The integration of artificial intelligence (AI) in nursing education offers opportunities to enhance teaching efficiency, personalize learning, and improve student outcomes. Faculty concerns regarding ethical implications, accuracy, and privacy present barriers to adoption. The Faculty AI Champion Program was developed to empower nurse educators with AI competencies, fostering a culture of innovation while ensuring ethical and responsible use.

Productivity and Pedagogy: Faculty AI Champions Program Outcomes

David J. Bunnell, MSHS, PA-C, DFAAPA#, Cheryl A. Fisher, EdD, MSN, RN*, Cory Stephens, DNP, MSN, RN, CNE, NI- BC, CPHIMS, FHIMSS*,
Veronica Quattrini, DNP, MS, FNP-BC*, Amanda Roesch, DNP, MPH, FNP-C*
University of Maryland, Baltimore - * School of Nursing - # School of Graduate Studies

Background

The integration of artificial intelligence (AI) in health professions education offers opportunities to enhance teaching efficiency, personalize learning, and improve student outcomes. Faculty concerns regarding ethical implications, accuracy, and privacy present barriers to adoption. The Faculty AI Champion Program was developed to empower nurse educators with AI competencies, fostering a culture of innovation while ensuring ethical and responsible use.

Method

Using the ADDIE model, the program was systematically designed, implemented, and evaluated through interactive workshops. Faculty participants engaged in AI training focused on productivity, pedagogy, and ethical considerations. Pre- and post-program surveys assessed knowledge, confidence, and AI integration.

Phase	Action
Analysis	Identifying faculty needs and gaps in AI knowledge, ethical concerns, and technical proficiency.
Design	Structuring the program's goals, learning outcomes, and instructional approach.
Development	Creating AI training materials, workshops, and interactive learning experiences.
Implementation	Delivering faculty training through hands-on workshops and interactive sessions.
Evaluation	Assessing faculty progress through pre- and post-program surveys.

Faculty AI Champion Program Two-Pronged Approach

Productivity	Pedagogy
• AI-assisted syllabus development to streamline course planning • AI-supported efficient grading and feedback • Workload management tools to reduce administrative burden • AI-generated discussion prompts and learning materials • Custom GPTs to assist in content creation and organization	• AI-enhanced case-based learning to foster critical thinking • AI-assisted simulations for realistic clinical training • Adaptive AI tools for personalized student learning experiences • AI-generated competency-based education (CBE) resources • AI-powered virtual teaching assistants for student support

Results

- Seven participated in the first cohort, with 100% completing the pre-survey and 57% completing the post-survey.
- Faculty reported increased understanding of AI (mean score: pre 3.4 → post 4.25/5) and improved self-efficacy in identifying, locating, and evaluating AI tools.
- The program received strong endorsement (avg. rating: 9.5/10).
- Field notes highlighted enthusiasm for AI integration in health professions education and its practical applications in teaching. Faculty aimed to expand their AI knowledge, explore practical tools, and exchange insights for daily use.

Word cloud from answers to the free-text question "What do you hope to learn?" in the intake survey

Conclusion

As AI reshapes healthcare and education, educators must lead its ethical and effective integration. The Faculty AI Champion Program equips faculty with AI skills, fostering continuous learning and ensuring nursing graduates are prepared for technology-driven clinical practice. This program is a model for evaluating AI's long-term impact on education in health professions. Future research can explore AI adoption among faculty, its effects on student outcomes, and its role in competency-based education.

The first cohort met on Halloween Day 2024. The group photo was transformed into this cartoon using OpenAI's ChatGPT.

References:
Chang, C.Y., Yang, C., Jen, H., Ogata, H., & Hwang, G. (2024). Facilitating nursing and health education by incorporating ChatGPT into learning designs. *Educational Technology & Society*, *27*(1), 215–230. https://doi.org/10.30191/ETS.202401_27(1).TP02
De Gagne, J. C., Hwang, H., & Jung D. (2024). Cyberethics in nursing educataion: Ethical implications of artificial intelligence. *Nursing Ethics, 31*(6), 1021-1030. https://doi.org/10.1177/09697330231201901
Higashitsuji, A., Otsuka, T., & Watanabe, K. (2024). Impact of ChatGPT on case creation efficiency and learning quality in case-based learning for undergraduate nursing students. Teaching and Learning in Nursing, 000(2024), 1-8. https://doi.org/10.1016/j.teln.2024.10.002
Huang, M.L., & Huang, S.T. (2024). The Application of generative AI for nursing education. Studies in Health Technology and Informatics, 315, 641. https://doi.org/10.3233/SHTI240256

This project was supported by the Leaders in Education: Academy of Presidential Scholars (LEAPS) Instructional Innovation Seed Grant Program