

Leveraging AI in Notebook LM Podcasts to Flip the Classroom

A Pedagogical Approach to Student Engagement and Reflection

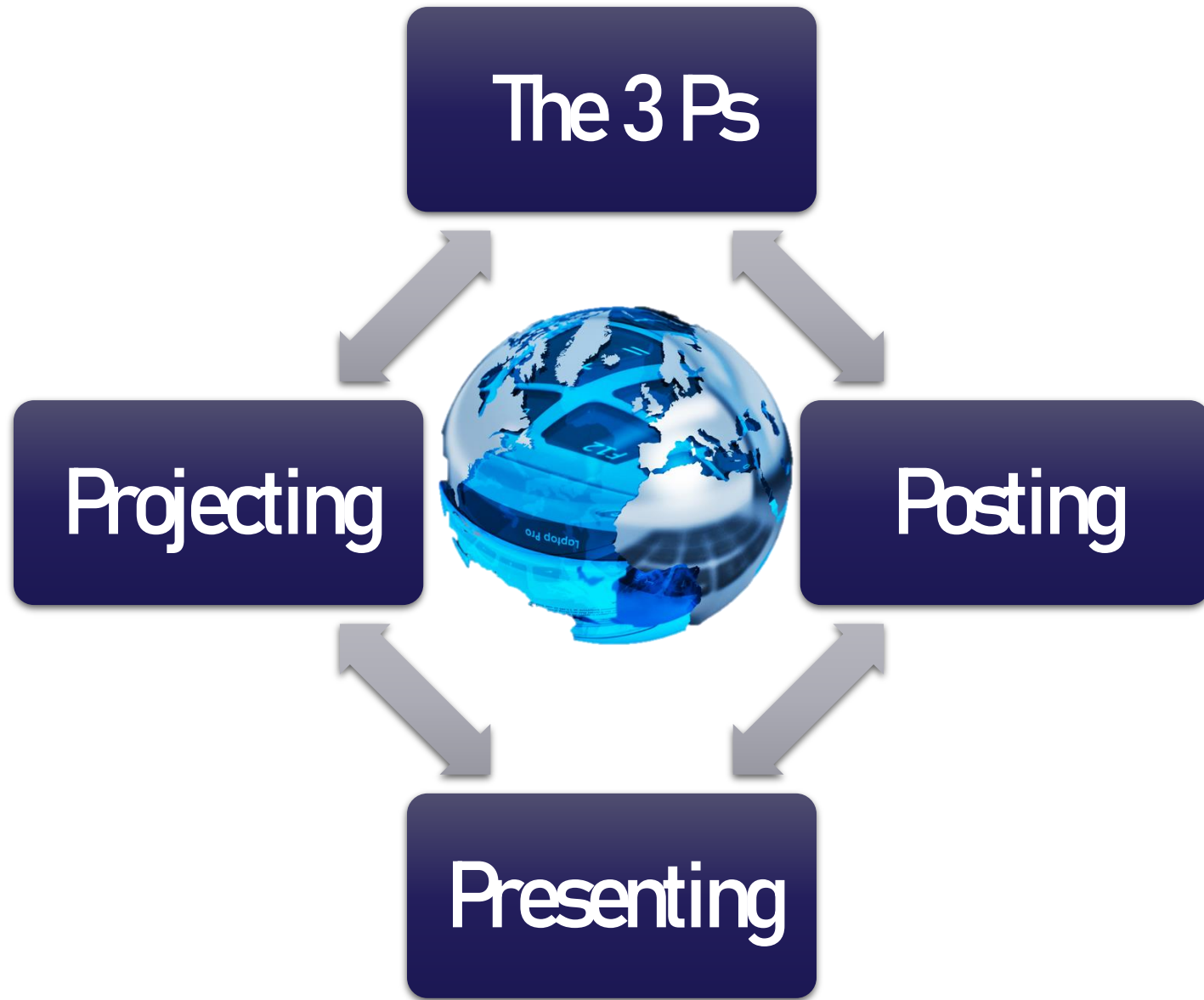
Dr. Georgia (Gina) Kostoulas
AMCAL Online Conference
27 May 2025

150
YEARS
OF HISTORY
1875 - 2025

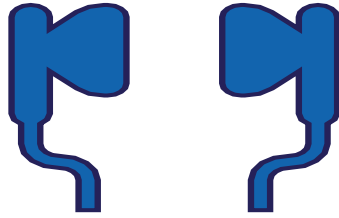


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We live in a world that celebrates...



Why Listening Matters More Than Ever



Our students are
great at showing
and sharing.

But how often are
they really taught
to LISTEN

To pause, reflect,
and ask: What did
that actually
mean to me?

Why Does This Matter?



How do we teach students to engage deeply, not just complete tasks?



How do we use AI ethically – to support not circuit learning?



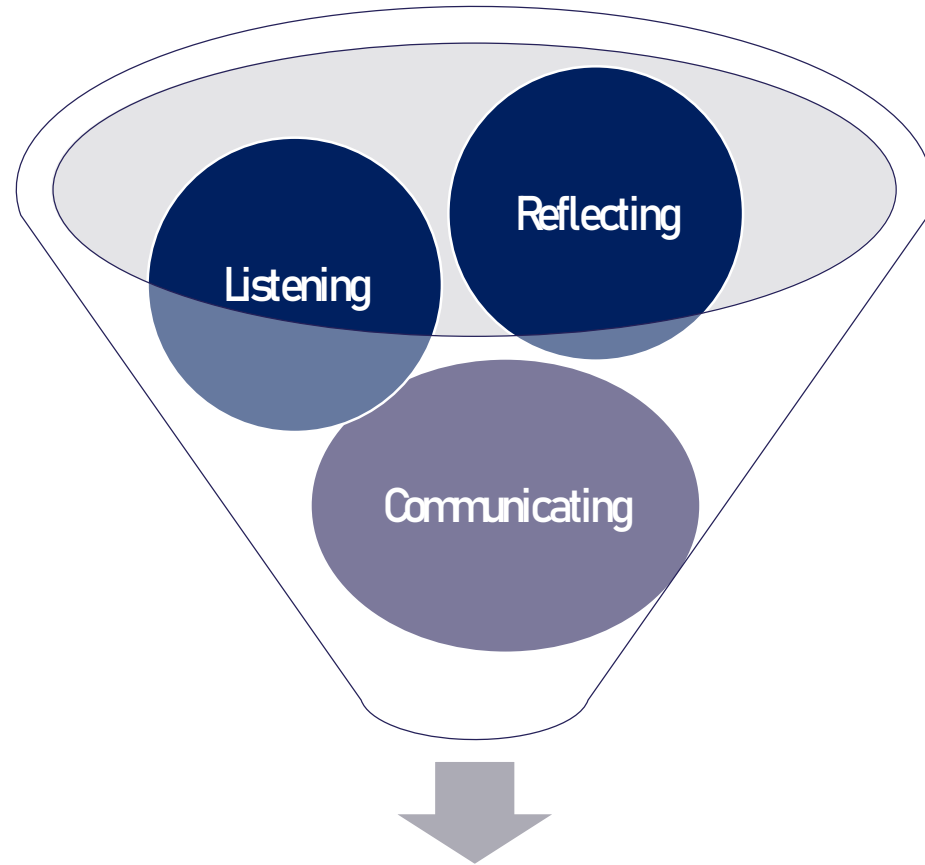
How can flipped classrooms become spaces for meaningful reflection, not just homework distribution?

Google's Notebook LM Not as a Tool



It is more like giving them a mirror to better understand how they think, feel, and communicate.

Google's Notebook LM Not as a Tool



...embedding them in the media
today's learners engage with.

Podcasts with Google's AI-Powered NotebookLM

What I did?

- Textbook/Chapters
- Lecture Notes
- Slide Decks
- YouTube Scripts

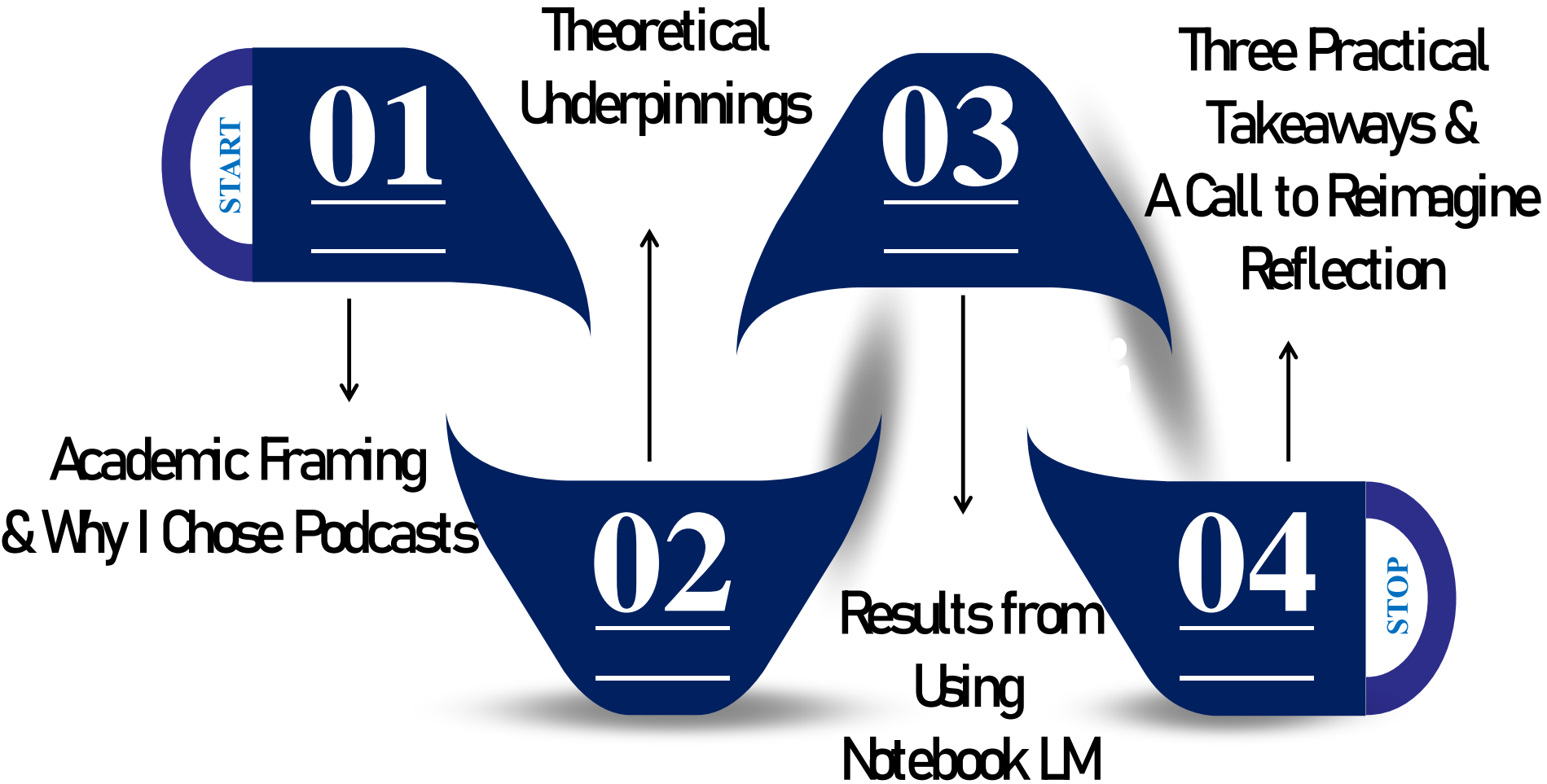
What I didn't do

- I didn't give transcripts.
- I didn't assign a quiz
- I just asked one thing: What resonated with you?



Using AI-generated podcasts ... is like planting a garden with **rich soil and careful watering**—rather than just handing students a bag of seeds.

OVERVIEW



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01

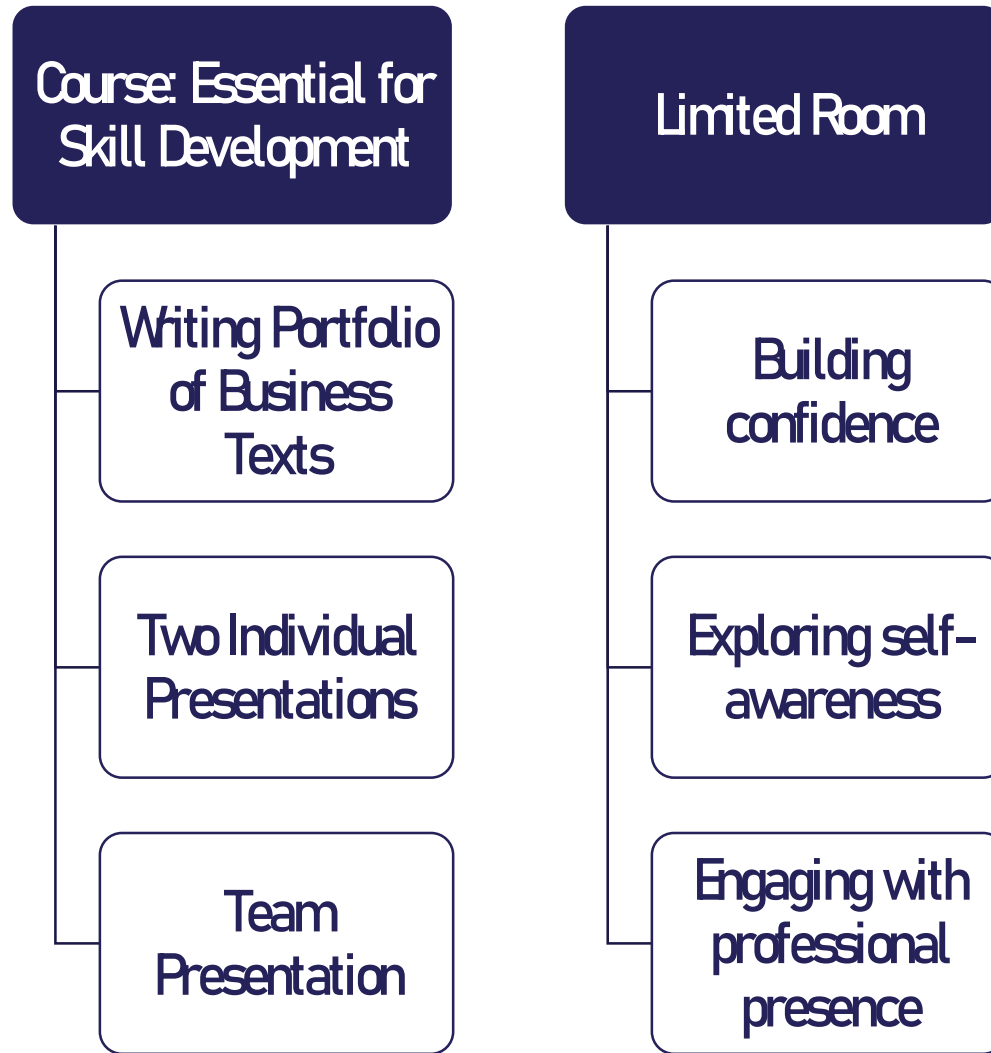
Academic Framing: Why I Chose Podcasts?

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Why I Needed to Think **Differently**



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Podcasts in Higher Education Aren't New

Used for
review,
accessibility, or
training, or
scaffolding
content



I wanted to ask
a different
question: Could
a podcast serve
as a a space
for reflection?



When students sense our enthusiasm,
they meet us there, (König, 2020)

(Furtado, 2023; Jafarian & Kramer, 2024;
Dupont et al., 2025)

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02

Theoretical Underpinnings

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Four Pillars

1. Cognitive Load Theory (Sweller, 1988)

- Listening can lighten the cognitive burden and make space for real processing.

2. Reflective Learning (Dewey, 1912, 1938; Schon, 1983)

- Learning isn't linear—it's a dance between action and awareness.
- It invites students into a cycle of professional growth (Kostoulas, 2019, 2024).

3. Moon's Experiential Learning Model (2004)

- Reflection is the bridge between content and meaning.

4. Ethical AI in Education (Holmes et al., 2021)

- AI must scaffold learning –not short-circuit it, especially when the work is identity building.



03

Results from Using NotebookLM Reflections & Survey

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Listening to the podcast made me realize how much I've underestimated the role of communication in day-to-day work...it's not just about talking, but about really listening, being clear, and knowing your audience...digital communication...can easily be misunderstood if we're not careful with our tone. It reminded me of times when group projects went sideways just because someone misread a message...and good communication builds trust...it's not just a skill you either have or don't have—it's something you can improve...I'll definitely be more aware of how I communicate going forward.

Student Reflection 1

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This podcast showed me how communication with audiences should be done more responsibly and respectfully. Although the ethics pyramid, understanding the audience, and speaking anxiety were helpful, listening is what resonated with me the most....that we all have internal filters and are so focused on our thoughts or judgments that we can miss the speaker's point entirely. The concept of receiver apprehension stuck with me. It clarified that I frequently miss out on someone's words because my mind is mentally responding instead of listening to them..this made me understand that being ethical in communication requires attentiveness, honesty, and readiness as a speaker.

Student Reflection 2

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I found myself thinking about how often I overlook the impact of my communication style at work. I realized that I sometimes focus too much on what I want to say next, rather than fully understanding the other person's message ...I've noticed that miscommunication often happens when I use the same tone or approach in every situation... [it] reminded me of how easily messages can be misunderstood in emails or messages without context or tone, this makes me want to be more careful with my words, especially when writing. Going forward, I want to be more mindful of how I communicate, not just what I say, but how I listen, respond, and engage with others.

Building better habits here will definitely help me grow both professionally and personally.

Student Reflection 3

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These reflections are not just echoes of the lesson—they're like **footprints on a path**..

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Anonymous Survey

85% – reflect meaningfully

64,3% – reinforce course concepts 'a lot'

100% – easy to access and use

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04

Three Practical Takeaways A Call to Reimagine Reflection

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Upload Your Materials

PowerPoints (as PDFs), Lecture
Notes, Journal Articles

Book chapters, Annotated
Readings, YouTube Transcripts



Create a New Notebook

Paste/Upload Content

Find generate podcast



Generate Podcast with a Reflective Prompt

Use a prompt like:

End with a reflective question

The Podcasts that Were Generated for My Course

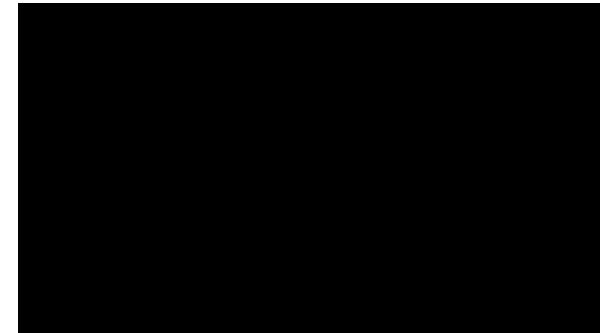


Communication Skills in the
Workplace – 18 mins.

Professional Writing in the
Modern Workplace– 17 mins.

Public Speaking Textbook
Overview–32 mins.

Teamwork & Monroe's
Motivated Sequence–15 mins.



[Here's an example](#)

Three Takeaways

1.

Reflection isn't a supplement—it's the pedagogy.

2.

AI tools can **scaffold** presence, **not** replace it.

3.

Start **small**, but design with **intentionality**.

Ethical Considerations

Holmes et al., 2021

AI use in education isn't just about transparency or fairness—it's about preserving the deeply human dimensions of learning.

We have to ask:

1. Whose voice are we amplifying?
2. Whose are we leaving out?
3. Are we helping students hear themselves more clearly— or are we filtering that voice through a narrow lens?





Let's **design** classrooms where **listening** is **learning**. Where **sound** sparks **insight**—and writing brings it home. Where we don't just flip the classroom, but **flip assumptions** about rigor, engagement, and what it means to really connect.

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Question	Response
<p>But what about accessibility—why no transcripts?</p>	<p><i>Great point. In this experiment, I intentionally excluded transcripts to see if listening would become more mindful. Most importantly because active listening is expected in professional environments. Prospective employees won't have a transcript to figure out what someone is saying. They need to mindfully listen. And listening requires a lot of effort. It's a skills that they need to hone.</i></p>
<p>Does this work across disciplines?</p>	<p><i>The model is most suited to reflective or communication-heavy courses—but yes, the podcast scaffold could be adopted across contexts, especially when paired with intentional prompts. So, for example in Literature, I wouldn't have NotebookLM create a podcast for an original poem or short story, etc. I would upload journal articles about the poem or short story, and create a reflection question.</i></p>

Question	Response
Isn't AI doing too much of the work?	<i>Only if you let it. I reviewed, edited, and designed all materials and responses. The AI simply helped generate the structure—students did the deep thinking.</i>

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