FLORIDA ATLANTIC UNIVERSITY

A New Vision of AI: Moving Beyond Hesitation to Action

Thursday, February 27, 2025 (Date)

8:00 AM to 12:00 PM (Time)

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Professional Learning Norms

Equity of Participation	Active Listening	Respect for All Perspectives
Pause • Leave quiet time for others to think and process **Pay attention to self and others** • Let everyone get their hands on the materials • Step up and step back **Place ideas on the table** • "Here is one option..." • "One thought I have is..."	**Paraphrase** • "So are you saying...?" • "I think I heard... is that right?" **Be Present** • "I'm just going to turn my phone off so I can really listen to you."	**Presume positive intentions** • "What ideas do you have about how we can improve?" • "Tell me more about your thinking" **Probe** • "Please say more about..." • "I'm curious about..."

Adapted from Adaptive Schools http://www.thinkingcollaborative.com/norms-collaboration-toolkit/ and the New Teacher Center www.newteachercenter.org

Teacher Institute on Science and Sustainability

Breakout Session Agenda

Time	What	Why	How
11:10 AM	Welcome & Norms	Set the tone and expectations for the session.	Four Corners Activity
11:30 AM	Understanding AI & Generative AI	Define key AI concepts and distinguish AI from Generative AI.	Facilitator-led presentation & discussion
11:34 AM	AI's Role in Education & Professional Learning	Examine real-world AI applications, trends, and challenges.	Case studies & small group discussions
11:44 AM	Evaluating AI's Opportunities & Limitations	Analyze how AI enhances efficiency while addressing ethical concerns.	Interactive group reflection
12:00 PM	Applying the TPACK Framework to AI Adoption	Assess AI knowledge across key dimensions.	Self-assessment & guided reflection
12:20 PM	Developing an Actionable AI Strategy	Create a personal or organizational AI goal.	Hands-on planning session
12:25 PM	Personal AI Journey & Implementation	Learn from real-world AI applications in professional settings.	Facilitator's insights & participant sharing
12:30 AM	Optimistic Closure & Next Steps	Encourage ongoing AI learning and application.	Individual commitment reflection
12:30 PM	Session Feedback & Adjourn	Gather insights to refine future sessions.	Quick feedback form & closing remarks

Breakout Session Objectives

- Define key AI concepts and distinguish between Artificial Intelligence (AI) and Generative AI.
- Examine real-world AI applications, trends, and challenges in K-12, higher education, and workplace contexts.
- Analyze how AI can enhance efficiency, innovation, and collaboration while addressing ethical concerns.
- Assess your AI knowledge across key dimensions and develop a goal to strengthen AI integration in your role.
- – Create a personal or organizational AI goal that supports responsible and effective AI implementation.

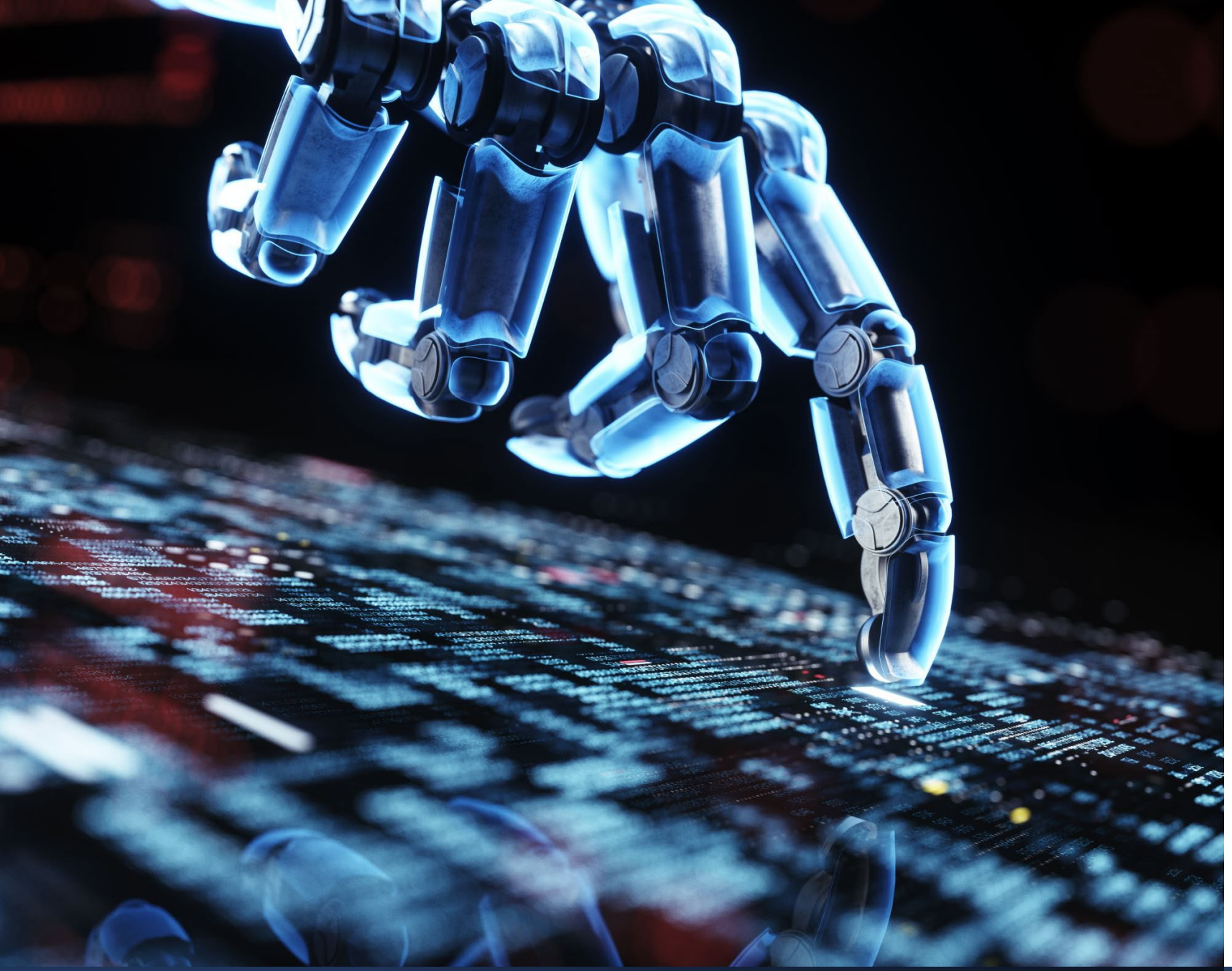
Welcoming Ritual - *Four Corners*

"AI will fundamentally change the nature of my job within the next decade."

"The societal implications of AI are more concerning than its potential benefits."

"I am excited about how AI can enhance my work and learning environment."

"Our institution is prepared and ready to integrate AI effectively into operations and teaching."



The ABCs of AI

- A – Artificial Intelligence (AI) & Automation
- B – Bias, Hallucinations, & Prompt Engineering
- C – Chatbots, Generative AI, & Large Language Models (LLMs)

USE WITH CAUTION!

- **Findings from a new study funded by Apple by Mirzadeh et al. (2024) reported:**
  - The report demonstrates that the performance of large language models deteriorates significantly as the complexity of the problem increases, such as when additional clauses are added to a mathematical question.
  - When irrelevant information is introduced into a question, it substantially affects the model's performance, revealing that these systems might not truly understand the content but rather rely on pattern matching observed in their training data.

Let’s Explore the AI Landscape

WORKPLACE TRENDS

K-12

HIGHER EDUCATION

AI in the Workplace – The Big Picture
(Microsoft & LinkedIn, 2024).

- **AI adoption is accelerating across industries**
  - 75% of global knowledge workers use AI at work today, nearly doubling in six months
  - 90% say AI saves time, and 85% say it helps them focus on important work.
  - 79% of leaders agree AI is necessary to stay competitive, but many lack a clear implementation plan.
  - 66% of leaders say AI skills will soon be as important as traditional experience.
- **What This Means for Educators**
  - AI is rapidly becoming a workplace necessity.
  - Schools must prepare students for AI-integrated careers.
  - Educators and leaders must embrace AI to drive efficiency and innovation.

AI in K-12 Education - *Trends & Challenges*

(Carnegie Learning, 2024)

AI is making its way into K-12 schools, but adoption varies.

- 52% of teachers use AI for lesson planning, brainstorming, and content creation.
- 10% use AI for grading, showing hesitation in fully integrating AI into assessments.
- Cheating is a top concern (52%), followed by a lack of training and support (50%).
- 61% of administrators allow student AI use, while only 31% of teachers feel comfortable with it.

AI in Higher Education – Faculty Perspectives

- **AI is reshaping higher education, but faculty remain cautious.**
  - 84% of higher ed administrators use AI, up from 26% in 2023 (Ellucian, 2024).
  - 77% of faculty see AI's potential to enhance teaching, but only 38% feel confident using it (Ellucian, 2024; Ithaka S+R, 2024).
  - 72% of instructors have experimented with AI, but many lack institutional guidance (ACUE, 2024).
  - Only 16% of faculty have received formal AI training (Digital Education Council, 2025).

A Comparative View

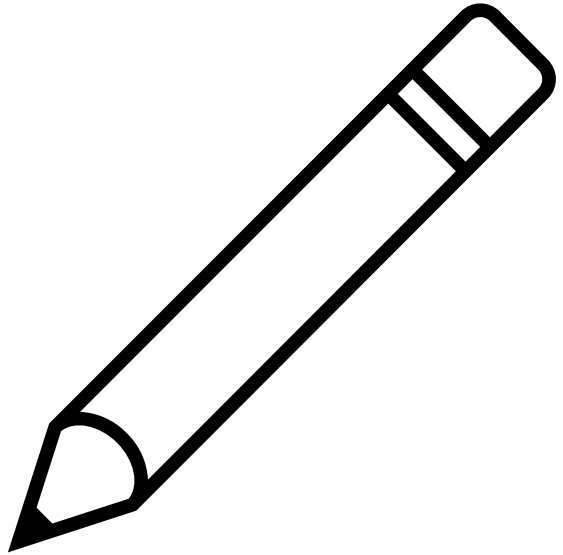
Workplace: AI is rapidly becoming a fundamental skill, with businesses integrating it to optimize productivity and efficiency.

K-12: AI is being used in lesson planning, but concerns around cheating and teacher preparedness persist.

Higher Edu: Adoption is growing, but faculty require training and clearer institutional policies to integrate AI effectively.

In Summary: AI is no longer an emerging technology—it is here to stay.

Individual Reflection



Use sticky notes to jot down thoughts to the following questions:

- How are you currently using AI in your role (or how have you seen it used in education)?
- What are the biggest opportunities AI presents for your work?
- What are the biggest challenges or barriers to AI adoption?

AI in Practice – Reflection & Discussion

20-Minute Table Activity

Discuss (20 min)

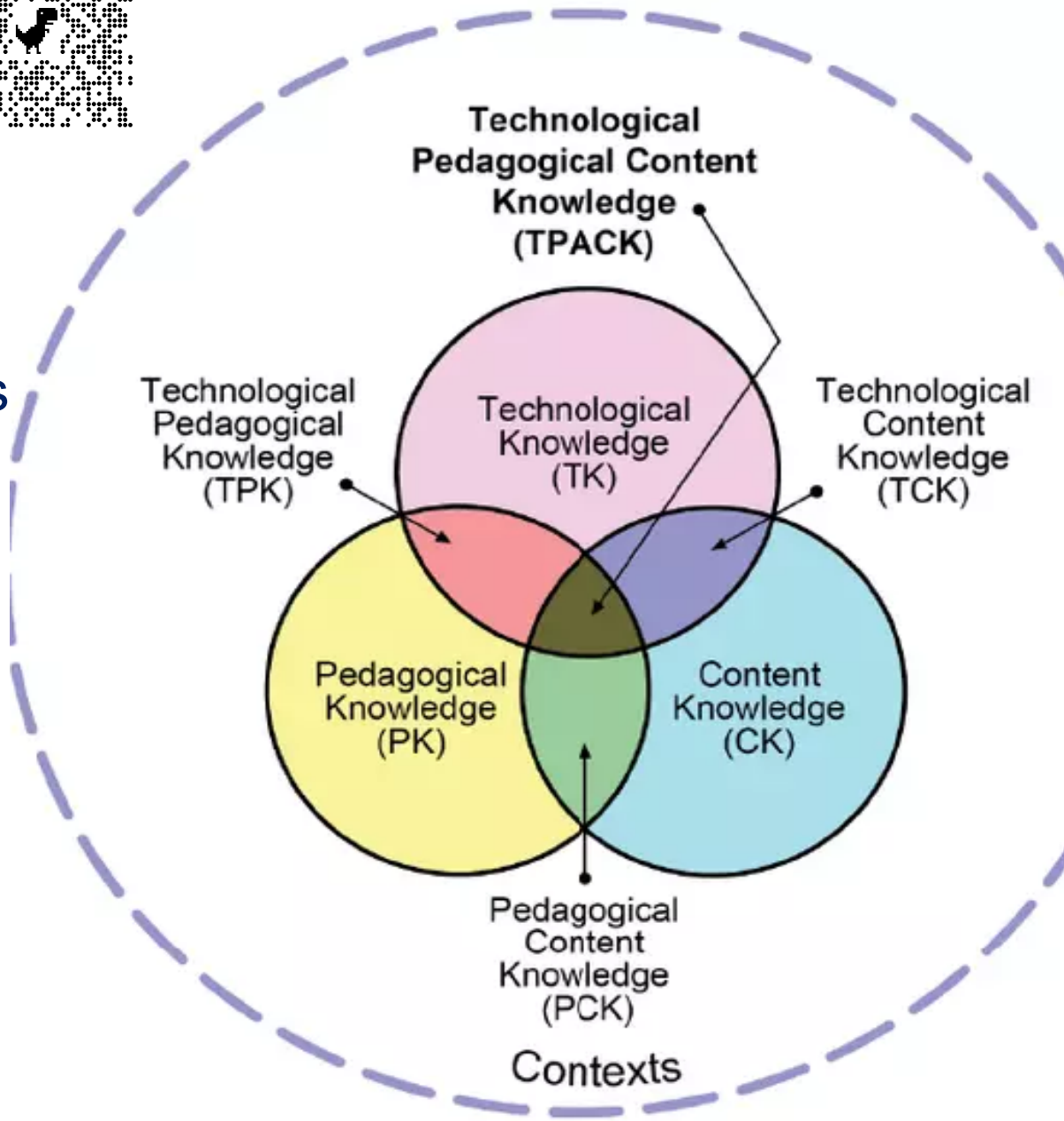
Share your responses with your table. Identify common themes, challenges, and concerns. Brainstorm ways AI can support innovation while being used responsibly.

Share-Out (5 min)

Using chart paper, each table records one AI use case, one major challenge, and one forward-thinking idea.

What is the TPACK Framework?

- The **Technological Pedagogical Content Knowledge (TPACK)** framework describes the intersection of three key knowledge areas that educators need to effectively integrate technology into teaching.
- It was introduced by **Mishra & Koehler (2006)** and has been widely used to study how technology enhances learning.
- It helps us understand **not just what technology is available, but how it can be applied effectively** in education.

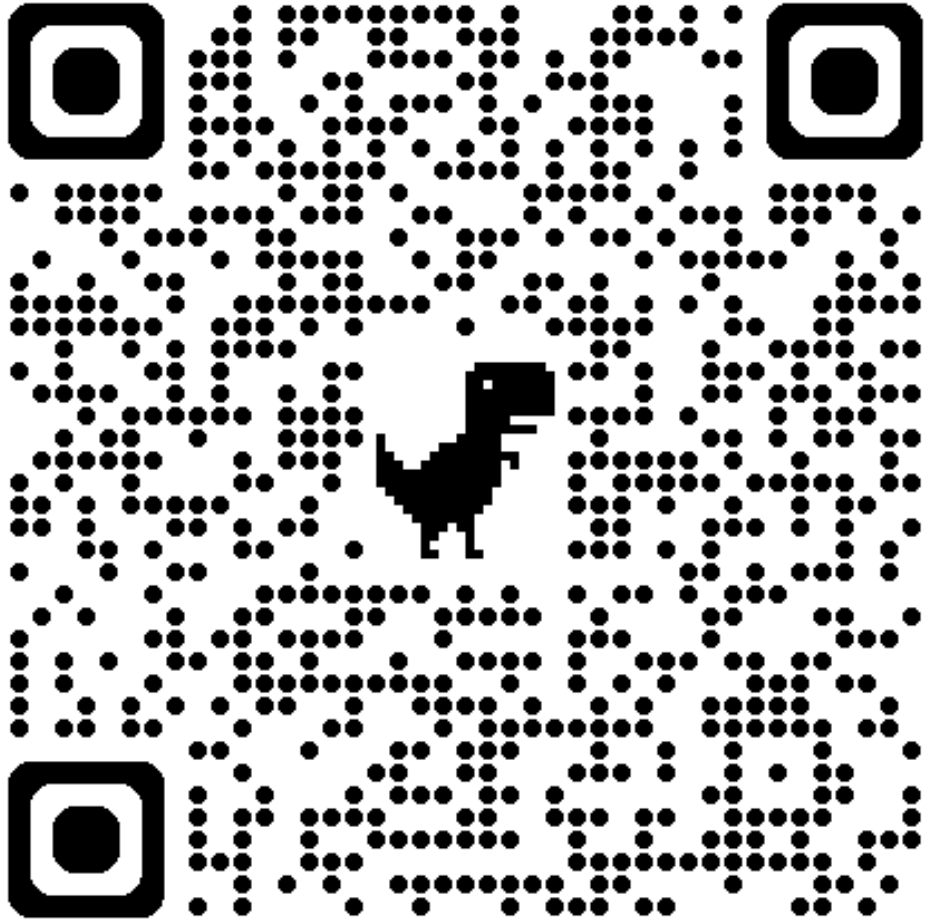


TPACK in Action

- TPACK provides **a framework for thinking about how AI and technology** fit into professional learning and educator development.
  For this session, we are focusing on four dimensions:
  - **Technological Knowledge (TK)** – Understanding how AI tools work and their applications.
  - **Technological Content Knowledge (TCK)** – How AI supports educator preparation and professional learning.
  - **Ethical Knowledge (EK)** – Awareness of AI's ethical implications, including bias and responsible use.
  - **Technological Pedagogical Content (TPACK)** – The intersection of all these elements to enhance teaching, leadership, and learning.
- Updated by Celik (2022) to include intelligence
- **Purpose and Use:** Assess where we stand in these areas and develop strategies to strengthen AI integration in our roles

AI & Professional Learning Self-Assessment

- You will complete a short **self-assessment survey** to reflect on your confidence and familiarity with AI in these four areas.
- **Instructions:**
  - Scan the **QR Code** (or use the provided link) to access the survey.
  - Read each statement and rate your agreement on a **1–5 scale** (Strongly Disagree → Strongly Agree).
  - Take **5 minutes** to complete it.



Collective Insights

- **Review the results:**
  - What are our strongest areas?
  - Where do we see the biggest gaps?
- **Discuss:** How can we apply the TPACK in practice?

Category	Key Focus
🛠️ **Technology Knowledge (TK)** *Understanding AI as a Tool*	✅ Knowing the basic principles of AI and how it works. ✅ Feeling confident using AI tools in daily work. ✅ Identifying different types of AI applications in education.
📚 **Technology-Content Knowledge (TCK)** *AI's Role in Education*	✅ Understanding how AI enhances educator preparation & professional learning. ✅ Exploring AI tools for lesson planning, feedback, or coaching. ✅ Recognizing AI's benefits and challenges in professional learning.
⚖️ **Ethical Knowledge (EK)** *Responsible & Informed AI Use*	✅ Being aware of AI ethics, including bias & data privacy. ✅ Feeling prepared to guide educators & students on responsible AI use. ✅ Understanding the importance of human oversight in AI-generated content.
🎯 **Technology-Pedagogical-Content Knowledge (TPACK)** *AI for Leadership & Strategy*	✅ Envisioning how AI supports instructional coaching & leadership development. ✅ Feeling comfortable discussing AI integration with colleagues & educators. ✅ Identifying AI tools that align with your organization's goals.

Personal AI Journey

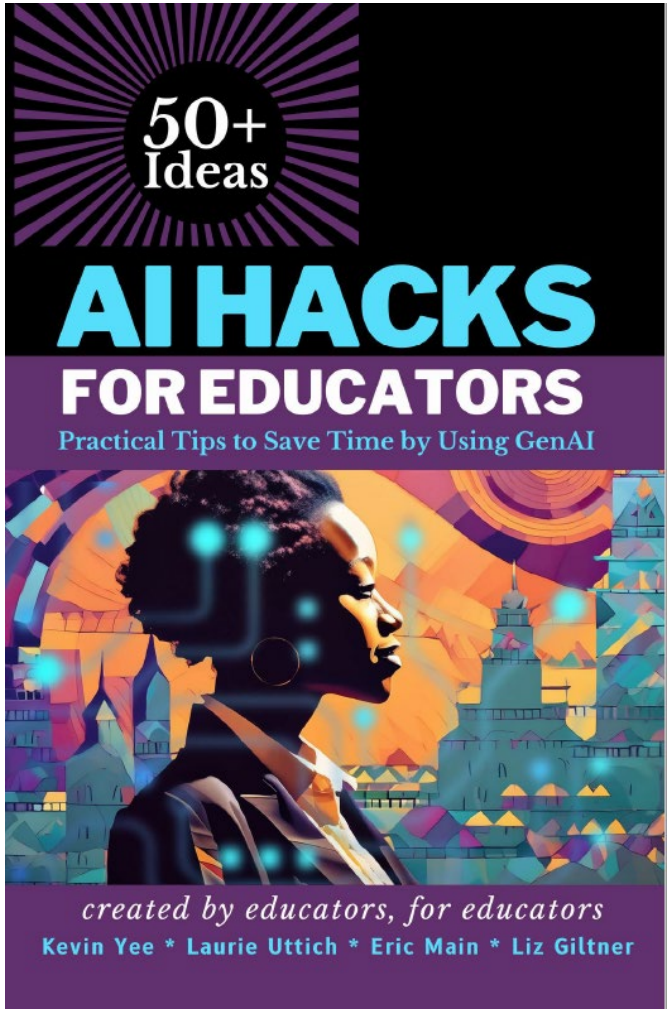
- **My Initial Perspective on AI**
  - When I first encountered AI, I wasn't sure what to make of it.
  - My perspective shifted when I saw AI not as a competitor but as a collaborator—an augmentative partner that complements human expertise.
- **A Framework for Collaboration – The Co-Agency Model:**
  - Popenici & Kerr (2017) described AI as an augmentative tool—one that extends human expertise rather than replacing it.
  - Instead of viewing AI as a threat, this model positions AI as a partner that supports human creativity and strategic thinking.
- AI has made me more efficient and intentional in my work, especially in feedback processes.

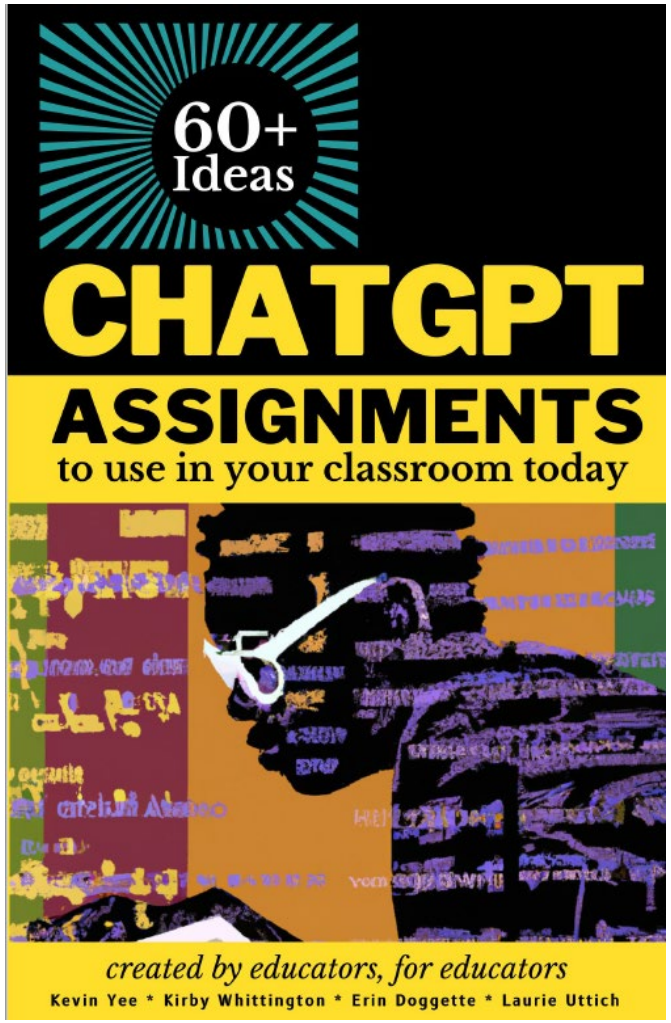
How I Leverage Generative AI in My Work

- **Drafting Materials –** I use ChatGPT to assist in creating first drafts of syllabi, assignment instructions, or emails—saving time on routine writing tasks.
- **Brainstorming & Ideation** – AI helps me create course activities, research topics, or discussion prompts.
- **Streamlining Workflows** – AI assists in data organization, visualization, and communicating results.
- **Conduct Research** – AI to help locate articles and research more precisely.
- **Diversify Feedback** – It helps me rephase redundant feedback.

Resource Padlet

Two Practice Guides Available





Optimistic Closure

AI Integration:

A small step today for an educator, a big leap for education tomorrow.

– a play off Neil Armstrong ;-)

Using the quote paper provided, what is one commitment you will make to advance your learning today forward?

Session Feedback