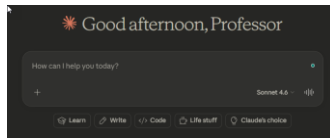


Problem

- Literature on generative AI in nursing education has largely emphasized detection of student misuse rather than strategies for faculty implementation an integration.
- There is a critical gap in nursing education regarding availability of evidence-based framework to support nurse educator adoption of AI technologies.
- There is an urgent need to identify readiness levels and practical barriers preventing nurse education from implementing AI tools.

Purpose

- The purpose of this project is to address a critical gap in nursing education with the adoption of generative AI technology use.
 - Providing nurse educators methods to adopt AI technology using an innovation configuration map.
- Nurse educator adoption of AI tools is essential and can be accomplished through:
 - Professional development
 - Structural support
 - Identification of strategies for faculty integration of AI tools to shift the focus away from a primary emphasis on detecting student misuse.



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Background

- The concerns-Based Adoption Model (CBAM) is a validated framework designed to assess how individuals implement new innovations within educational environments.
- Most existing research regarding generative AI in nursing education has focused on preventing and detecting student academic dishonesty.
- There is currently a lack of evidence-based strategies and frameworks that address how faculty should integrate AI into their won professional workflows and teaching practices.
- Understanding the specific stages of educator adoption is a prerequisite for creating effective professional development that supports technological literacy and curriculum innovation.

CBAM Framework

CBAM was developed to study mandated program implementation, and its diagnostic instruments were validated in that context. We will use this framework to describe faculty use of AI. CBAM uses three components described below.

Stages of Concern

This describes the affective and cognitive preoccupations of individuals as they encounter AI. There are seven stages grouped into three clusters:

- Unconcerned reflects no awareness or engagement
- The Self-Cluster captures early concerns about what AI is and what it means for the individual.
- The Task Cluster reflects concerns about the mechanics of use, logistics, time, and effort.
- The Impact Cluster reflects concerns oriented outward toward students, colleagues, and improvement of practice.

Levels of Use

This describes the behavioral profiles for faculty use of AI.

- Non-use
- Orientation – faculty exploring what's available
- Preparation – acquiring access and learning basic functions
- Mechanical Use – Task-driven and inconsistent use
- Routine Use – Comfortable and predictable use of AI
- Refinement – deliberately adjust use to improve outcomes
- Integration – Coordinating AI use with colleagues
- Renewal – Contribute to broader AI innovation

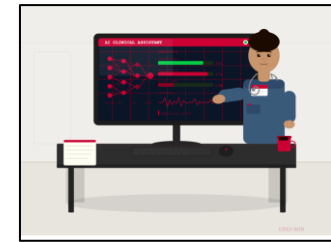
Innovation Configuration Mapping

This process creates an operational picture of what faculty AI use looks like in practice defining acceptable and unacceptable AI use based on faculty behaviors.

- Start by defining specific components of AI use
 - Extent of use with variations ranging from non-use to super-use.
 - Types of uses with variations ranging from editing help to extensive data projects
- Create a map that describes the different ways AI is used by faculty

Methods

This is a mixed-method implementation study
We will recruit nurse educators across the United States
Participants complete surveys
Matrix analysis of Stages of Concern by Levels of Use
Configuration Map will describe faculty use



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Implications for Nursing Education

The results of this study will include:

- An innovation Configuration Map providing a framework for studying nurse educator adoption of generative AI tools in their workflow and teaching. This map will be a tool that can be used by other researchers examining generative AI in nurse education.
- Description of nurse educator adoption of generative AI at each time-point, overall and stratified by years of teaching experience.
- Estimates of the magnitude of the effect of structured professional development on nurse educator adoption of generative AI, calculated using the Friedman Test for non-parametric repeated ordinal data. This test will allow us to measure the shift in Level of Use between those who did and did not attend professional development.

Resources

Access the AI Toolkit



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