

INTEGRATING AI INTO PBL

Project-Based Learning Planning Guide



This handout will guide you through planning a project-based learning (PBL) lesson, where students use AI responsibly to deepen learning. Fill in the guide as you design your project.

1. Define your Project and Driving Question:

Real-world problem or challenge students will address	
Driving Question you want students to answer	
How might AI help you generate or refine this question? List your ideas.	

2. Plan roles for AI and Learners at each stage:

Decide what students and teachers will do and **when** and **where** AI will support the work. Brainstorm specific AI tools (e.g., ChatGPT, Gemini, Adobe Express) and human activities (e.g., vetting sources, peer critique).

Project Stage	Student/Teacher Tasks	Possible AI Tools/Methods
Inquiry and Research		
Ideation and Planning		
Design and Creation		
Drafting and Writing		
Revision and Reflection		
Presentation and Sharing		

3. Consider Ethical Guidelines and Media Literacy using these guiding questions:

- What class norms will you set for AI use?
- How will you teach students to recognize bias in AI and evaluate sources?



4. Review the implementation checklist below to confirm criteria:

- ☐ Conduct a survey or discuss with students to understand their current AI skills and concerns.
- ☐ Create or adapt a checklist/rubric that tells students how to use AI at each phase.
- ☐ Plan when peers, teachers, or community experts will give feedback.
- ☐ Align AI-supported tasks with state/district standards and PBL frameworks.
- ☐ Include mini-lessons on verifying sources, prompt engineering, and citing AI output.

5. Organize the planning details in the chart below:

AI tools you plan to use, and why	
Human experts or mentors student will consult	
How will you measure whether AI improved learning or motivation?	
Reflection questions you'll ask students about AI's role	

6. Confirm these cautions and Considerations:

- ☒ Teach underlying skills (research, writing, problem solving) before students rely on AI.
- ☒ Remind students that AI suggestions are starting points and may be incomplete or biased.
- ☒ Encourage precise prompts and critical evaluation of AI outputs.
- ☒ Adjust AI-generated tasks to meet standards and differentiate for learners' needs.

Next Steps:

Use this handout as a living document while you design and run your project. Add notes and revisions as you observe what works well, and what needs adjustment.

