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AI-Powered Curriculum Mapping: A new Tool for DNP Programs?

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Disclosure

- We have no actual or potential conflict of interest in relation to this presentation.

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Objectives

- Describe the exploratory application of text generating artificial (AI) in facilitating DNP curriculum mapping

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Background

- Transitioning to AACN (2021) Essentials
- Mapping of DNP curriculum, a complex task
  - Curriculum Design
  - Teaching Methods
  - Assessment and Evaluation
  - Clinical Experience/DNP Project
- Developing exploratory inquiry: Can generative AI be applied to assist with the DNP curriculum development process?

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The BIG Idea

- Generative AI, a disruptive technology
- Cutting-edge technology:
  - Analyze existing curriculum
  - Mapping competencies to course content
- Notable absence of research in context of nursing curriculum mapping

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Methodology

- Used exploratory / descriptive design
- Matched AACN's advanced-level competencies and featured concepts
- Queried Google Bard
  - Which course learning outcomes match with the below domains (with explanation)? Map the matches in a table. Here are the course learning outcomes… and here are the domains…
- Queried OPenAI ChatGpt-4
  - Select the best matched concepts for nursing practice with the course learning outcomes 1 through 6. Here are the course learning outcomes:…. And here are the concepts:…

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Results

- Transferred data output into spreadsheet software
- Output data included rationale for each match
- Substantial proportion of the course learning outcomes matched accurately

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Limitations

- Validity and reliability untested
- Accuracy - requires expert review

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Summary / Implications for Practice

- AI as a tool for curriculum mapping: improves faculty productivity but requires human oversight

- Balancing AI with expertise: Integration of AI must complement, not replace expert review

References

American Association of Colleges of Nursing. (2021). The Essentials: Core competencies for professional nursing education. Accessible online at https://www.aacnnursing.org/Portals/0/PDFs/Publications/Essentials-2021.pdf

Google Inc. (2023). Bard [Research large language model]. https://bard.google.com

OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model]. https://chat.openai.com/chat

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