# Navigating the AI-Enhanced PME Landscape Series, Part 1 Exploration

# Intersession Assignment: Curriculum Analysis and Opportunity Mapping for AI Integration

## Purpose

This assignment is designed to help you apply the concepts from Session 1 ("Laying the Foundation") to your own PME context. By analyzing a specific part of your curriculum, you will identify concrete opportunities for integrating Artificial Intelligence to enhance learning, address potential gaps, and support doctrinal requirements. This work will directly prepare you for Session 2, where we will focus on rapid prototyping of AI-enhanced learning activities.

## Due Date

To be completed before Session 2 (Date: August 13) Submission: Please be prepared to discuss your findings in small groups during Session 2. You may want to bring your notes digitally or on paper.

## Instructions

Please select one module, unit, or distinct learning objective from a course you currently manage, teach, or are very familiar with. Using this selection as your focus, please complete the following steps and document your responses.

## Part 1: Context and Current State

This might take :30-45 minutes.

1. Identify Your Focus:

* Course Name:
* Selected Module/Unit/Learning Objective:
* Brief Description of this Module/Unit/Objective: (1-2 sentences)

1. Learning Outcomes & Doctrinal Alignment:

* What are the specific, measurable learning outcomes for this selected module/unit/objective? (List 2-3 key outcomes)
* How do these outcomes align with broader OPMEP or other doctrinal requirements (e.g., critical thinking, joint operations, leadership principles)? Be specific.

1. Current Pedagogical Approach:

* Briefly describe the current primary teaching methods used for this module/unit/objective (e.g., lecture, seminar, case study, practical exercise).
* Briefly describe the current primary assessment methods used (e.g., exam, paper, presentation, simulation performance).

1. Identify Pain Points & Opportunities (Reflection):

* Where do learners typically struggle with this content or these skills?
* What aspects of teaching or assessing this module/unit/objective are particularly time-consuming or challenging for instructors?
* Are there any potential learning gaps (e.g., skills not fully developed, knowledge not retained effectively) that current methods don't fully address?

## Part 2: Brainstorming AI Integration

This might take :45-60 minutes.

Building on your analysis in Part 1, brainstorm potential ways AI could be integrated to enhance this specific module/unit/learning objective.

1. Brainstorm AI Integration Ideas:

* Generate 2-3 distinct ideas for how AI could be used. For each idea, consider:
  + Idea #1:
    - AI Application Type: (e.g., GAI for brainstorming, AI for personalized feedback, AI for content analysis, AI for scenario generation).
    - How it would work: Briefly describe the proposed AI-enhanced activity or process. How would learners interact with it? How would instructors use it?
    - How it addresses a pain point/gap OR enhances learning: Connect this idea back to your reflections in step 4 or the learning outcomes in step 2.
    - Potential benefits: (e.g., increased engagement, deeper understanding, improved critical thinking, instructor efficiency).
    - Potential challenges/risks: (e.g., ethical concerns, technical limitations, learning curve for users).
  + Idea #2: (Repeat bullets above)
  + Idea #3 (Optional): (Repeat bullets above)

1. Describe Current vs. Potential AI-Enhanced Approach:

* For one of your brainstormed ideas, elaborate on how the current teaching/assessment method you described in step 3 could be transformed or augmented by this AI integration. What would look different for the student? For the instructor?

## Part 3: (Optional) Initial AI Tool Exploration

This might take :30-60.

If you are comfortable and have access, try to experiment with one freely available AI tool that is relevant to one of your brainstormed ideas.

AI Tool Experimentation (Optional):

* Tool Chosen: (e.g., NIPRGPT, CamoGPT, ChatGPT, Gemini, Claude, or another model of your choice).
* Task Attempted: What did you try to do with the tool in relation to your curriculum idea? (e.g., "Asked NIPRGPT to generate five discussion questions about Topic X," "Used CamoGPT to summarize three articles on Y," "Used Gemini to draft an outline for a lesson on Z").
* Brief Reflection on the Experience:
  + What worked well?
  + What were the limitations or challenges?
  + Did it spark any new ideas or concerns?
  + How might this (or a similar tool) realistically be used in your PME setting?

## Guidance for Success

* Be Specific. The more detailed your analysis of your current curriculum, the easier it will be to identify relevant AI opportunities.
* Think in Practical Terms. Focus on AI applications that are feasible within your current or near-future technological and resource constraints. Consider tools accessible to your faculty and students.
* Focus on Augmentation, Not Replacement. How can AI support and enhance human learning and instruction, particularly for developing critical and creative thinking?
* Consider Ethics. Keep the ethical implications discussed in Session 1 in mind as you brainstorm.
* Don't Aim for Perfection. This is an exploratory exercise. The goal is to generate initial ideas and identify potential pathways.

## Preparation for Session 2

Be prepared to discuss your selected module/objective, your analysis of its current state, and at least one of your AI integration ideas with a small group of peers. Your reflections on any AI tool experimentation will also be valuable to share.

This assignment will form the basis for our hands-on work in Session 2, where we will delve into rapid prototyping techniques for bringing these AI-enhanced learning experiences to life.