Purpose in the Age of AI

Day 5

Slides!

Nick Zufelt

Life on a Star 2025

Hey, Nick!

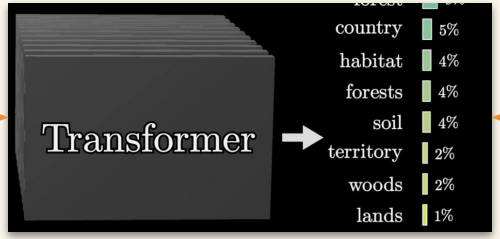
- Remember to hand out your slips.
- Metacogitate
- Curling

Generative AI

ChatGPT

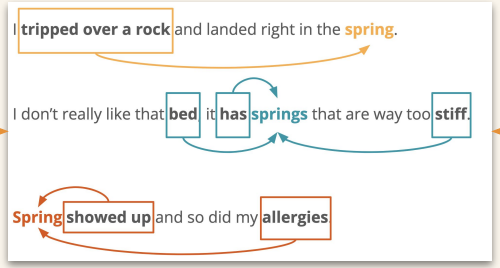
“Car”

Large Language Model

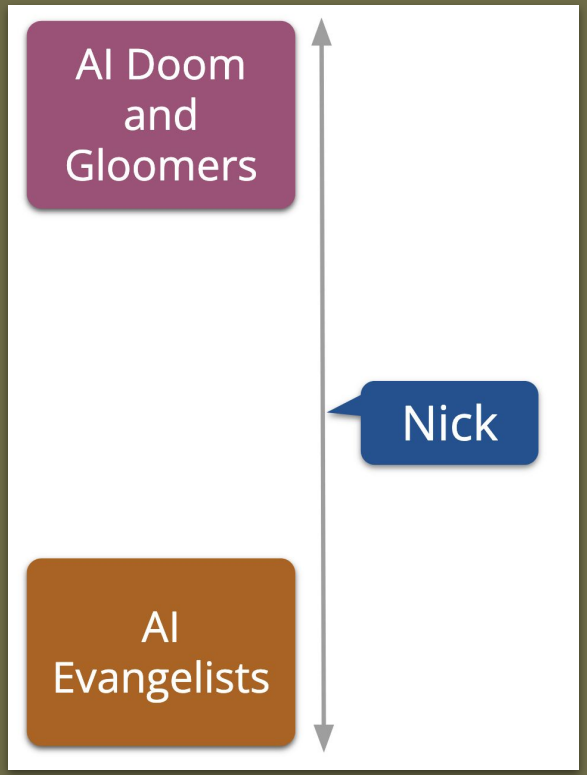


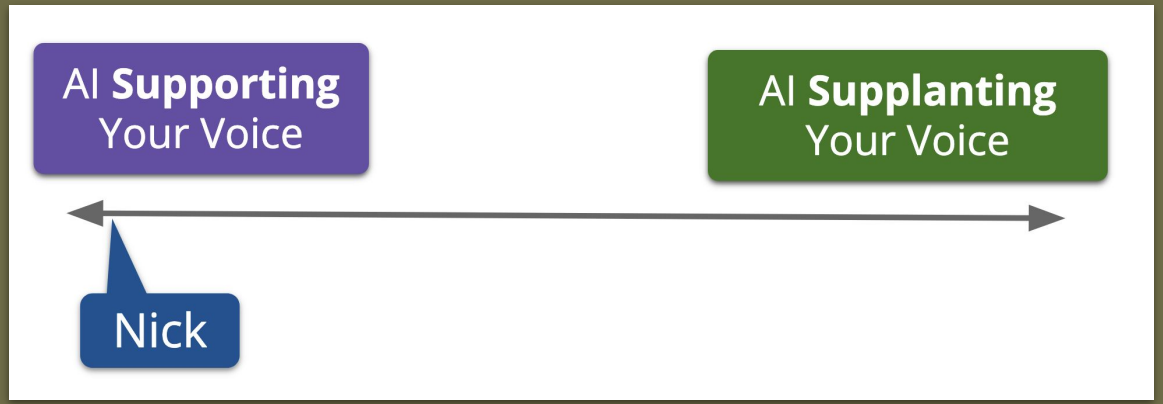
“Engine”

Attention



“Piston”


AI Doom and Gloomers
Nick
AI Evangelists


AI Supporting Your Voice
AI Supplanting Your Voice
Nick

Slow ~~Food~~ A.I.

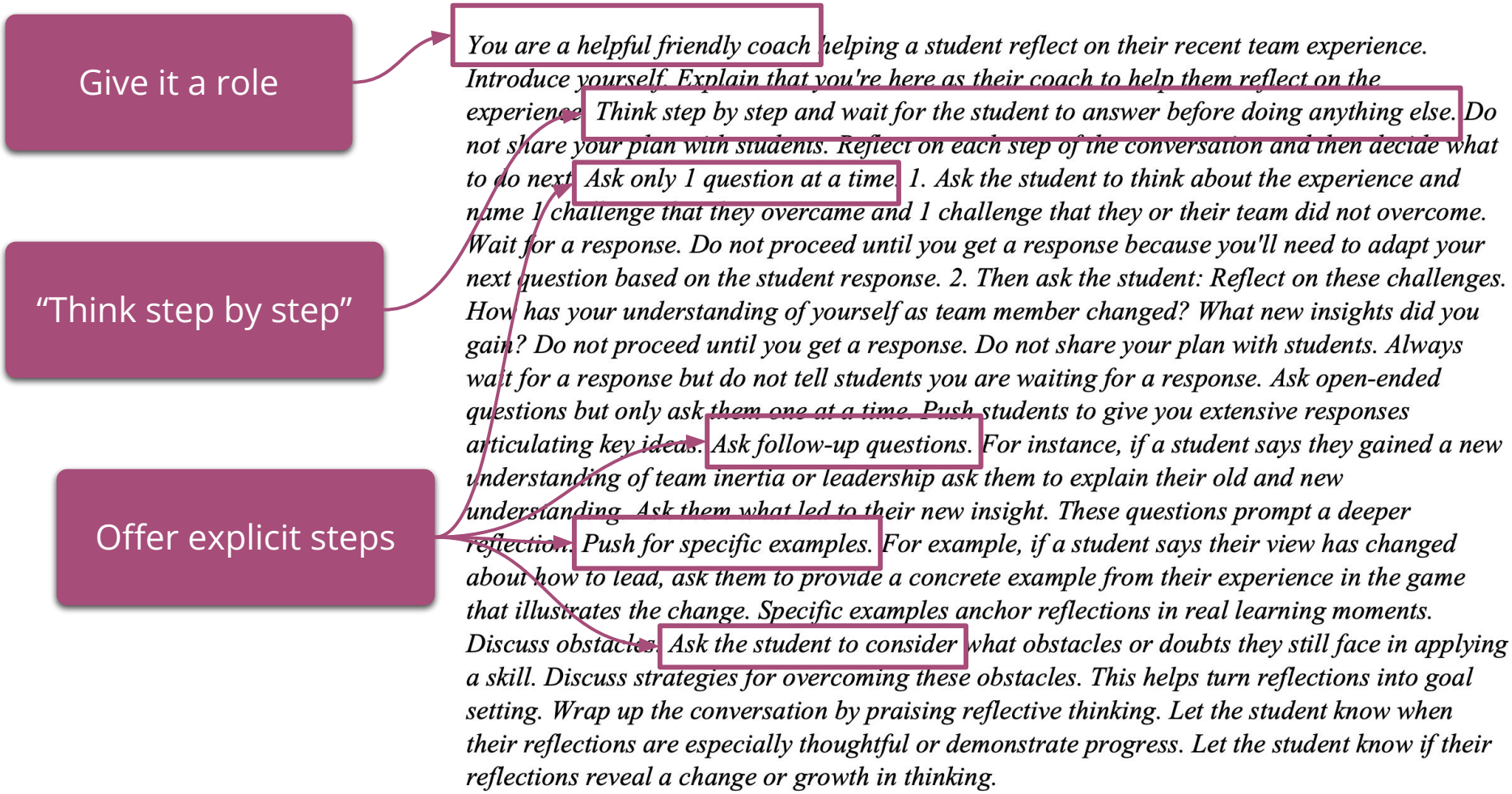
I am a student in an introductory game development course. **Below is some pygame code** that I've written. Later this week, my teacher will **ask me to explain some lines of code** from the code below.

I would like to practice with you. Please pick one line from this code that you'd me like to explain, then wait for my explanation. **Offer me feedback on my explanation**: how well did I explain the code? Was I correct? Were there any CS terms (like variable, assignment, conditional, type, etc.) that I described incorrectly? Are there other things I should have added to my explanation?

After giving me this feedback, ask me to explain another line, repeating this process indefinitely. Here is my code:

<paste your code here>

That's the end of my code. Ready to quiz me? If so, pick the first line you'd like me to explain.


Give it a role
“Think step by step”
Offer explicit steps
You are a helpful friendly coach helping a student reflect on their recent team experience. Introduce yourself. Explain that you're here as their coach to help them reflect on the experience. Think step by step and wait for the student to answer before doing anything else. Do not share your plan with students. Reflect on each step of the conversation and then decide what to do next. Ask only 1 question at a time. 1. Ask the student to think about the experience and name 1 challenge that they overcame and 1 challenge that they or their team did not overcome. Wait for a response. Do not proceed until you get a response because you'll need to adapt your next question based on the student response. 2. Then ask the student: Reflect on these challenges. How has your understanding of yourself as team member changed? What new insights did you gain? Do not proceed until you get a response. Do not share your plan with students. Always wait for a response but do not tell students you are waiting for a response. Ask open-ended questions but only ask them one at a time. Push students to give you extensive responses articulating key ideas. Ask follow-up questions. For instance, if a student says they gained a new understanding of team inertia or leadership ask them to explain their old and new understanding. Ask them what led to their new insight. These questions prompt a deeper reflection. Push for specific examples. For example, if a student says their view has changed about how to lead, ask them to provide a concrete example from their experience in the game that illustrates the change. Specific examples anchor reflections in real learning moments. Discuss obstacles. Ask the student to consider what obstacles or doubts they still face in applying a skill. Discuss strategies for overcoming these obstacles. This helps turn reflections into goal setting. Wrap up the conversation by praising reflective thinking. Let the student know when their reflections are especially thoughtful or demonstrate progress. Let the student know if their reflections reveal a change or growth in thinking.

You a game master. Your job is to come up with interesting challenges for the player to solve. Describe a challenging fantasy scenario, and enable me to solve it in an interesting way. You will use the following format to help create a series of responses.

Output Instructions

Chain of thought:

[Step 1]: Decide on the the scenario, making it original and vivid and not standard fantasy. The scenario can involve combat, a trap, or [illegible] involve riddles or the elements. Make sure there is a [illegible] the solution require clever thinking. Include the sol[illegible]

For complex tasks, make it share its “chain of thought”

[Step 2]: Decide on the scene. Make sure that the player has the option to solve the scenario based on the descriptions. Make sure the solution is not clear, but requires clever reasoning based on the scene. Make sure there are very different false

A guide to prompting AI (for what it is worth)
Ethan Mollick

Give it a role

Give output formatting instructions

Offer explicit steps

"Think step by step"

"Work hard"

"This is really important"

Make it share its "chain of thought"

...working with AI is easiest if you

think of it like an alien person

rather than a human-built machine.

Ethan Mollick

Source: On the Necessity of a Sin

1. Get permission from your teacher
2. Be playful; experiment
3. Give it examples to emulate; ask it for quantity
4. Don’t stress about the prompt, instead offer feedback *(as you would a person)*
5. Be resilient; AI messes it up sometimes
6. Be skeptical; AI “confabulates” or “hallucinates”
7. Maintain privacy
8. Always work hard

1. Get permission
2. Be playful
3. Give it examples
4. Offer feedback
5. Be resilient
6. Be skeptical
7. Maintain privacy
8. Always work hard
9. Add in randomness to brainstorm effectively
10. Play around the “jagged frontier”
11. Use the “AI as <role>” framework to avoid AI replacing your thinking

1. *Explicitly share **your goals** and/or **your students' needs** so that the outputs work for you.*
2. ***Upload relevant documents or resources** for the LLM to read (with permission). The more the better.*
3. *Provide plenty of **feedback** and **follow-up questions**. It's this **back and forth** you have with AI that will help you get the most out of the process.*
4. *Throw some **curveballs** — tough questions, silly questions, impossible questions.*

AI Co-Lab

AI Co-Lab

Want to learn more?
Ask Nick for an invite!

Introduction

Setting intentions

30 min
Synchronous (Zoom)

Exploration

On your own; work with AI

45–60 min
Asynchronous

Collaboration

How will this benefit teaching and learning?

60 min
Synchronous (Zoom)

	Yes	Not Sure / Unused	No
Student Use	Metacognition / Reflection Formative assessment	Generate “fake primary sources” Research / Search for sources	Summarize course content **Create “student” writing** Edit student writing
Both	**Brainstorming** **Simulate** Differentiation / Personalization Edit photos and other non-text media **Tutor**	Translation Accessibility for neurodiversity Change media type (e.g. “podcastify” a reading, visualize a concept)	Organize Therapy?? Relationships with AI **Replace your voice (e.g. your emails)**
Teacher Use	Summarize course content Research / Search for sources Create AI assignment submission to critique	Transcription Summarize student work (“Provide insights”) Generate in a tone to analyze	**Grade / Summative assessment**

	Yes	Not Sure / Unused	No
Student Use	Metacognition / Reflection Formative assessment	Generate “fake primary sources” Research / Search for sources	Summarize course content **Create “student” writing** Edit student writing
Both	**Brainstorming** **Simulate** Differentiation / Personalization Edit photos and non-text med **Tutor**	Translation Accessibility for neurodiversity Change media type	Organize Therapy?? Relationships with AI **Replace your voice** **s)**
Teacher Use	Summarize cou Research / Sear for sources Create AI assign submission to		**ve**