Using GPTs as Co-Designers, Not Answer Machines

Category: Teaching Tools | Published: January 27, 2026

Below is a **blog post** that translates my core ideas into an educator-facing roadmap. It is written to be informative, reflective, and pragmatic—aimed at faculty who are trying to move past "Should I use AI?" toward "How do I use it well, responsibly, and with purpose?" The framing and language are grounded directly in the collaboration metaphors and principles that should be articulated in Human-AI collaboration.

Using GPTs as Co-Designers, Not Answer Machines

By Dylan A. Bulseco, Ph.D.

SVP R&D, Institute for Future Intelligence

A Practical Roadmap for Educators Navigating AI in the Curriculum

Artificial intelligence, especially large language models like GPTs, is entering classrooms faster than our pedagogical frameworks can adapt. Many educators feel caught between enthusiasm and unease: AI can accelerate learning, but it can also short-circuit it. It can empower students, but it can also obscure authorship, rigor, and accountability.

My approach to using GPTs in education begins with a simple but consequential shift in mindset:

AI should function as a collaborative reasoning partner—not a replacement for human judgment, expertise, or learning effort.

This post outlines a practical roadmap for educators who want to use AI tools thoughtfully, transparently, and in ways that strengthen, not weaken, learning.

Reframing the Role of AI: From "Answer Engine" to "Thinking Partner"

Most early classroom uses of AI fall into a trap: treating GPTs as faster Google or automated essay writers. This framing almost guarantees misuse and shallow learning.

A more productive stance is to treat GPTs as **co-explorers**—tools that help:

- surface assumptions,
- test ideas,
- generate alternatives,
- and stress-test reasoning.

In this model, **the human sets direction**:

- the learning goals,
- the constraints,
- the standards of evidence,
- and the criteria for quality.

AI does not decide *what* matters. It helps organize *how* we think about it. ***AI is the tool that helps complete the task, and humans establish the purpose for this tool and ultimately control the problems that will be solved with it.***

Side-by-Side Learning: Keeping the Focus on the Problem Space

One of the most important design principles to consider is **"side-by-side orientation"**.

Instead of positioning AI as:

- an authority students consult ***instead of*** the instructor, or
- a black box that produces polished outputs,

One should design activities where:

- students and AI look at the same problem together,

- reasoning is made explicit,
- and intermediate thinking steps are transparent and open for discussion.

This aligns naturally with inquiry-based learning, project-based learning, and CURE-style research experiences where the goal is not correctness alone, but *sense-making over time*.

Long-Arc Thinking: Designing for Learning Trajectories, Not Single Assignments

AI exposes a weakness in many traditional assignments: they often measure ***output*** more than ***process***.

When GPTs can generate fluent text instantly, the educational value must shift to:

- how students frame questions,
- how they refine prompts,
- how they evaluate responses,
- and how they integrate AI-generated ideas with domain knowledge.

This demands **long-arc thinking (the process)**:

- scaffolding AI use across weeks or modules,
- revisiting the same concepts at increasing levels of sophistication,
- and making growth in judgment visible over time.

In practice, this often means grading **decisions and reflections**, not just final artifacts.

AI as Scaffolding, Not Substitution

A core principle in my use of GPTs is **supportive posture**.

AI should:

- help students get unstuck,
- offer alternative explanations,

- translate between representations,
- or highlight edge cases they may have missed.

It should *not*:

- replace sense-making,
- eliminate productive struggle,
- or obscure where understanding is weak.

Used well, GPTs function like an always-available teaching assistant—one that scaffolds learning without dictating it.

Making the Work Visible: Tools, Artifacts, and Accountability

Effective AI integration is never abstract. It lives in **artifacts**:

- annotated prompts,
- critique logs,
- comparison tables,
- revision histories,
- and reflective memos explaining how AI was used.

These artifacts serve two purposes:

1. **Pedagogical** – they externalize thinking so it can be studied, understood and coached.
2. **Ethical** – they normalize ideas of transparency and authorship.

Students should be able to answer clearly (critical thinking skills):

- *What did I ask the AI?*
- *Why did I ask it?*
- *What did I accept, reject, or modify—and why?*

Avoiding the Extremes: Neither AI Panic nor AI Magic

One of the most damaging dynamics in current discourse is polarization:

- AI as an existential threat to education, or
- AI as a silver bullet that fixes engagement and equity.

Both positions are pedagogically unhelpful.

A grounded approach treats AI as **infrastructure**:

- **P**otentially powerful,
- **A**lways imperfect,
- **C**learly shaped by design choices,
- and only as **E**ffective as the values embedded in its use.

The goal is not to "future-proof" education against AI, but to **educate students for a world where intelligence, both human and artificial, is acknowledged, embraced but used in the right ways and for the right reasons**.

A Practical Roadmap for Educators

For faculty just beginning, I recommend this progression:

1. **Start with faculty use**
    - Lesson planning
    - Rubric creation
    - Example generation
2. **Transition to guided student use**
    - Structured prompts
    - Critique tasks
    - Comparison exercises
3. **Introduce metacognitive reflection**
    - How AI influences thinking, not just outcomes.

4. **Align assessment to process**
    - Reasoning
    - Iteration
    - Judgment over polish.
5. **Revisit and refine**
    - AI use should evolve as pedagogy evolves.

Closing Thought

The most important question is not *whether* AI belongs in education, but *how intentionally we design for it*.

When human intent, disciplinary expertise, and ethical judgment remain central, GPTs can become powerful partners in learning—amplifying reasoning rather than replacing it and helping educators and students navigate the path forward together.

© 2026, Dylan A. Bulseco, Ph.D., AI in Education Blog. All rights reserved.

This work is funded in part by NSF DUE 2300796, NSF ITE 2347375 and NSF DRL 2342700.