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Impact of Generative AI in Nutrition Education & Counseling

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ND344 Impact of Generative AI in Nutrition Education & Counseling

Purpose

This assignment aims to help you consider the use of generative AI from the perspective of both a nutrition professional and a client. AI systems are being developed to provide health and nutrition information to the public. Although generative AI is becoming more popular and useful for professionals and the general public, there are significant considerations regarding its use – both positive and negative. Nutrition professionals must keep abreast of the latest tools and topics impacting the profession and their clientele.

Skills

The purpose of this assignment is to help you familiarize yourself with generative AI platforms from the perspective of a nutrition professional whose peers and clients will be using these systems. Additionally, this assignment will help you strengthen your information literacy.

- Assess generative AI tools available for clients.
- Consider how to communicate with clients about available generative AI tools.
- Analyze generative AI nutrition information for accuracy.
- Gather information from multiple sources to identify current challenges and benefits generative AI presents to nutrition professionals and their clients.

Knowledge

In the completion of this assignment, you will need to:

- Draw upon foundational nutrition information learned in your fundamentals of nutrition course (basic nutrition course).
- Practice prompting generative AI systems for nutrition recommendations.
- Utilize APA citation style for all information gathered.

Task

Collect your information before engaging in meaningful discussions with peers before reporting consensus to the class.

Step 1

To prepare for in-class discussions, investigate the following questions individually (not group work) and prepare an approximately two-page summary of your findings utilizing APA citations. Generative AI should not be used to create your summary.

1. Research the benefits and concerns of AI for nutrition professionals and list your top five reasons for each side with citations.
2. Research the benefits and concerns of AI for clients seeking nutrition information and list your top five reasons for each with citations.

3. Visit a generative AI program of your choice and ask it to answer three nutrition questions you think a client may ask. Assess the accuracy of the results with support from evidence-based sources.
    o Some examples of systems you could try (but are not limited to) include Claude, Google Gemini, Microsoft CoPilot, or Chat GPT. Some of these systems do not require you to create an account to use the system (e.g. ChatGPT).
    o Keep a record of your prompts and AI responses. Consider if the quality of your question impacts the generated results.

Step 2

Engage in discussion with your group mates. Appoint one individual to serve as a recorder and one individual as a spokesperson for your group. The recorder should collect a summary of the major takeaways from your group discussion for questions 1-3 above. AI should not be used to create this summary.

Additional points to discuss:

- What path did each of you take to determine the accuracy of the results?
- Compare how each of you cited your sources, including the generative AI systems used; were your in-text citations and source in the reference list formatted correctly?

Step 3

Each student will upload a copy of their individual prework summary and the group summary document to the Blackboard assignment link.

Criteria for Success

To be successful with this assignment, students will come to class prepared for and engage in discussion with their peers. Individual group work and a summary of group findings will be uploaded to Blackboard.

Refer to Blackboard for points and due date.

Rubric

	Incomplete	Complete
Connection to Experience	Weak connections are made or it is unclear how it relates to the topic and/or assignment.	Clear connections are made between the pre-work, the discussion, and the learning specific to the assignment guidelines.
Accuracy	Submitted work has clear errors and/or appropriate evidence is not provided for answers to questions.	Submitted work reflects an accurate understanding and knowledge of assignment content. Appropriate evidence is provided when needed.
Relevance	Information provided is too vague to align with the specific topic or assignment.	Learning is reflective of the specific content from the assignment and the discussion was related to the assignment requirements.
Depth	Minimal connections are made between the assignment and discussion. Lacks critical thinking or analysis and is too brief to meet the requirements of the assignment.	Provides a necessary level of complexity when needed and is not over-simplified. Answers are reflective of a deep understanding and awareness of the assignment content. Provides alternative views and other potential interpretations of content.
Significance	Conclusions and statements are too broad to apply to this topic or assignment.	Conclusions and statements are directly connected to the assignment and the partner discussion experience.

Rubric adapted from Ash, S.L., & Clayton, P.H. The articulated learning: An approach to guided reflection and assessment. Innovative Higher Education 29, 137–154 (2004).
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