

A teacher in a classroom, smiling and gesturing with her hands while holding a folder. She is surrounded by students sitting at desks. The scene is overlaid with a semi-transparent purple rectangle containing text.

CEN

COLLEGIATE EDU-NATION

Artificial Intelligence

**Leveraging Generative AI for
Data-Driven Instruction and Actionable PLCs**

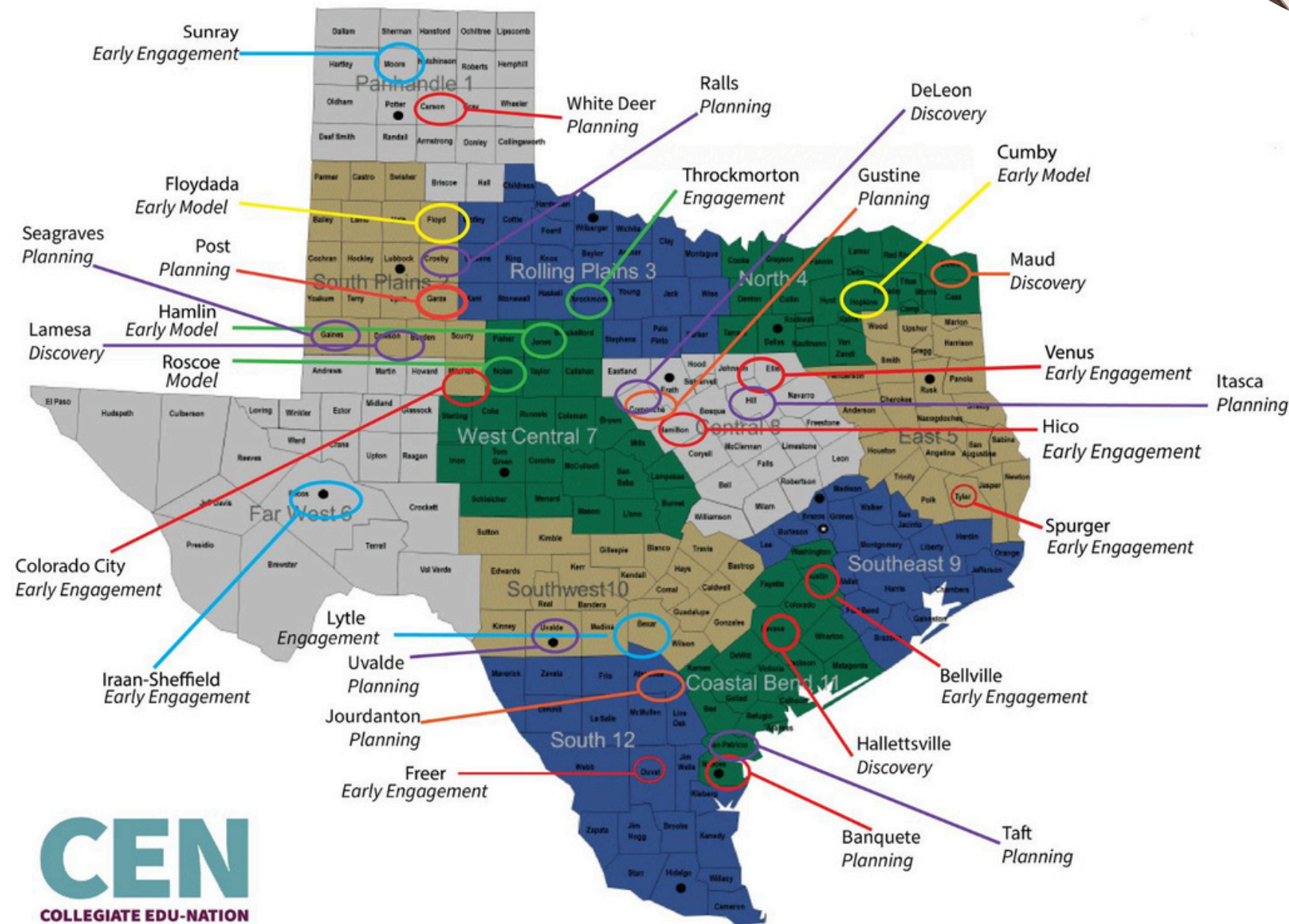
CEN

COLLEGIATE EDU-NATION



RACHAEL MCCLAIN

Collegiate Edu-Nation
CEN President



Primary Source:
Cammie Kannekens
District Instructional Coach (Prairie Rose Public Schools)
and Edtech Consultant (Logics Academy)
Alberta, Canada



Successes of Traditional PLCs:

- Encourages collaborative teaching culture.
- Focuses on improving student outcomes.
- Promotes reflective professional growth

Pain Points of Traditional PLCs:

- Lack of dedicated meeting time.
- Limited data analysis capabilities.
- Ineffective meeting facilitation.



What is Generative AI?

Generative AI is a **type of artificial intelligence** capable of creating new content, such as text, images, or even music.

Unlike traditional AI, which primarily analyzes data, Generative AI generates outputs based on the data it has learned from. It uses advanced models like GPT (Generative Pre-trained Transformer) **to understand patterns and produce human-like responses.**

Key Features:

- Creates new content based on prompts.
- Learns from vast datasets to improve responses.
- Adapts to provide personalized and insightful outputs.

Generative AI can **enhance teaching, streamline lesson planning, and facilitate collaborative discussions, making it a powerful tool for education.**

Objectives



Streamline Administrative Tasks:

Demonstrate how AI can automate routine administrative tasks within PLCs, freeing educators to focus on instructional strategies and collaborative planning.



Leverage Data for Better Decision-Making:

Showcase how AI-powered data analysis can provide actionable insights, helping PLCs identify student learning needs, monitor progress, and adjust interventions effectively.



Enhance Instructional Practices and Grading:

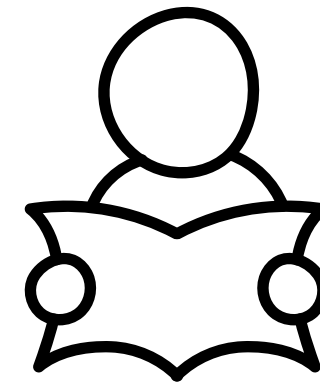
Explore AI tools that support personalized learning, improve grading efficiency, and enable teachers to develop targeted instructional practices, fostering more effective student learning outcomes.





**What is the
goal of
education?**

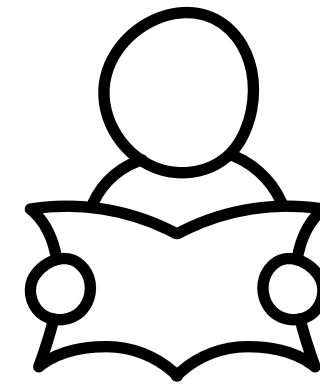
What is the goal of education?



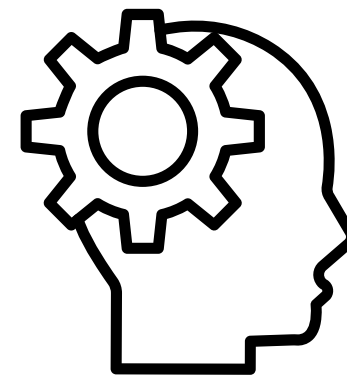
Lifelong
Learner



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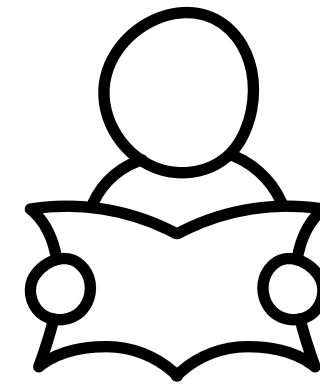


**Lifelong
Learner**

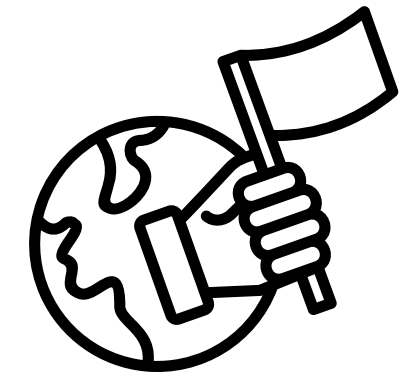


**Critical
Thinkers**

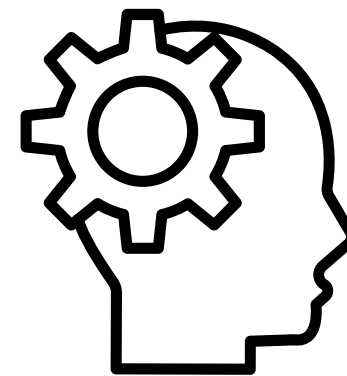
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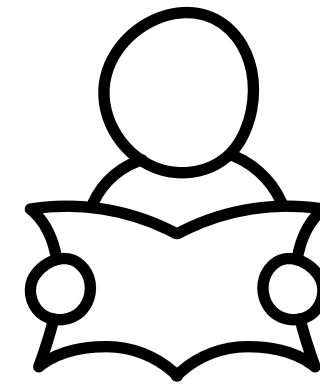


**Responsible
Citizens**



**Critical
Thinkers**

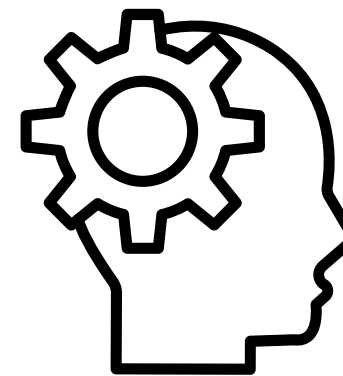
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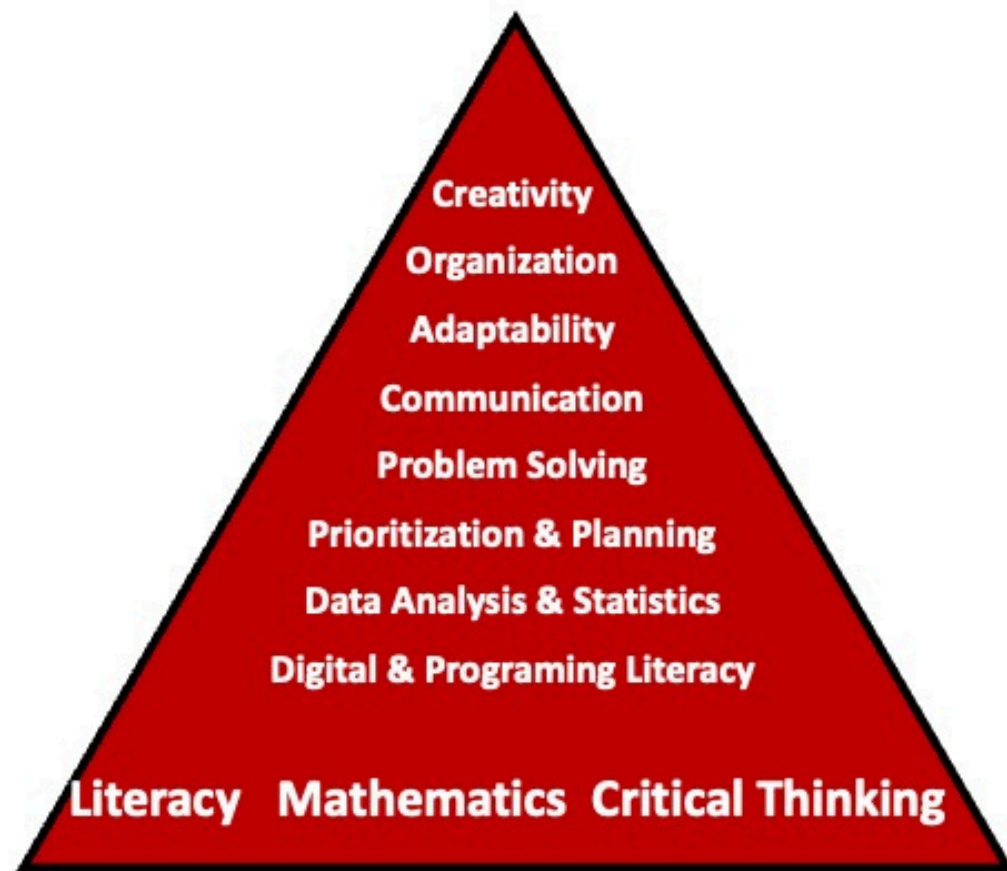


**Critical
Thinkers**



**College &
Career
Ready**

The Future Focused Instructional Framework for Schools



Cognitive & Academic



Interpersonal



Self-Leadership



Using AI to Improve Administrative Practices



Cheating versus Integrity

Sound Familiar?

We need an AI-Detector

No Technology in this lesson

Block AI from the Campus Wifi

The Problem with AI Detectors in Academics

(And How to solve it)

✓ Have conversations w/students about appropriate use of AI

✓ Collect writing samples throughout the year to use as growth indicators

✓ Capture student reflections on the AI collaboration process

✓ Think of collaboration with AI as similar to working with a tutor

✓ Have students share about how much AI was used for idea generation and feedback and how it impacted the final writing



✗ High frequency of false positives

✗ A lot of unnecessary work for teachers

✗ Lack of transparency about how they actually work

✗ Discrimination against non-native English speakers

✗ Promotes a false assumption that this is always bad

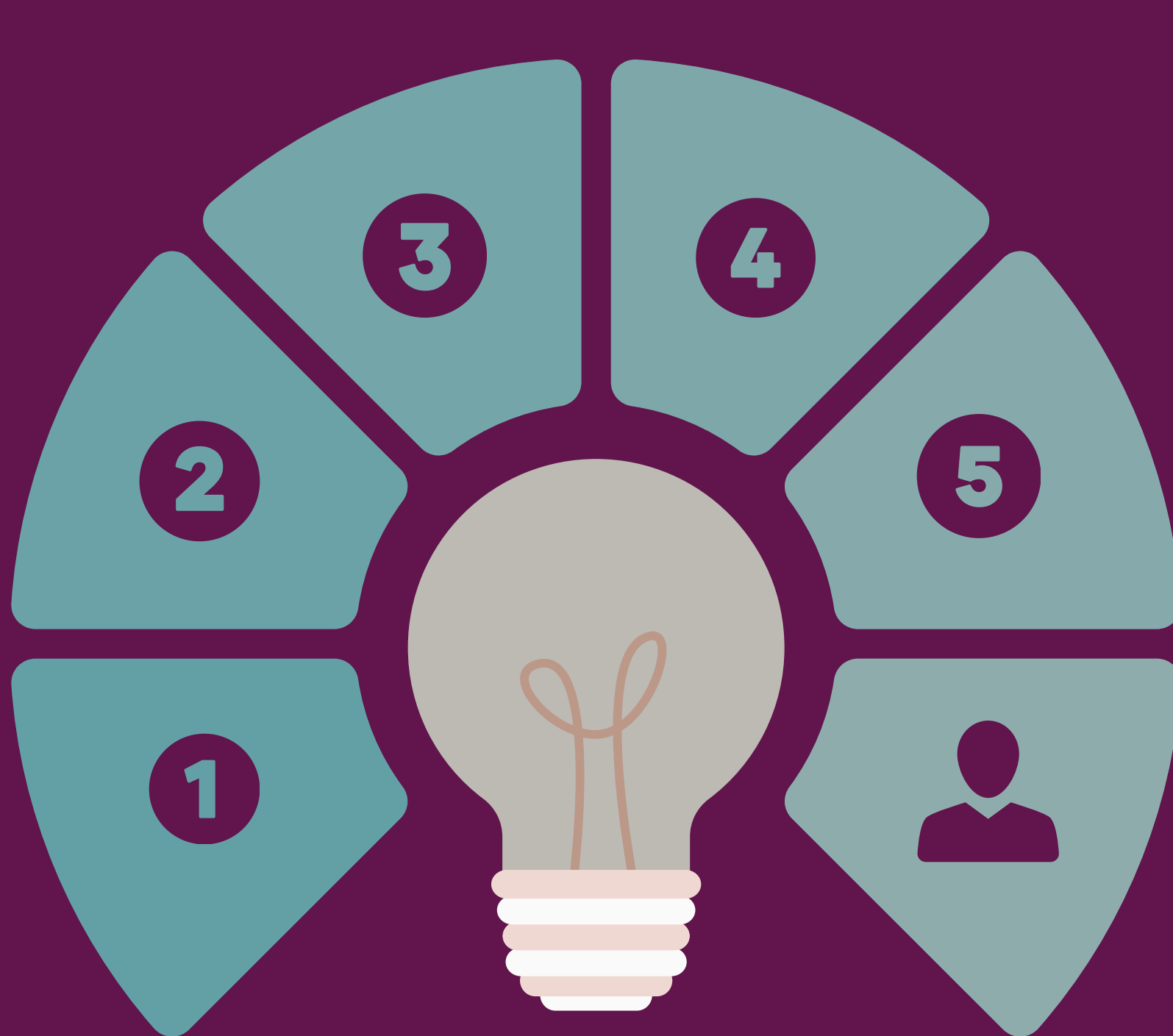
✗ Many institutions of higher learning are now turning these off



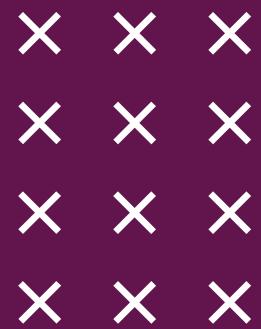
You can detect AI...

- ▶ Repetitive phrases
- ▶ Different writing style for student (Inconsistent tone, vocabulary, etc) from handwritten assignments
- ▶ Lack of personalization
- ▶ Forced cheeriness (sounds fake)
- ▶ Formatting (bullet points, headers)
- ▶ Try your prompt in AI and look for similarities

Shift: AI is Cheating to AI as Pedagogy



- 1** Normalize responsible AI use for students
- 2** You/human are the master – AI is your assistant
- 3** Think of AI as an **AMPLIFIER** – not a **REPLACER**
- 4** Think of AI as **FIRST DRAFT**
- 5** Think of AI as a personal tutor or assistant



Let's Demo!

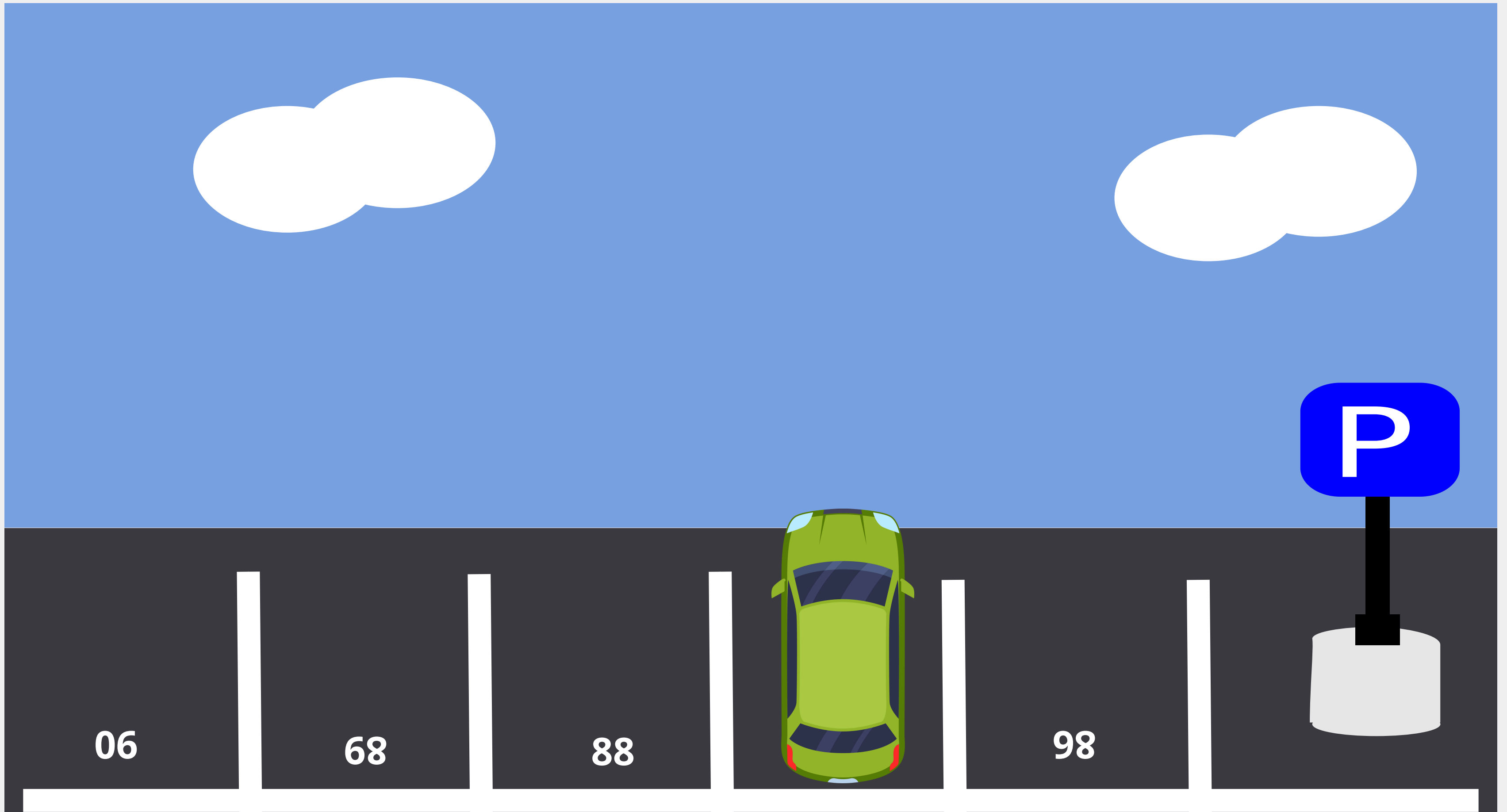
Using ChatGPT to create:

- Generate a professional development calendar for teachers designed to integrate AI in the lessons for the next 6 weeks
- Curate resources for a PLC
- Use AI-Note Taker to transcribe the PLC





AI Data Analysis Practices

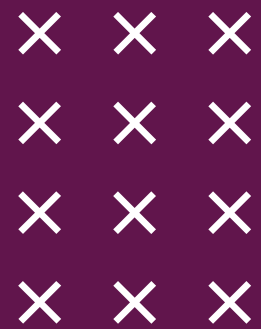


06

68

88

98



Let's Demo!

Using ChatGPT to create:

- Develop a student review based on EOY MAP Data
- Generate bell ringers and/or exit tickets using student data
- Create Tutorial Groups using formative data





AI Instructional Practices

Planning Assessment & Classroom Instruction

In the Gen AI Age

Teaching With AI

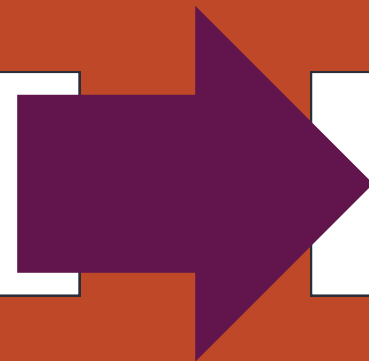
Teaching about AI



Planning Assessment & Classroom Instruction

In the Gen AI Age

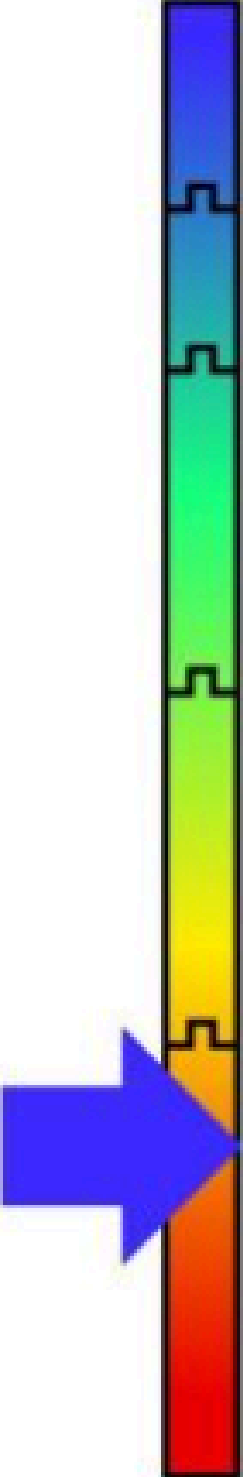
Teaching With AI



Teaching about AI



What level of AI can we use today?

- 
- AI does all your work - you don't think at all
 - AI writes it, you tweak it based on class notes
 - AI drafts it, you rewrite with your own ideas
 - AI gives options, you pick the best parts
 - You list main points, AI writes it up
 - AI coaches you through the writing process
 - When you're stuck, you ask AI for help
 - AI helps find facts, you write everything yourself
 - **You brainstorm with AI but write it all yourself**
 - You write it all, then ask AI how to make it better
 - You do everything yourself - no AI or internet help at all

AI Resources

AI Resistant (& Assisted) Assignments and Assessments

Ai for Education

<https://www.aiforeducation.io/prompts/design-an-ai-resistant-assessment>

Magic School

<https://www.magicschool.ai/>

Teaching Channel

<https://www.teachingchannel.com/k12-hub/blog/outsmarting-the-bots-5-strategies-to-create-ai-resistant-assignments/>

Caitlin Tucker

<https://catlintucker.com/2024/10/ai-resistant-tasks/>

Khanmigo

<https://www.khanacademy.org/teacher/khanmigo-tools>

AI Resistant Assessments

Assessment Area	AI-Resistant Skills	Assessment Methods
Critical Thinking	Analytical reasoning, problem-solving, decision-making	Case studies, scenario analysis, logic puzzles
Communication	Effective writing, public speaking, negotiation	Writing assignments, role plays, group projects
Creativity	Innovation, design thinking, problem-solving	Brainstorming sessions, design challenges, innovation competitions

AI Resistant Assessments

Product Transitions to Process	Product	Process
Enabling personalized, adaptive learning experiences that emphasize understanding, exploration, and skill development rather than just final outcomes		

AI Resistant Assessments

Product Transitions to Process	Doing Old Things Faster to Doing New Things Better	
Enabling personalized, adaptive learning experiences that emphasize understanding, exploration, and skill development rather than just final outcomes	Fostering innovation, creativity, and personalized learning approaches that go beyond efficiency to fundamentally transform educational experiences.	

AI Resistant Assessments

Product Transitions to Process	Doing Old Things Faster to Doing New Things Better	Compliance/Task Focused to Active Learning/Goal Focused
Enabling personalized, adaptive learning experiences that emphasize understanding, exploration, and skill development rather than just final outcomes	Fostering innovation, creativity, and personalized learning approaches that go beyond efficiency to fundamentally transform educational experiences.	Enabling more engaging, personalized learning experiences that encourage critical thinking, creativity, and deeper understanding, aligning activities with meaningful goals rather than merely completing tasks.

AI Resistant Assessments

Product Transitions to Process	Doing Old Things Faster to Doing New Things Better	Compliance/Task Focused to Active Learning/Goal Focused
<p>Enabling personalized, adaptive learning experiences that emphasize understanding, exploration, and skill development rather than just final outcomes</p>	<p>Fostering innovation, creativity, and personalized learning approaches that go beyond efficiency to fundamentally transform educational experiences.</p>	<p>Enabling more engaging, personalized learning experiences that encourage critical thinking, creativity, and deeper understanding, aligning activities with meaningful goals rather than merely completing tasks.</p>
Teacher as the Audience to Real World as the Audience		
<p>Providing students with authentic contexts, global collaboration opportunities, and meaningful feedback, making their learning experiences more impactful and relevant to real-world challenges.</p>		

AI Resistant Assessments

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Teacher as the Audience to Real World as the Audience	Consumption to Creation	
<p>Providing students with authentic contexts, global collaboration opportunities, and meaningful feedback, making their learning experiences more impactful and relevant to real-world challenges.</p>	<p>Actively produce content, innovate, and solve problems, turning them from passive recipients of information into active creators who apply knowledge in meaningful ways.</p>	

AI Resistant Assessments

Product Transitions to Process	Doing Old Things Faster to Doing New Things Better	Compliance/Task Focused to Active Learning/Goal Focused
<p>Enabling personalized, adaptive learning experiences that emphasize understanding, exploration, and skill development rather than just final outcomes</p>	<p>Fostering innovation, creativity, and personalized learning approaches that go beyond efficiency to fundamentally transform educational experiences.</p>	<p>Enabling more engaging, personalized learning experiences that encourage critical thinking, creativity, and deeper understanding, aligning activities with meaningful goals rather than merely completing tasks.</p>
Teacher as the Audience to Real World as the Audience	Consumption to Creation	Traditional Assignment to Content the World wants to Consume
<p>Providing students with authentic contexts, global collaboration opportunities, and meaningful feedback, making their learning experiences more impactful and relevant to real-world challenges.</p>	<p>Actively produce content, innovate, and solve problems, turning them from passive recipients of information into active creators who apply knowledge in meaningful ways.</p>	<p>Enabling students to create authentic, audience-relevant work that has a purpose beyond the classroom, engaging broader communities and contributing to the world in meaningful ways.</p>

What happens Offline

Emphasize **Personal Reflection**
More **oral response**

Spend more time on the **process** –
collect the process

Spiky **Opinions** / Spectrums / Rank &
Justify

Class **discussions**

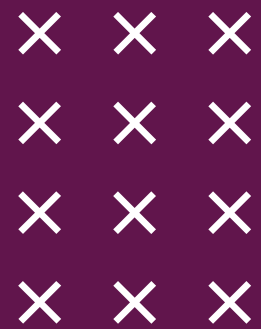
Hand written rough drafts

What happens Online

Digital **Portfolios**

Change the medium to multimedia
(recording, podcasting, videos, digital
portfolios, etc)

More oral digital response
([Snorkl.app](https://snorkl.app), Seesaw, Padlet, etc)



Let's Demo!

Using ChatGPT to create:

- Consumption to Creation Lessons
- Trend Data to generate PBLs with support resources





Links

Cammmie's AI Padlet at bit.ly/prpsai3

TeachAI's AI Guidance for Schools Toolkit
<https://www.teachai.org/>

Ditch That Textbook on Writing Feedback

10 ways to detect AI ...with Human power

Video: "Cheating is a Skill" - Dan Fitzpatrick
(6:52)

AiforEducation.io Resource Hub

Amazon: Dan Fitzpatrick's *The AI Classroom*

Amazon: Matt Miller's *AI for Educators*

Holly Clark's "Why AI Detectors Are Problematic" *AI Infused Classroom*

<https://www.aiedu.org/ai-snapshots> 180 x 5
minute AI Snapshots

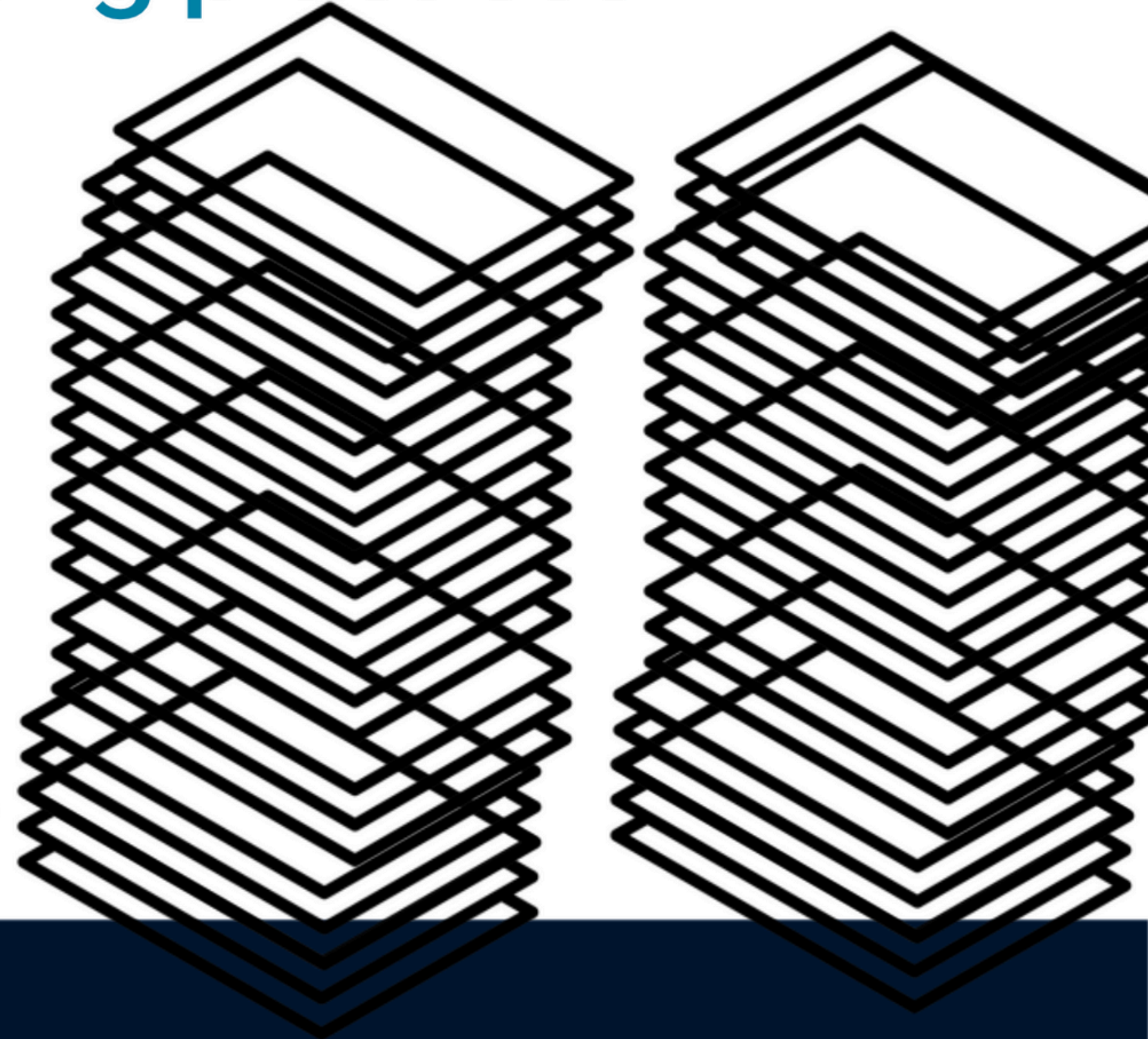
Using AI to Grade



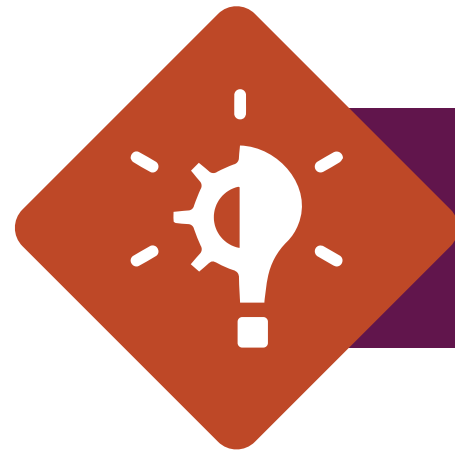
A Tale of Four RLA Teachers...

Current assessment/grading practices

- 😬 colleague 1
 - % only
- 😬 colleague 2
 - 6-8 weeks to return
- 😬 colleague 3
 - skips writing
- 😬 colleague 4
 - quality feedback, 2 weeks



Using AI to Grade



Workflow Process

Teacher and/or student...

1. Copy/Paste your rubric into **ChatGPT** or **Perplexity.ai**
2. Paste the written response afterward; ask for feedback on writing

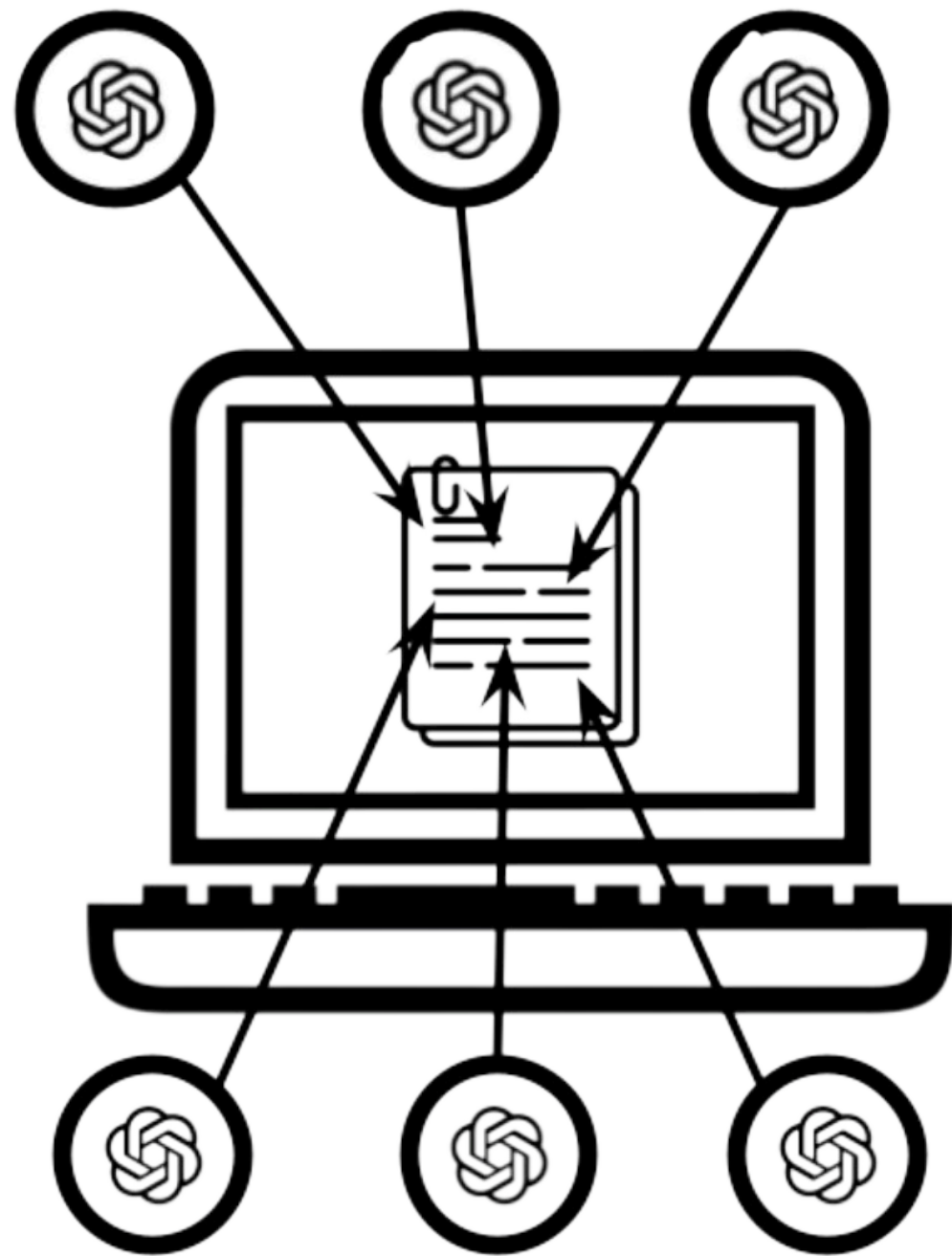
Prompt: *"Can you use this rubric to provide feedback on **[this aspect of my writing]** and explain your suggestions."*



AI Feedback vs. Human Feedback

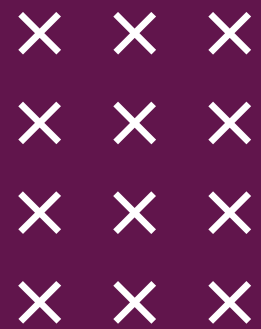
- Timely → instant
- Therefore, more frequent
- More consistent
- More accurate
- More detailed
- Can increase student independence/ownership
- Less biased than a human

Here's how I used ChatGPT to assess student writing



Guest post by Deborah Cleveland

**Here's how I
used ChatGPT
to assess
student
writing**



Let's Demo!

Using ChatGPT to create:

- Generate sample prompts for classroom practice for short-constructed response
- Practice grading STAAR passages using AI



Resource Page

<https://coloradoea.org/news-updates/a-deeper-dive-into-ai-cheating/>

Cammie Kannekens
District Instructional Coach
(Prairie Rose Public Schools)
and Edtech Consultant
(Logics Academy)
Alberta, Canada

[AI Guidance for Schools
Toolkit](#)

[Foundational Policy Ideas for
AI in Education](#)

[Teach AI Guidance Toolkit and Foundational
Policy Ideas](#)

[SIIA Education Technology Industry's
Principles for the Future of AI in Education
Council of the Great City Schools & CoSN](#)

[Launch K-12 Generative Artificial
Intelligence \(Gen AI\) Readiness Checklist
CoSN and Council of Great City Schools K-
12 Gen AI Maturity Tool](#)

[Ed SafeAI Alliance SAFE Benchmarks
Framework](#)

[Kapor Foundation Responsible AI and Tech
Justice: A Guide for K-12 Education](#)

[Office of Educational Technology: Artificial
Intelligence and the Future of Teaching and
Learning](#)

[Australian Framework for Generative
Artificial Intelligence in Schools](#)

[OECD: Artificial Intelligence
\(recommendation of the Council on Artificial
Intelligence\)](#)

[Bletchley Declaration](#)

[Torrey Trust GenAI & Ethics: Investigating
ChatGPT, Gemini, & Copilot](#)

Resource Page

[Triple E Evaluation for Educational Apps](#)

[Rubric for Evaluating AI Tools for Schools](#)

[AI Policy Resources](#)

[AI Equitable Access Resources](#)

[Eric Curts,](#)
[ControlAltAchieve.com](#)



THANK YOU

QUESTIONS?

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