# Al and Educators: 5 Steps to Take Now

October 19, 2023

•• Think •• CERCA<sup>™</sup> ONE-STOP-SHOP

### **Think Netflix for Literacy**

ThinkCERCA for Tier 2

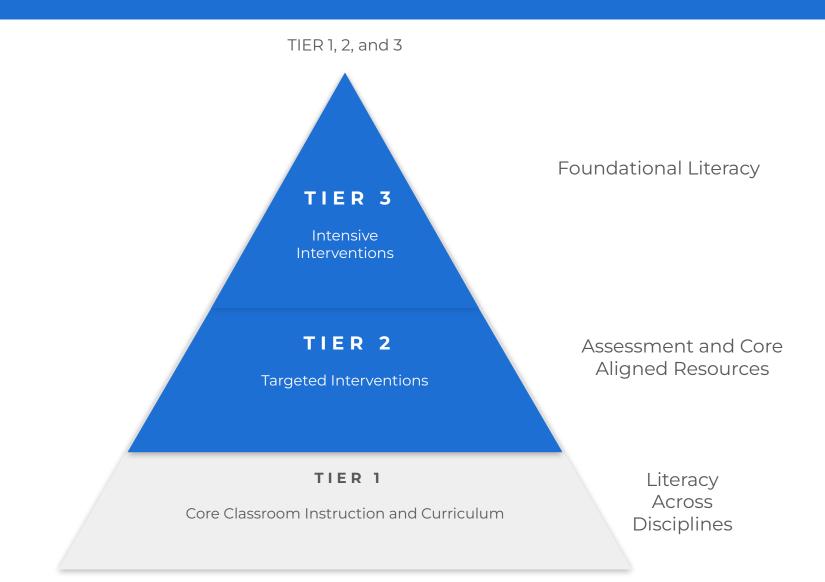


ELA 🗸 Grade 3 🗸

#### Lesson Spotlight (33)

View All





### Presenters



**Q McCallum** Al/ML Consultant, Writer, Researcher ThinkCERCA



Michael S. Manley (MSM) Chief Technology Officer ThinkCERCA



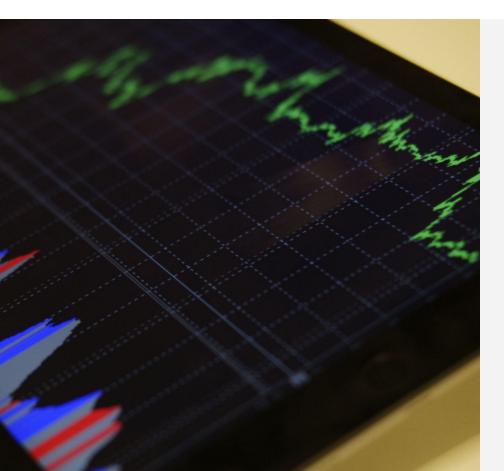
**Daniel Rivera** Technology Director Georgia's 1st District RESA

### Agenda

- → Quick recap of our previous webinar: <u>ChatGPT in Education</u>
- → Five steps you can take to improve your relationship with ChatGPT and similar AI tools
- → A sneak peek at some of what ThinkCERCA is doing with AI
- → Closing Out w/ Q&A

# What We Talk About When We Talk About Al

# What is Al?



Mathematical Modeling that can be used to:

- Make predictions.
- **Sort things into buckets** or group things together.
- **Recognize** things that **don't** fit patterns.

Where this practice often goes off the rails: **bias in the data used to train the models**.

### What is Generative AI?

# Solution OpenAl Solution





Our story so far...



### **How We Got Here**

### 7 ways to use ChatGPT at work to make your job easier

Analysis by Jacob Zinkula and Aaron Mok Updated Sep 3, 2023, 2:49 PM CDT

"CHATGPT DOES LIKE 80 PERCENT OF MY JOB IF I'M BEING HONEST." <sup>теснвучисе</sup> **'Overemployed'** Hustlers Exploit ChatGPT To Take On Even More Full-Time Jobs

MOTHERBOARD

### Where We Are Now

### Detecting AI may be impossible. That's a big problem for teachers.

Turnitin has acknowledged a reliability problem with Ai cheating-detection software used on 38 million student papers. Computer scientists warn we may never be able to reliably detect AI.



Analysis by <u>Geoffrey A. Fowler</u> Columnist | + Follow

June 2, 2023 at 12:30 p.m. EDT



# **A Point on Ethics**

- Everyone will be tempted to take the easy route
- Al is sweet sweet sugar... and we could become mental diabetics
- Honest Reflection:
  - Do you want to grow?
  - Are you claiming this is your work?
- If Yes, don't use A.I., or at least admit it
- From Creator to Director

# **Get Curious**

Artificial intelligence can respond intelligently to human prompts but it is up to humans to create those prompts. By empowering more productive acts of creation, AI elevates the importance of curiosity. In the future, it will be increasingly important for students — for all people — to be able to identify and ask interesting, important questions.

Consequently, **inquiry-oriented practices** — practices that promote the development of curiosity by getting students to ask more of the questions and allowing them to pursue their own wonderings in the context of authentic investigations — will become increasingly important.

# **Asking Good Questions**

My mother made me a scientist without ever intending to. Every other Jewish mother in Brooklyn would ask her child after school: So? Did you learn anything today? But not my mother.

*"Izzy,"* she would say, *"did you ask a good question today?"* That difference — asking good questions — made me become a scientist.

-- Isidor Isaac Rabi - Nobel laureate & physicist.

# Apathy



### APATHY

whatever - add your own Sub-text



### Lessons from Star Wars

### Apathy

- Fuels the "Dark Side"
- Quick, easy way out
- Short Term
- Al as a quick fix
- Cheats you of thought & growth

### Curiosity

- Fuels the "Light Side"
- Harder path
- Long Term
- Al as a tool for learning
- Encourages thinking & growth

### 5 Steps You Can Take Now



### 1. Opt Out of the Arms Race

# A STRANGE GAME. THE ONLY WINNING MOVE IS NOT TO PLAY.



Your Students are Solution Seekers

### $\equiv$ WIRED

BY CHRISTOPHER BEAM BACKCHANNEL SEP 14, 2023 6:00 AM

### The Al Detection Arms Race Is On

And college students are developing the weapons, quickly building tools that identify Al-generated text—and tools to evade detection.

The Al detection tools are ... not so good

### ars TECHNICA

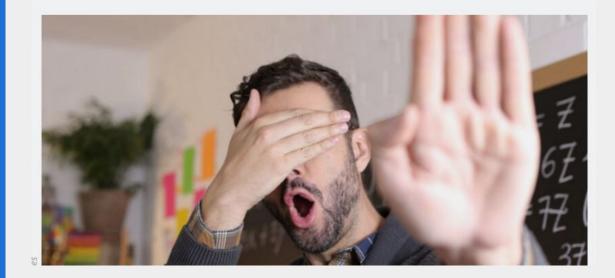
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#### ADVENTURES IN 21ST-CENTURY WRITING -

# OpenAI confirms that AI writing detectors don't work

No detectors "reliably distinguish between AI-generated and human-generated content."

BENJ EDWARDS - SEP 8, 2023 3:42 PM UTC



## 2. Compare and Contrast

#### Potential identifying characteristics

We expect to see certain characteristics in a student writer's original response to a ThinkCERCA prompt, which makes an Al-generated response quite distinctive.

Characteristic	Student-generated work	Al-generated work Little to no specific evidence about the topic is included. If evidence is included, it generally cannot be found in ThinkCERCA texts, and if it can, the evidence is more detailed than the source material provided. Most likely, the body includes complex, detailed reasons and reasoning with little supporting evidence.		
Evidence	The writer incorporates quotes, details, references, or statistics drawn from one or both ThinkCERCA texts, possibly with the addition of personal experiences or common knowledge.			
Syntax	Student syntax will include primarily simple or compound sentences, depending on student grade-level and skill development. Sentences tend to start in repetitive ways. Errors in capitalization, spelling, and sentence structure (e.g. fragments) are common, with almost every response including errors of some kind.	Syntax is generally quite advanced, with sentences properly using multiple commas linking the independent clause with multiple subordinate clauses, participial phrases, or other structures. Sentences have varied beginnings, frequently starting with adverbs, adjectives, or participles. Items in lists generally come in threes and are usually fairly lengthy (e.g. verb phrases) but 100% properly used. Errors are not usually found in the text		
Diction	While expectations for diction vary based on grade level, the general vocabulary of an elementary, middle, or	Al has all of English vocabulary at its disposal, and it uses–or shall we say, it <i>utilizes</i> –relatively advanced words throughout its responses.		

### **3. Learn More about Al**

### **From Our Speakers:**

- Daniel Rivera: https://tiny.cc/aioverview
- Q McCallum: https://qethanm.cc/tags/data-literacy/

### **Other Resources:**

- The Office of Educational Technology: https://tech.ed.gov/ai/
- The State of AI: https://www.stateof.ai/



# **3. Learn More about Al**

- Al Wastes Water: A.I. tools fueled a 34% spike in Microsoft's water consumption, and one city with its data centers is concerned about the effect on residential supply <a href="https://fortune.com/2023/09/09/ai-chatgpt-usage-fuels-spike-in-microsoft-water-consumption/sumption/">https://fortune.com/2023/09/09/ai-chatgpt-usage-fuels-spike-in-microsoft-water-consumption/</a>
- Al Wastes Electricity: Powering Al could use as much electricity as a small country <u>https://techxplore.com/news/2023-10-powering-ai-electricity-small-country.html</u>
- Al Wastes Money: So far, Al hasn't been profitable for Big Tech <u>https://arstechnica.com/information-technology/2023/10/so-far-ai-hasnt-been-profita</u> <u>ble-for-big-tech/</u>
- Al May Waste Time: 'Overhyped' generative Al will get a 'cold shower' in 2024, analysts predict <u>https://www.cnbc.com/2023/10/10/generative-ai-will-get-a-cold-shower-in-2024-analy</u>

sts-predict.html

### 3. Learn More about Al

- Learn as much about AI as you can beyond text
- PLAY and break it. Be creative.
- Use it to save you time on tedious things
- Use it to learn ... everything
- Consider long-term implications



### 4. Develop In-Class Uses for LLMs

Sources for Ideas:

- Harvard Business School: <u>Student Use Cases</u>
- Common Sense Media: <u>Lessons and Tools for Teaching</u>







# Worked Examples

You are a 7th grade student studying Shirley Jackson's short story, "The Lottery." You have been asked by the teacher to write an argumentative essay with the prompt, "Analyze the commentary Shirley Jackson makes on society and human behavior through the story of "The Lottery." Use details from the text to explain why everyone in the town chooses to participate year after year." Draft that essay.



# Worked Examples

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Draft 1 Shirley Jackson's "The Lottery": A Commentary on Society and Human Behavior In her short story "The Lottery" Shirley Jackson In her short story "The Lottery" Shirley Jackson In her short story "The Lottery" Shirley Jackson In her short story "The Lottery" Shirley Jackson

Shirley Jackson's "The Lottery": A Commentary on Society and Human Behavior

In her short story "The Lottery," Shirley Jackson makes a powerful commentary on society and human behavior. Through the story of a seemingly idyllic town that engages in a yearly ritual of stoning someone to death, Jackson explores themes such as mob mentality, blind conformity, and the capacity for violence that exists within all of us.

One of the most striking things about the story is that everyone in the town chooses to participate in the lottery, even though they all know that it is a cruel and barbaric act. This suggests that Jackson is making a broader point about the dangers of groupthink and the tendency of people to

### **ThinkCERCA**

View other drafts 🔨

# Worked Examples

First: It got something wrong:

 When Old Man Warner suggests that the lottery should be stopped, the other townspeople quickly dismiss him.

Second: It did something odd:

 Overall, Shirley Jackson's "The Lottery" is a powerful and disturbing story that makes a深刻的 commentary on society and human behavior.

### ThinkCERCA™

# Translation Exercises



(Photo by Markus Krisetya on Unsplash)



# 5. Be Open with the Students and Learn about AI.



(Photo by Kenny Eliason on Unsplash)







assignment. Assess YOUR knowledge/skill.

→ YELLOW - Get permission to use A.I. Share chat logs, transparent assistance.

→ GREEN - Encouraged to use A.I. on assignment. Use as a tutor, to learn from.

Build healthy "working relationship" with AI tools.

### **Sneak Peek**



### New Integrations

- We've already integrated Azure Immersive Reader, an AI-backed assistive technology that provides voice-overs for lesson materials, translation to multiple languages for both text and speech, highlighting tools for focusing reader attention, and parts-of-speech and dictionary support.
- → We will soon be integrating AI-backed spelling and grammar checking tools into the writing experience across the platform.

### **ThinkCERCA**

# Al Backed Lesson Search

We will soon be integrating AI-backed search into ThinkCERCA's lesson library of thousands of lessons, which will allow you to find the appropriate lesson content for your classroom using natural language.

### **ThinkCERCA**

Automated Feedback on Student Writing

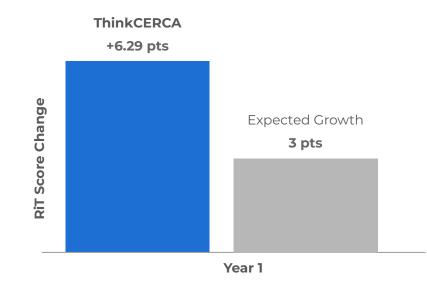






# **2x Reading Growth in a Year**

As measured by the NWEA MAP assessment

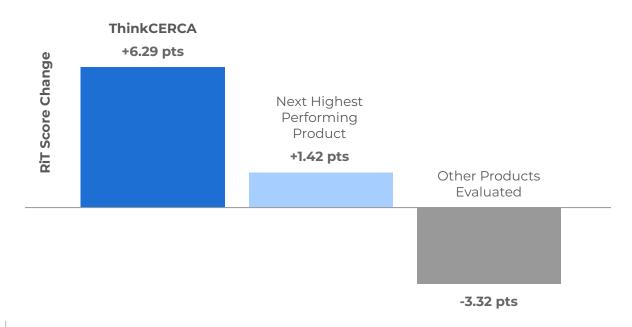




An **independent**, **controlled study** of 26 ed-tech products by LEAP Innovations showed ThinkCERCA helped students achieve an extra year's worth of growth in one school year. Source: "Finding What Works: Results from the LEAP Innovations Pilot Network," 2014-2015.

### **4x More Growth Than Competitors**

Compared to the next highest performing product on NWEA MAP

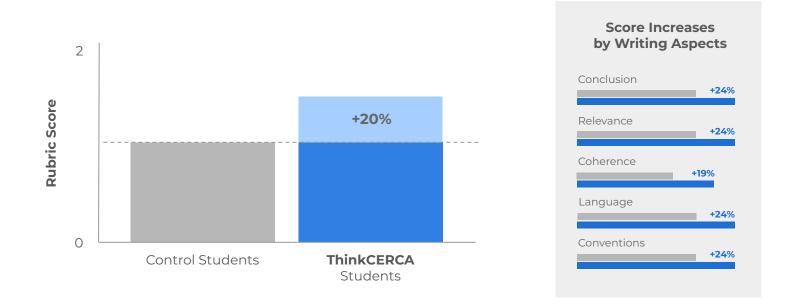




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### **20%** Gain in Writing Scores

(in as little as 8 weeks of ThinkCERCA usage)





As part of the Gates Foundation Literacy Courseware Challenge Grant, an independent, controlled study found that elementary school students who used ThinkCERCA saw gains in their writing scores across all writing aspects. *Source:* "*Literacy Courseware Challenge Evaluation: Results of ThinkCERCA Participation,*" 2016.

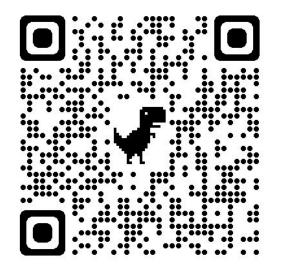
# Get in touch!

### **Current Partners**

Contact your School Success Manager.

### New to ThinkCERCA?

Schedule a demo during a time that fits with your schedule.



ThinkCERCA'S One-Stop-Shop for Literacy

### **One Platform for Literacy**

Eliminate Cost, Work as a Team, and Gain Actionable, Apples to Apples Insights on Student Learning

Benchmark Writing Assessments and Evaluation Services		Core English Language Arts/ Reading Curriculum Su		Tier 1 Reading and Writing Supplement Across Disciplines	
Additional Leveled Reading Practice		Personalized Grammar and Skills Practice		Assessment Prep	
Foundational Reading Skills and Tutoring Services					

