Handbook: Empowering PME with AI - Session 1: Laying the Foundation

Introduction to the Workshop Series

Welcome from the Facilitators

Welcome to "Empowering PME with AI: A Practical Path Through Uncertainty"! We are delighted to have you join us for this crucial workshop series. As seasoned professionals deeply invested in Professional Military Education (PME) and the transformative potential of Artificial Intelligence (AI) in education, we understand the unique challenges and immense opportunities facing federal government learning institutions today. This handbook serves as your comprehensive companion throughout our journey, designed to support your learning both during and long after our sessions. We believe that by strategically integrating AI, we can not only navigate uncertain times but actively shape a more effective and resilient future for PME.

Series Goals and Participant Outcomes

This workshop series aims to equip you, as faculty developers, course owners, faculty, and instructional designers, with the practical knowledge and actionable strategies to confidently and effectively integrate AI into your PME curriculum.

By the end of this series, you will be able to:

* Articulate the strategic imperative and ethical considerations of AI integration in PME.
* Identify specific areas within your existing curriculum where AI can augment learning and address gaps.
* Apply rapid prototyping techniques to quickly design and test AI-enhanced learning activities.
* Develop Generative AI (GAI)-partnered assignment templates that foster critical and creative thinking.
* Champion responsible AI adoption within your institution, aligning with doctrinal requirements and warfighter ethos.

Navigating This Handbook

This handbook is structured to mirror the progression of our workshop sessions, offering expanded content, practical guidance, and supplementary resources. Each chapter corresponds to a key topic, allowing you to read ahead, review concepts, or use it as a standalone guide for your staff. We encourage you to annotate, highlight, and make it your own. Appendices provide valuable tools, a glossary for key terms, and a bibliography for deeper dives.

Chapter 1: Setting the Stage – AI in the Modern PME Landscape

1.1 The Evolving PME Environment: Navigating Uncertainty

Professional Military Education exists in a state of perpetual evolution, constantly adapting to geopolitical shifts, technological advancements, and the changing nature of warfare. However, the current era presents a unique confluence of challenges:

* Budgetary Constraints. Fiscal realities often limit the adoption of expensive new technologies or extensive curriculum overhauls.
* Shifting Organizational Structures. Frequent reorganizations can disrupt long-term planning and create uncertainty in resource allocation and strategic direction.
* Staffing Limitations. Reduced personnel or a high operational tempo can strain existing resources, making the integration of new paradigms seem overwhelming.

Despite these pressures, the demand for high-quality, relevant PME remains unwavering. Doctrinal requirements and guidance continue to emphasize the development of adaptable, critical-thinking warfighters. This creates a paradox: how do we innovate and integrate cutting-edge capabilities like AI when resources are constrained and the environment is uncertain?

The answer lies in viewing AI as an Enhancer and Efficiency Tool, rather than a costly, disruptive overhaul. AI can optimize existing processes, free up valuable human capital from repetitive tasks, and provide new avenues for learning without necessarily demanding entirely new infrastructure. It's about working smarter, not just harder, with the tools you already possess.

1.2 The Imperative of Doctrinal Alignment

At the heart of PME lies its mission: to educate and develop leaders capable of executing military doctrine and achieving national security objectives. Any integration of new technology, including AI, must align seamlessly with this core mission. Key doctrinal requirements, such as fostering critical and creative thinking, remain paramount for warfighter development.

* Understanding OPMEP and Key Doctrinal Requirements. The Officer Professional Military Education Policy (OPMEP) and other service-specific doctrinal documents provide the foundational framework for PME. These documents emphasize the cognitive skills necessary for complex decision-making, ethical leadership, and adaptability in diverse operational environments. Our approach to AI integration must directly support these established requirements.
* Focusing on Core Competencies such as Critical and Creative Thinking. These are not abstract academic pursuits but essential warfighting skills. Critical thinking enables rigorous analysis, evaluation of information, and sound judgment under pressure. Creative thinking allows for innovative problem-solving, adaptation to unforeseen circumstances, and the development of novel strategies. AI, when properly applied, can serve as a powerful catalyst for developing these very competencies.

1.3 AI as a Strategic Enabler, Not a Replacement

A common misconception is that AI will replace human roles in education or military operations. Our philosophy is fundamentally different: AI is a strategic enabler. It augments human capabilities, allowing instructors to focus on higher-order teaching and mentorship, and enabling learners to engage with complex material more deeply. It's about leveraging AI to:

* process vast amounts of data faster than any human.
* identify patterns and anomalies that are imperceptible to the human eye.
* automate repetitive tasks, freeing up cognitive bandwidth.
* generate ideas and scenarios for human refinement and critique.

The ultimate goal is to create an "augmented intelligence" ecosystem where the unique strengths of human cognition (judgment, empathy, creativity, ethical reasoning) are amplified by the speed and analytical power of AI.

Chapter 2: Deconstructing the Demand – Identifying Needs and AI Solutions

2.1 Understanding and Addressing Potential Learning Gaps in PME

Before integrating any new technology, it's crucial to understand the specific needs it aims to address. In PME, "learning loss" isn't just about forgetting facts; it can refer to:

* Decay of Complex Skills. The erosion of infrequently practiced analytical or decision-making skills.
* Outdated Knowledge. Rapid advancements in technology or doctrine rendering previous knowledge obsolete.
* Gaps in Application. Students struggling to apply theoretical knowledge to complex, ambiguous real-world scenarios.
* Inefficiency in Current Methods. Traditional methods being too slow or resource-intensive to keep pace with information volume.

Identifying these areas where current methods may fall short is the first step. AI can then be strategically deployed to bridge these gaps, offering adaptive practice, personalized feedback, or tools for rapid information synthesis.

2.2 Connecting Doctrinal Requirements to AI Capabilities

The power of AI lies in its specific capabilities. By understanding these, we can directly map them to the doctrinal requirements we aim to fulfill:

* Mapping Critical Thinking Skills to AI Tools
  + *Analysis (breaking down information) --* AI (e.g., NLP) can summarize lengthy documents, extract key entities, or identify logical fallacies in arguments.
  + *Synthesis (combining information) --* AI can help correlate disparate data points, generate comprehensive outlines from multiple sources, or propose connections between seemingly unrelated events.
  + *Evaluation (assessing information) --* AI can flag potential biases in source material, identify inconsistencies across reports, or provide counterarguments for a given proposition, prompting human critical assessment.
* Mapping Creative Thinking Skills to AI Tools
  + *Brainstorming & Idea Generation --* GAI can generate diverse ideas for problem-solving, propose multiple courses of action, or suggest novel approaches to a tactical dilemma.
  + *Scenario Generation --* AI can rapidly create complex, dynamic scenarios for wargames or ethical discussions, complete with realistic parameters and unexpected variables.

By explicitly linking AI capabilities to these cognitive skills, we ensure that technology serves pedagogy, not the other way around.

2.3 A Practical Framework for Curriculum Analysis for AI Integration

Integrating AI doesn't require a complete curriculum overhaul. Instead, it begins with a targeted analysis of existing content. We propose a practical, step-by-step framework:

* Step-by-Step Guide. (Refer to Appendix A: Curriculum Analysis Framework Worksheet for a detailed guide and template.)
  1. Select a Specific Module/Learning Objective: Choose a manageable unit of instruction.
  2. Identify Key Learning Outcomes & Doctrinal Links: What should learners know/do, and how does it connect to PME doctrine?
  3. Analyze Current Activities & Assessments: What methods are currently used? Where are the "pain points" for learners or instructors?
  4. Brainstorm Potential AI Enhancements: How could AI tools specifically address identified gaps or enhance existing activities?
  5. Consider Feasibility & Impact: Is the proposed AI integration practical within your current technology stack and resource constraints? What is the potential learning impact?

This framework helps in Identifying Low-Hanging Fruit and Strategic Priorities, allowing you to start small, achieve early successes, and build momentum for broader integration.

2.4 Reflective Activity: Initial Curriculum Scan (Guidance)

As a preliminary step to applying the framework, take a moment for individual reflection. Think about one course or module you are very familiar with.

* What is its core purpose?
* Where do students typically struggle with the content or skills?
* Are there any tasks that are repetitive or time-consuming for instructors?
* Can you envision one small way AI might assist in this area?

This brief exercise will help you identify a potential focus area for your intersession assignment.

Chapter 3: Introduction to AI in Professional Military Education

3.1 Demystifying AI: Core Concepts for Educators

Artificial Intelligence (AI) is often portrayed with a mix of hype and apprehension. For educators, it's essential to cut through the noise and focus on its practical applications.

* What is Artificial Intelligence (AI)? Broadly, AI refers to systems that can perform tasks that typically require human intelligence, such as learning, problem-solving, decision-making, and understanding language.
* Key Subfields Relevant to Education:
  + Machine Learning (ML). A subset of AI where systems learn from data to identify patterns and make predictions without being explicitly programmed. This powers recommendation engines and predictive analytics.
  + Natural Language Processing (NLP). Enables computers to understand, interpret, and generate human language. This is crucial for text analysis, translation, and chatbots.
  + Generative AI (GAI). A type of AI (often using deep learning models) capable of generating new content, such as text, images, audio, or code, based on patterns learned from vast datasets. Examples include ChatGPT, Bard, and DALL-E.
* Focus on Practical and Accessible Tools. Our emphasis is on tools that are readily available or can be integrated without massive infrastructure investment, allowing educators to experiment and innovate within their existing environments.

3.2 Practical AI Applications in PME Contexts

AI can be a versatile tool across various PME functions.

* Content Curation & Knowledge Management:
  + Summarizing lengthy research papers or doctrinal documents.
  + Identifying relevant sections in vast military archives.
  + Generating concise overviews of complex topics for pre-reading.
* Personalized Learning & Adaptive Feedback:
  + AI tutors providing foundational knowledge review or adaptive practice exercises.
  + Tailoring learning paths based on individual student performance or learning styles.
  + Providing automated, immediate feedback on objective questions or grammar/style in draft essays.
* Assessment Support & Evaluation:
  + Automating grading for multiple-choice or short-answer quizzes.
  + Assisting instructors in developing diverse assessment questions or rubrics.
  + Plagiarism detection (though with caveats in the AI era).
  + Providing initial feedback on assignment drafts for student revision.
* Idea Generation & Creative Problem Solving:
  + Brainstorming diverse tactical solutions or strategic options.
  + Generating "what-if" scenarios for wargaming or ethical dilemmas.
  + Creating initial drafts of speeches, reports, or plans for human refinement.
* Simulation and Wargaming Enhancements:
  + Developing more dynamic and adaptive AI adversaries in simulations.
  + Generating realistic operational environments or unexpected events for training.

3.3 Ethical Considerations and Responsible AI Use in Military Education

The power of AI comes with significant ethical responsibilities, especially in a military context. Responsible AI use is paramount.

* Data Privacy and Security: Protecting sensitive PME content, student data, and operational information from unauthorized access or misuse by AI systems. Understanding how data is used by commercial AI tools is critical.
* Algorithmic Bias and Fairness: AI models learn from data, and if that data reflects historical biases (e.g., demographic, cultural, or historical operational biases), the AI's outputs (e.g., in assessment, resource allocation, or even intelligence analysis) can perpetuate or amplify those biases. Ensuring fairness and equity is a constant challenge.
* Transparency and Explainability (XAI): Understanding *why* an AI system made a particular recommendation or decision. This is crucial for building trust, debugging errors, and maintaining human accountability, especially when "black box" AI models are used.
* Maintaining Human Oversight and Critical Judgment: AI should augment, not replace, human decision-making. Over-reliance on AI can lead to "automation bias," where humans uncritically accept AI outputs. PME must ensure learners develop the skills to critically evaluate AI, challenge its assumptions, and exercise independent judgment.
* Intellectual Property and Authorship: Questions arise regarding the ownership of content generated by AI, how to appropriately cite AI assistance in academic work, and the boundaries of "original" thought when AI is involved.

3.4 Discussion Points: Your Initial Thoughts and Concerns

As you consider these applications and ethical dimensions, reflect on:

* What aspects of AI in PME excite you the most?
* What are your primary concerns or hesitations about integrating AI into your curriculum or institution?
* Are there specific ethical dilemmas that feel particularly relevant or challenging in your PME context?

Chapter 4: Introduction to Rapid Prototyping and GAI Partnership

4.1 The Value of Rapid Prototyping in PME Curriculum Development

In an environment of uncertainty and rapid technological change, traditional, lengthy curriculum development cycles can be a hindrance. Rapid prototyping offers an agile alternative:

* Iterative Design: Learning by Doing, Failing Fast: Instead of aiming for perfection on the first try, rapid prototyping encourages quickly building a "sketch" or working model of an idea, testing it, gathering feedback, and then iterating. This allows for early identification of flaws and continuous improvement.
* Resource Efficiency: Testing Ideas Before Full-Scale Development: By creating low-fidelity prototypes (e.g., a simple LMS activity, a storyboard of an interaction), you can test the viability and impact of an AI integration idea without committing significant time, budget, or personnel. This minimizes risk and maximizes learning from early experiments.
* Stakeholder Engagement and Feedback: Prototypes provide a tangible artifact for discussion. It's easier for faculty, students, and leadership to provide concrete feedback on a working model than on an abstract concept, leading to better buy-in and more effective solutions.

4.2 Generative AI (GAI) as a Collaborative Partner

GAI represents a significant leap in AI capabilities, allowing systems to create novel content. In education, this positions GAI as a powerful collaborative partner:

* Augmenting Human Capabilities, Not Replacing Instructors or Learners: GAI can assist with brainstorming, drafting, summarizing, and generating diverse examples, but the human remains responsible for critical evaluation, refinement, ethical judgment, and ensuring alignment with learning objectives.
* Defining Roles: Learner, Instructor, AI: Clear guidelines are essential. For example:
  + Learner: Uses GAI for initial research, idea generation, drafting, or self-assessment. Critically evaluates GAI output and integrates it into their original work.
  + Instructor: Designs assignments that leverage GAI strategically, teaches prompt engineering, guides critical evaluation, and provides feedback on the human-AI collaboration process.
  + AI: Acts as a sophisticated tool for content generation, summarization, or idea expansion.
* Examples of GAI-Partnered Assignments:
  + AI as Research Assistant: Learners prompt GAI to summarize articles or identify key arguments, then verify and synthesize the information into an original research brief.
  + AI as Socratic Questioner: Learners use GAI to generate challenging questions or counterarguments to their own positions, then formulate robust responses.
  + AI as First Drafter: Learners prompt GAI to create an initial outline or draft of a report/speech, then critically edit, refine, and add their unique insights and voice.

4.3 Tools and Techniques for Rapid Prototyping within Your LMS

You don't need specialized AI software to start rapid prototyping. Your existing Learning Management System (LMS) offers robust tools:

* Leveraging Existing LMS Activities in New Ways:
  + Assignments: Design prompts that *require* students to use GAI, submit its output, and then critically reflect on it.
  + Forums: Create discussion prompts where students share GAI-generated content and peer-review its quality, biases, or relevance.
  + Quizzes: Use GAI to help generate diverse question stems or scenarios, or design quizzes that test critical evaluation of AI-generated text.
  + H5P: Create interactive scenarios (like "Branching Scenarios") that present ethical dilemmas related to AI, or "Drag the Words" activities to match AI capabilities to tasks.
* Storyboarding AI-Integrated Activities: Visually map out the student's journey and interaction with AI within an activity. This low-fidelity method helps clarify the process before building.
* Creating Simple Proof-of-Concept Integrations: Build a single, small activity in your LMS that demonstrates an AI concept. This "micro-prototype" can be shared for feedback and iterated upon.

Chapter 5: Preparing for Action – The Intersession Assignment

This chapter outlines the practical activity you will complete between Session 1 and Session 2. This assignment is designed to help you apply the concepts discussed in Session 1 to your own PME context, setting the stage for hands-on prototyping in our next session.

For detailed instructions and guidance, refer to your Intersession assignment.

Tips 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.
* 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.

Conclusion & Next Steps

Session 1 has laid the foundation for understanding the strategic landscape of AI in PME, demystified core AI concepts, explored practical applications, and introduced ethical considerations. We've also touched upon the agile approach of rapid prototyping and the power of GAI as a collaborative partner.

Your intersession assignment is the critical bridge to our next session. By actively engaging with your own curriculum, you will identify tangible opportunities to apply these concepts.

We look forward to seeing the fruits of your initial exploration and diving deeper into hands-on design in Session 2!

Appendix A: Curriculum Analysis Framework Worksheet

Assignment: Intersession Assignment: Curriculum Analysis and Opportunity Mapping

Purpose: This worksheet guides your analysis of a specific module or learning objective from your PME curriculum. By systematically examining its current state and identifying potential areas for AI integration, you will prepare for the hands-on prototyping activities in Session 2.

Part 1: Context and Current State Analysis

Instructions: Select one module, unit, or distinct learning objective from a course you currently manage, teach, or are very familiar with. Complete the sections below based on your chosen focus area.

1. Focus Area Identification:

* Course Name:
  + *x*
* Selected Module/Unit/Learning Objective Title:
  + *x*
* Brief Description of this Module/Unit/Objective: (1-2 sentences summarizing its core content/skill)
  + *x*

2. Learning Outcomes & Doctrinal Alignment:

* Specific, Measurable Learning Outcomes (2-3 key outcomes):
  + *x*
  + *x*
  + *x*
* How do these outcomes align with OPMEP or other doctrinal requirements (e.g., critical thinking, joint operations, leadership principles)?
  + *x*

3. Current Pedagogical Approach:

* Primary Teaching Methods Used: (e.g., lecture, seminar, case study, practical exercise, discussion)
  + *x*
* Primary Assessment Methods Used: (e.g., exam, paper, presentation, simulation performance, group project)
  + *x*

4. Identify Pain Points & Opportunities (Reflection):

* Where do learners typically struggle with this content or these skills? (e.g., difficulty with complex concepts, lack of practice opportunities, information overload)
  + *x*
* What aspects of teaching or assessing this module/unit/objective are particularly time-consuming or challenging for instructors? (e.g., grading complex assignments, providing individualized feedback, keeping content updated)
  + *x*
* Are there any potential learning gaps (e.g., skills not fully developed, knowledge not retained effectively) that current methods don't fully address?
  + *x*

Part 2: Brainstorming AI Integration Opportunities

Instructions: Building on your analysis in Part 1, brainstorm 2-3 distinct ideas for how AI could be integrated to enhance this specific module/unit/learning objective.

5. Brainstorm AI Integration Ideas:

* Idea #1:
  + Proposed AI Application Type: (e.g., GAI for brainstorming, AI for personalized feedback, AI for content analysis, AI for scenario generation, NLP for summarization, Computer Vision for imagery analysis)
    - *x*
  + How it would work: (Briefly describe the proposed AI-enhanced activity or process. How would learners interact with it? How would instructors use it?)
    - *x*
  + 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.)
    - *x*
  + Potential Benefits: (e.g., increased engagement, deeper understanding, improved critical thinking, instructor efficiency, reduced time on task)
    - *x*
  + Potential Challenges/Risks: (e.g., ethical concerns, data privacy, technical limitations, learning curve for users, over-reliance)
    - *x*
* Idea #2:
  + Proposed AI Application Type:
    - *x*
  + How it would work:
    - *x*
  + How it addresses a pain point/gap OR enhances learning:
    - *x*
  + Potential Benefits:
    - *x*
  + Potential Challenges/Risks:
    - *x*
* Idea #3 (Optional):
  + Proposed AI Application Type:
    - *x*
  + How it would work:
    - *x*
  + How it addresses a pain point/gap OR enhances learning:
    - *x*
  + Potential Benefits:
    - *x*
  + Potential Challenges/Risks:
    - *x*

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

* For one of your brainstormed ideas (choose your strongest or most interesting one), 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?
  + *x*

Part 3: (Optional) Initial AI Tool Exploration

Instructions: 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.

7. AI Tool Experimentation (Optional):

* Tool Chosen: (e.g., ChatGPT, Google Bard/Gemini, Perplexity AI, an AI-powered feature within software you already use)
  + *x*
* Task Attempted: (What did you try to do with the tool in relation to your curriculum idea? Be specific.)
  + *x*
* Brief Reflection on the Experience:
  + What worked well?
    - *x*
  + What were the limitations or challenges?
    - *x*
  + Did it spark any new ideas or concerns?
    - *x*
  + How might this (or a similar tool) realistically be used in your PME setting?
    - *x*

Appendix B: Glossary of Key AI Terms

* Artificial Intelligence (AI): Systems that mimic human intelligence to perform tasks.
* Machine Learning (ML): A subset of AI where systems learn from data without explicit programming.
* Natural Language Processing (NLP): AI's ability to understand, interpret, and generate human language.
* Generative AI (GAI): AI capable of creating new content (text, images, etc.) based on learned patterns.
* Augmented Intelligence: AI used to enhance human capabilities, not replace them.
* Algorithmic Bias: Systematic and repeatable errors in an AI system's output due to biased training data or flawed algorithms.
* Transparency (in AI): The ability to understand how an AI system makes its decisions or generates its outputs.
* Human-in-the-Loop: A design principle where human oversight and intervention are integrated into AI-driven processes.
* Rapid Prototyping: An iterative design process focused on quickly building and testing low-fidelity models to gather feedback and refine ideas.
* Low-Fidelity Prototype: A simplified, often non-functional, representation of a design idea used for early testing (e.g., sketches, storyboards).
* Prompt Engineering: The art and science of crafting effective inputs (prompts) for AI models to achieve desired outputs.
* OPMEP: Officer Professional Military Education Policy (specific to US military education).
* ISR: Intelligence, Surveillance, and Reconnaissance.

Appendix C: Further Reading and Resources (Bibliography)

This bibliography offers key readings for Professional Military Education (PME) educators and instructional developers interested in deepening their understanding of AI's integration into learning design, ethical considerations, and its impact on critical thinking and the warfighter ethos, alongside foundational concepts in curriculum development and prototyping.

I. AI in Professional Military Education (PME) & Strategic Context

1. Air University. (2025, June 20). *Future-Proofing PME: How AI is Redefining Adaptive Wargaming and Strategic Readiness*. Wild Blue Yonder.
   * Directly addresses AI's transformative role in PME, particularly in adaptive wargaming and scenario planning, and its contribution to strategic readiness.
   * <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/4221801/future-proofing-pme-how-ai-is-redefining-adaptive-wargaming-and-strategic-readi/>
2. Army University Press. (2025, April). *Enhancing Professional Military Education with AI: Best Practices for Effective Implementation*. Journal of Military Learning.
   * Provides an overview of current AI tools in PME, discussing benefits, challenges, and best practices for military educators, including ethical considerations.
   * <https://www.armyupress.army.mil/Journals/Journal-of-Military-Learning/Journal-of-Military-Learning-Archives/JML-April-2025/Enhancing-pme-with-ai/>
3. Small Wars Journal. (2025, May 7). *Embracing the Inevitable: Integrating AI into Professional Military Education (PME)*.
   * Shares insights from the U.S. Army War College's experience with AI adoption, emphasizing AI literacy among faculty and practical applications for curriculum.
   * <https://smallwarsjournal.com/2025/05/07/embracing-the-inevitable/>
4. National Security Commission on Artificial Intelligence (NSCAI). (2021). *Final Report*.
   * A comprehensive strategic report on AI's role in national security, including its implications for military applications, intelligence, and the necessity of AI literacy across the workforce.
   * https://nwcfoundation.org/wp-content/uploads/2021/04/NSCAI-Final-Report-AI-Accelerated-Competition-and-Conflict.pdf.

II. Curriculum Redesign & Assignment-Level Transformation

1. Wiggins, G., & McTighe, J. (2005). *Understanding by Design*. ASCD.
   * A foundational text on "backward design," a powerful framework for curriculum redesign that starts with desired results and works backward through assessment to learning activities. Essential for transforming curriculum at the assignment level.
2. Suskie, L. (2018). *Assessing student learning: A common sense guide*. John Wiley & Sons.
   * Relevance: While broad, this book offers practical guidance on designing effective assessments that drive learning, making it highly relevant for understanding how assignment-level redesign can be a transformative lever for curriculum change.
   * Source: Major booksellers or educational publishers.
3. eLearning Industry. (2025, February 19). *Integrating AI In Curriculum Design: A Comprehensive Guide For Educators*.
   * Provides practical guidance on how AI can be integrated into the curriculum design process, from personalized learning paths to efficient content creation and continuous improvement.
   * <https://elearningindustry.com/integrating-ai-in-curriculum-design-a-comprehensive-guide-for-educators>

III. Rapid & Low-Fidelity Prototyping in Learning Design

1. Dam, R. F., & Teo, Y. S. (2025, March 12). *5 Common Low-Fidelity Prototypes and Their Best Practices*. Interaction Design Foundation.
   * An excellent practical guide detailing various low-fidelity prototyping methods, their pros and cons, and best practices for quick and inexpensive testing of ideas in design.
   * <https://www.interaction-design.org/literature/article/prototyping-learn-eight-common-methods-and-best-practices>
2. Tripp, S. D., & Bichelmeyer, B. (1990). Rapid prototyping: An alternative instructional design strategy. *Educational Technology Research and Development, 38*(1), 31-44.
   * A classic academic paper that introduced rapid prototyping as a viable instructional design strategy, emphasizing its iterative and flexible nature.
   * https://doi.org/10.1007/BF02298246
3. iSpring Solutions. (n.d.). *How to Create a Storyboard for eLearning (Instructional Design)*.
   * Provides practical, step-by-step guidance on using storyboarding as a tool in the instructional design process, which is a key low-fidelity prototyping technique for visualizing learning experiences.
   * <https://www.ispringsolutions.com/blog/elearning-storyboard>

IV. Using Generative AI (GAI) in Assignments for Adult Learners

1. Lin, H. H. (2024). *GenAI-Infused Adult Learning in the Digital Era: A Conceptual Framework for Higher Education*. ResearchGate.
   * Offers a conceptual framework for integrating Generative AI into adult learning, discussing how GAI tools can assist adult learners in setting goals, finding resources, and personalizing learning plans.
   * <https://www.researchgate.net/publication/382846242_GenAI-Infused_Adult_Learning_in_the_Digital_Era_A_Conceptual_Framework_for_Higher_Education>
2. University of Wisconsin-Madison Continuing Studies. (n.d.). *How adult learners can enhance their education with AI*.
   * Provides practical advice and examples for adult learners on how to effectively use AI tools to streamline their learning process, develop new skills, and advance their careers.
   * <https://dcs.wisc.edu/blog/enhance-education-with-ai/>

V. Critical Thinking, Academic Honesty, & Warfighter Ethos in the AI Age

1. Air University. (2025, June 17). *Educating the AI-Ready Warfighter: A Framework for Ethical Integration in Air Force Professional Military Education*. Wild Blue Yonder.
   * Directly addresses the ethical integration of AI within PME, discussing governance, transparency, and the preparedness of faculty, including the impact on critical thinking and the warfighter ethos.
   * <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/4219340/educating-the-ai-ready-warfighter-a-framework-for-ethical-integration-in-air-fo/>
2. Faculty Focus. (2025, June 27). *Helping Students Develop AI Prompting Skills for Critical Thinking*.
   * Provides direct guidance for educators on how to teach students to interact with AI effectively, emphasizing prompt engineering as a means to foster critical thinking and ethical reasoning.
   * <https://www.facultyfocus.com/articles/teaching-with-technology-articles/helping-students-develop-ai-prompting-skills-for-critical-thinking/>
3. U.S. Department of Defense. (2020). *DoD Ethical Principles for Artificial Intelligence*.
   * Relevance: (Duplicated from Section I for emphasis on ethics) The foundational policy document outlining the core ethical principles that guide the DoD's approach to AI.
   * https://www.defense.gov/News/Releases/release/article/2091996/dod-adopts-ethical-principles-for-artificial-intelligence/