Text version of ‘Generative AI and Critical Thinking: Expanding Bloom’s Taxonomy’ infographic

This infographic visually represents an expanded version of Bloom’s Taxonomy, incorporating Generative AI and its impact on critical thinking. The central part of the infographic contains a circular diagram divided into three domains: Cognitive Domain (Green), Affective Domain (Blue), and Metacognitive Domain (Orange). Surrounding the central circle are labelled icons representing various cognitive, affective, and metacognitive skills related to AI and critical thinking. Each label includes a short description of how AI contributes to that specific thinking skill.

The infographic uses color-coded sections to differentiate the three domains:

Cognitive Domain (Green): Represents learning and knowledge application.

Affective Domain (Blue): Represents emotional and ethical considerations.

Metacognitive Domain (Orange): Represents self-awareness, analysis, and refinement of knowledge.

Each section includes specific AI-related skills and descriptions, as outlined below:

## Cognitive Domain

* **Discovering**: Rapid information gathering and idea generation using AI.
* **Understanding**: Simplifying complex concepts and bridging knowledge gaps.
* **Applying**: Integrating theoretical knowledge with practical scenarios.
* **Analysing**: Critically evaluating the accuracy and biases of AI content.
* **Creating**: Generating and refining innovative ideas beyond traditional methods.

## Affective Domain

* **Collaborating**: AI acts as a cognitive partner in co-creating knowledge.
* **Ethical Reasoning**: Navigating ethical considerations and academic integrity with AI.
* **Reflective Thinking**: Critically assessing AI’s limitations and adapting strategies.

## Metacognitive Domain

* **Interrogating and Refining**: Iterative questioning to refine AI-generated insights.
* **Articulating**: Formulating precise prompts for more accurate AI outputs.
* **Iterative Learning**: Engaging in a cycle of continuous refinement and evaluation.
* **Meliorating (Information)**: Integrating AI outputs with traditional sources of information for depth.
* **Meliorating (Tools and Technologies)**: Combining AI and non-AI tools to enhance learning outcomes.

Reference:  
Gonsalves, C. (2024). *Generative AI’s impact on critical thinking: Revisiting Bloom’s Taxonomy.* Journal of Marketing Education. <https://doi.org/10.1177/02734753241305980>

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