing faculty development initiatives remain fragmented, technology-focused, or operationally driven without adequate integration of caring science frameworks (NLN, 2023; WHO, 2021).
- Caring science frameworks are underrepresented in many technology-focused faculty development programs, contrasting nursing's foundational commitment to human caring, relational practice, and person-centered education (Locsin, 2017; Watson, 2008).
- Nursing faculty are expected to teach students how to use emerging technologies responsibly while preserving nursing's identity as a caring discipline.

Needs Assessment: 2024 & 2025-Faculty reported:

- Interest in technology-aided teaching
- Limited AI literacy and confidence
- Uncertainty regarding ethical AI integration
- Desiring institutional guidance, policies, and structured implementation support

The Call: A human-centered approach that integrates AI and Caring Science and places faculty at the center of innovation and growth.

Technological Competency as Caring in Nursing (TCCN)



Overarching Tenets:

- Competent, compassionate technological use and caring coexist as complementary expressions of nursing.
- Technologically competent faculty model the integration of compassion, ethical discernment, human connectedness, and technological proficiency.

Consolidated Framework for Implementation Research (CFIR)

The Consolidated Framework for Implementation Research (CFIR)

Tenet:

- Forecasts or explains barriers and facilitators to implementation success
- Domain 1:** Intervention Characteristics
Domain 2: Outer Setting
Domain 3: Inner Setting
Domain 4: Individuals' Characteristics
Domain 5: Process

TCCN + CFIR

***Humanistic*Relational*Organization*Implementation Sustainable Change**

Aims

Within 12 months, implement and evaluate a sustainable faculty development ecosystem that will:

- Increase faculty AI literacy competency scores by at least 30% from baseline as measured by pre-/post-assessments.
- Achieve 80% faculty participation in professional development activities focused on caring pedagogy, competency-based education (CBE), and inclusive teaching practices.
- Support at least 75% of participating faculty in integrating AI-enhanced and caring science-informed teaching strategies into one or more courses.
- Increase scholarly productivity related to AI, caring science, or educational innovation by 10%, as measured by presentations, publications, grant submissions, or quality improvement projects.
- Establish an evidence-based implementation infrastructure, guided by the Implementation Science and the Consolidated Framework for Implementation Research, with ongoing evaluation demonstrating at least 80% faculty satisfaction and intent to sustain the initiative beyond the initial year.

Phase 1: Readiness and Engagement

Timeline: Months 1–3

Objectives/Activities/Deliverables

- Faculty readiness, Consensus/Implementation Teams Activities
- AI literacy survey/Stakeholder meetings/Baseline competency assessments/Readiness assessment using CFIR domains
- Deliverables: Faculty readiness report/Gap analysis/Stakeholder map/Implementation roadmap

Phase 2: Foundational Faculty Development

Timeline: Months 4–9

Module 1: Foundations of AI in Nursing Education

Topics: AI fundamentals, generative AI tools, ethical AI use

Learning Outcomes:

- Explain foundational AI concepts relevant to nursing education.
- Evaluate ethical implications of AI use.
- Develop responsible AI integration strategies

Module 2: Locsin's Theory and Technological Caring

Module 3: Competency-Based Education (CBE) and AI

Module 4: Universal Design for Learning (UDL)

Module 5: AI-Enhanced Teaching Strategies

Module 6: Scholarship and Research Innovation

CFIR Domains

EXPECTED OUTCOMES

- Cultivate technologically competent, caring, innovative nursing faculty who ethically integrate AI and educational technologies to transform teaching, mentorship, scholarship, and student success.

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Human-Centered Innovation_AI, Caring Science & The Future of Faculty Development

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Biography

As a nationally certified nurse educator (CNE) in acute care and academic settings, and a Certified Health Education Specialist (CHES) in community settings, Dr. Marshall brings a wealth of experience and knowledge to nursing education and to discussions of health and wellness. Currently, she serves as the Faculty Development Coordinator at the Christine E. Lynn College of Nursing at Florida Atlantic University.

Dr. Marshall's primary research interests include the intersection of spirituality, health, and technology, as well as health promotion, Faith Community Nursing (FCN), Community-Partnered Participatory research (CPPR), and Technology-assisted learning.

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