

Unlocking the Power of AI for Work-Based Learning

December 2, 2025



I-WIN

Illinois Work-Based Learning
Innovation Network



Our Vision

Clear, unambiguous paths to college and career opportunities that equip students for meaningful participation in the global economy.

Pillars of Work

- Policy: Shaping systems for equitable college and career access
- Practices: Improving learner experiences and outcomes
- Impact: Driving systemic change through data and networks

Areas of Practice

- College and career pathways
- Career-connected and work-based learning
- Transitional instruction
- Early college coursework
- Flexible learning
- Longitudinal data
- Collective impact networks



Explore the [I-WIN Resource Hub](#)
and [subscribe to the newsletter](#)



Highlight and explore
innovative models for
work-based learning



Engage in conversations
on creating sustainable,
high-quality models
that provide broader
and more equitable
access, focusing on
building social capital
for students furthest
from opportunity



Build connections
among communities to
share best practices,
learnings and resources



Identify needs for state
policy changes or
support systems



stronger together

Creating Opportunity for Every Learner

➤ Illinois Education and Career
Success Network Conference
2.26.2026, Palos Hills, Illinois

Introduce yourself!

Please share in the chat your:

- Name
- Role
- Organization
- **Plus, any top-of-mind questions about AI and how it can be used for work-based learning**

Today's discussion:

[Learning Technology Center](#) will share:

- The fundamentals of artificial intelligence
- How AI tools can streamline administrative tasks, boost productivity, and enhance coordination efforts.
- How AI can enrich student-facing experiential learning opportunities

Artificial Intelligence to Increase Efficiency

I-WIN Team, 12.2.25

Eric Santos

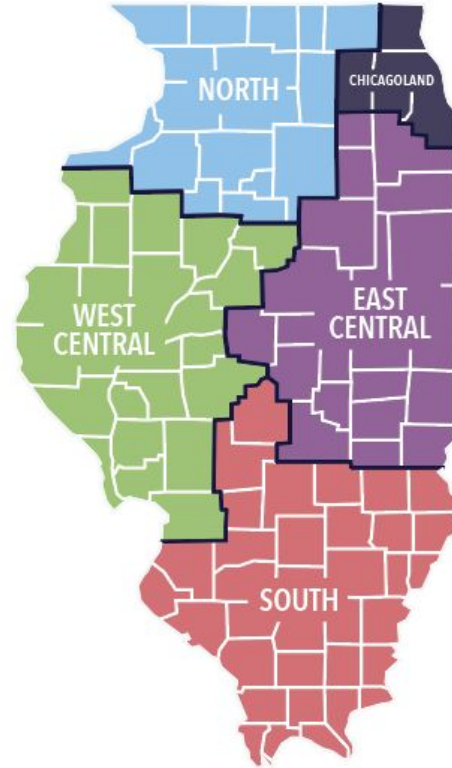


About the LTC

We provide

- Professional Learning
- Resources
- Consulting and guidance
- Networking
- Services
- Technical Support

👉 ltcillinois.org



Meet the Presenter

Eric Santos, Regional Ed Tech Coordinator, LTC Chicagoland



About Me

- NCBT, STEM Teacher, Tech Coach
- Adjunct Professor of Education
- More about me: LTC.site/eric
- What I offer: LTC.site/santosworkshops
- AI-specific Workshops: LTC.site/santosai



Learning
Technology
Center



Large Language Models



ChatGPT

Gemini



Claude

Professional grade commercial kitchen that has every appliance and ingredient and can cook ANYTHING.



AI Platforms

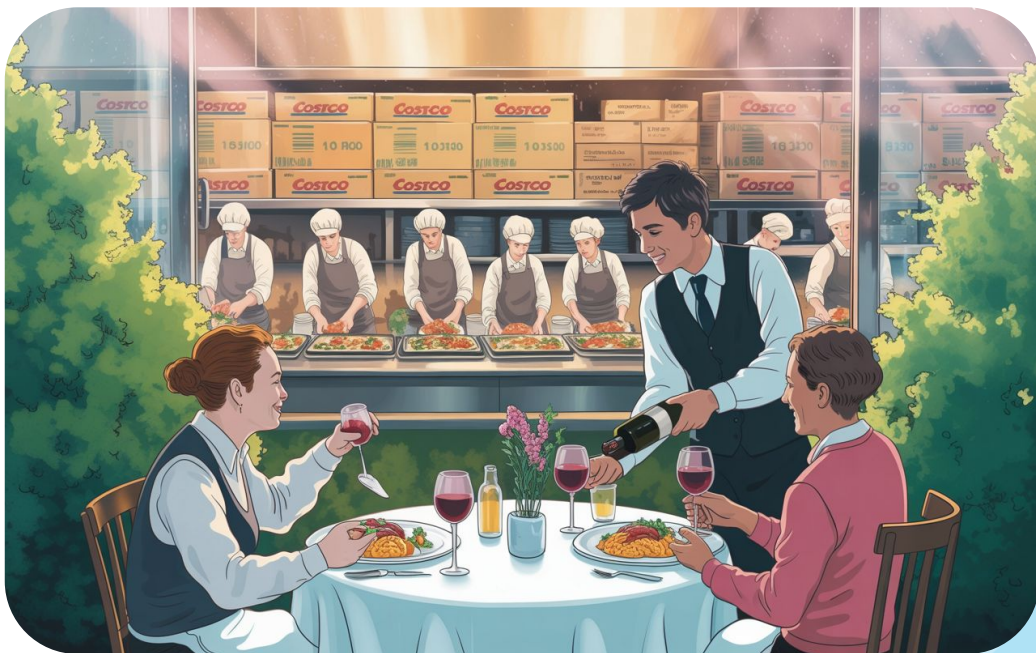
Use LLMs **behind the scenes** to do the language-heavy lifting.

Add extra features and a unique interface

 NotebookLM

 perplexity

 Copilot



Specialized Tools



Specialized Models

World-class specialty restaurant

They only make one thing, but they've built a model (kitchen) that is trained heavily on that one specialty, so it outperforms the generalized kitchen at that one thing.



Which LLM do I choose?

Gemini

Claude

Copilot

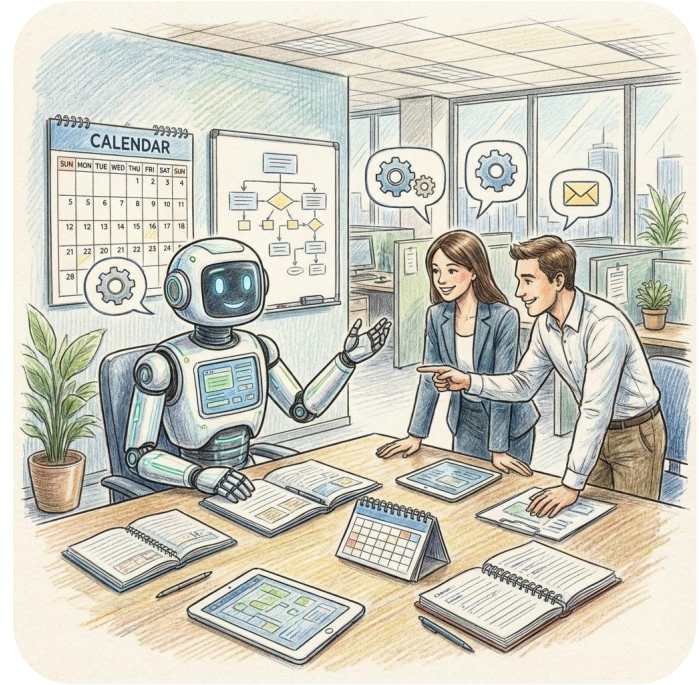
ChatGPT



Three AI Workflows

1. Planning and Communications:

- Draft an email on a sensitive topic.
- Write a recommendation letter.
- Plan a New Intern Orientation presentation.
- Role play a job interview
- Research a job field.



Prompts to try:

[Chat GPT](#) | [Gemini](#) | [Claude](#) | [Perplexity](#)

Slide 13

Creative Event Planning

- "I am hosting a networking breakfast for shy high school students and corporate bankers. Give me 5 specific icebreaker questions to put on the tables to get them talking."
- "Give me 10 catchy titles for a Resume Workshop that won't sound boring to teenagers."
- "Create a 1-hour agenda for a 'New Intern Orientation' that covers safety, professionalism, and communication."

Instructional Materials & Roleplay

- "Create 3 'angry customer' scenarios for my hospitality students to roleplay in class."
- "Generate a quiz with 5 multiple-choice questions about workplace safety based on general OSHA standards."
- "Create a rubric for grading a student's 'End of Internship' presentation."

Student Support (Equity & Access)

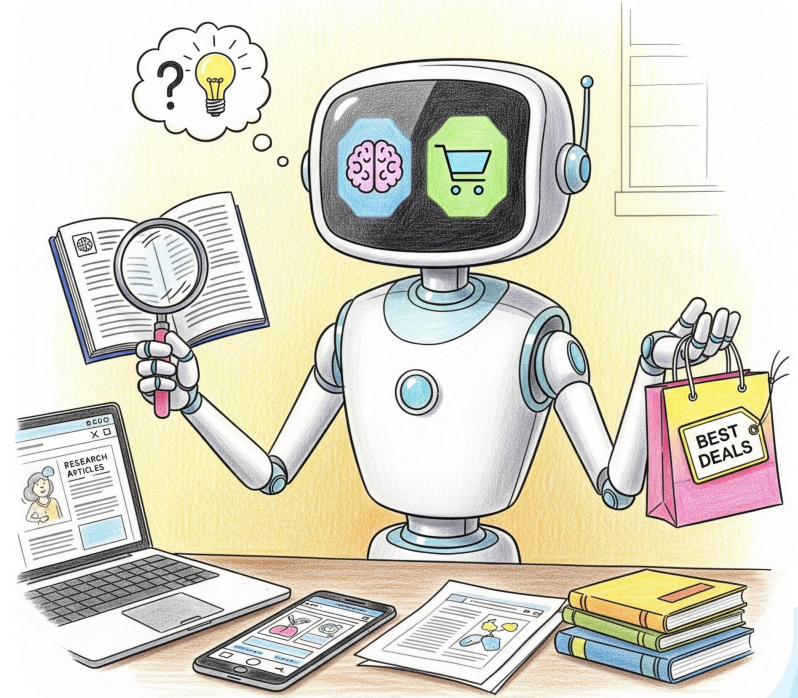
- "Here is a list of chores a student does (babysitting, mowing lawns). Rewrite these as professional 'transferable skills' for a resume."
- "Act as a hiring manager for a retail store. Interview me for a cashier job. Ask one question at a time and wait for my response."
- "Translate this permission form into Spanish and Polish."

Marketing & Recruitment

- "Write 3 different social media posts (Instagram, Facebook, LinkedIn) celebrating our students who just passed their CNA exams. Tailor the tone for each platform."
- "Create a flyer text to recruit local businesses to our 'Career Expo'. Focus on the benefit of building their future workforce."

Tools and Skills we learned:

- [Chat GPT](#), [Google Gemini](#), [Perplexity](#)
- Drafting text in different formats, voices, styles, and languages
- Using different models and modes.
- Uploading files and photos.
- Deep Research
- [Google AI Studio Live](#)
- Fast research and citing sources ([Perplexity](#))
- Deep Research with [Gemini](#)
- Shopping with AI!



2. Analyze Data

- “What trends do you see?”
- “What are the most common skills?”
- "Group the students into categories based on their transportation needs."
- Create a bar chart / table showing distribution of grade levels.
- Summarize GPA by Career Cluster.
- “Create an Infographic...”
- “[Show me](#) how to make a pivot table.”

A	B	C	D	E	F	G	H	I	J	K
Student ID	First Name	Last Name	Grade	GPA	Career Cluster	Preferred Work Environment	Transport Access	Availability Start Date	Skills & Certifications	Personal Statement
1001	Jordan	Smith	11	3.4	Health Science	Clinical/Lab	Public Transit	2024-06-01	CPR, First Aid	I've always wanted to be a nurse. I helped take care of my grandpa in biology class.
1002	Liam	Johnson	12	2.8	Manufacturing	Hands-on/Shop	Own Car	2024-05-15	OSHA-10, Welding Basics	I prefer working with my hands. Classroom all day is hard for me. I want to learn more about welding last summer.
1003	Emma	Williams	10	3.9	STEM (Engineering)	Office/Remote	Parent Drop-off	2024-06-10	Python, Javascript, Robotics	I love coding and solving puzzles that help people organize.
1004	Noah	Brown	9	3.1	Arts & AV	Studio/Creative	Public Transit	2024-06-01	Adobe Photoshop, Photography	I run a YouTube channel for art. I want to learn more about video graphic design.
1005	Olivia	Jones	11	3.6	Business & Finance	Office	Own Car	2024-05-20	Microsoft Excel, Public Speaking	I am the treasurer for the student council. I like math but applied to real money.
1006	William	Garcia	12	2.5	Construction	Outdoors	Public Transit	2024-05-15	Carpentry Level 1	I like seeing the results of my work. I helped build a shed for my dad.
1007	Ava	Miller	10	4	Health Science	Hospital	Parent Drop-off	2024-06-15	CPR, Spanish (Fluent)	My mom is a doctor and I want to be a nurse. I am very organized in science.
1008	James	Davis	11	3.2	IT / Cybersecurity	Office	Own Car	2024-06-01	CompTIA Fundamentals	Computers are easy for me. I want to know how to stop hackers.
1009	Isabella	Rodriguez	9	3.5	Education	Classroom	School Bus/Walk	2024-06-20	Babysitting, Tutoring	I love kids. I tutor my little cousin. I think I want to be a teacher.
1010	Benjamin	Martinez	12	2.9	Transportation & Logistics	Warehouse/Active	Own Car	2024-05-15	Forklift (Provisional)	I like keeping things moving. I work at a warehouse. I like organizing shelves right and left.
1011	Mia	Hernandez	10	3.8	Marketing	Office/Creative	Parent Drop-off	2024-06-01	Social Media Mgmt, Canva	I run the Instagram for the school. I like analyzing what posts get the most likes.
1012	Elijah	Lopez	11	3	Manufacturing	Factory Floor	Public Transit	2024-06-10	CNC Machining Intro	I like consistent work where I can follow detailed instructions.
1013	Charlotte	Gonzalez	12	3.7	Law & Public Safety	Office/Court	Own Car	2024-05-20	Debate Team, Mock Trial	I want to be a lawyer. I like arguing my way and reading about history.
1014	Lucas	Wilson	9	2.7	Agriculture	Outdoors	Bicycle	2024-06-15	Gardening	I volunteer at the community garden. I like being outside and not stuck inside.
1015	Amelia	Anderson	11	3.9	STEM (Bio-Med)	Lab	Own Car	2024-06-01	Lab Safety, Microscope	I am fascinated by how cells work. I research diseases one day. Research.
1016	Mason	Thomas	10	3.3	Hospitality	Hotel/Restaurant	Public Transit	2024-06-10	ServSafe Food Handler	I like talking to people and making them want to own a restaurant one day.
1017	Harper	Taylor	12	3.1	Arts & AV	Backstage/Tech	Own Car	2024-05-15	Lighting Design, Sound Mixing	I don't want to be on stage.
1018	Ethan	Moore	11	2.6	Construction	Job Site	Friend's Car	2024-06-01	Drywall, Painting	School isn't my favorite but I like to learn a trade so I can start my own business.
1019	Evelyn	Jackson	9	3.8	Human Services	Office/Community	Parent Drop-off	2024-06-20	Conflict Resolution	I am the person my friends come to for help.

Prompts you can try (copy/paste) with this data:

Get the data first! [XLS File](#) | [PDF File](#)

"Create a bar chart showing the number of students in each 'Career Cluster'. Which industry has the highest interest?"

"Analyze the 'Transport Access' column. What percentage of our students rely on Public Transit or Walking? Create a pie chart."

"Read all the 'Personal Statement' responses. Identify the top 3 recurring themes or motivations that drive these students."

"I want to invite all the students interested in 'Health Science' to a tour of the local hospital next Tuesday. Draft a short, exciting email invitation I can send to them."

"Search the 'Skills & Certifications' column. List any students who have OSHA-10, CPR, or Excel certifications."

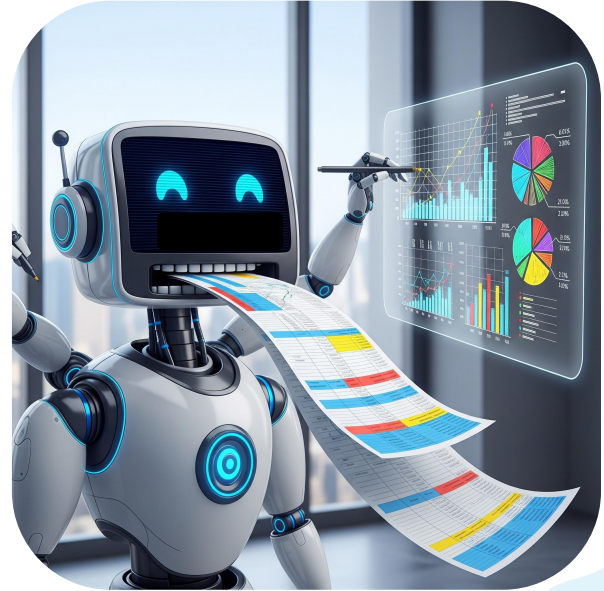
"Compare the average GPA of students interested in 'STEM' versus those interested in 'Arts & A/V'. Present this as a simple table."

"Look at the row for student Jordan Smith. Draft a specific email to a potential employer recommending him. Mention his specific motivation for nursing from his personal statement."

"I have a new internship opening at a downtown Logistics company. It requires a student who is available by June 10th, has their own car, and has a GPA above 2.8. Which students should I contact?"

Skills we just learned:

- Feed AI data a variety of ways (spreadsheet, PDF file, screenshot, CSV)
- Build visuals, infographics, and interactive content
- Hire a tutor to teach you new skills
- Hold a live conversation
- Share your screen ([Google AI Studio Live](#))
- Screenshot it!



3. Meeting Prep

- “Digitize these handwritten notes...”
- “Summarize this year’s action items...”
- “Turn information into a podcast...”
- Summarize and Synthesize information
- “Create AI bot that allows people to ask questions about _____”

NotebookLM

- 6.2 State of the School – Guajardo Elementary
- Wendy Patterson, Principal of Guajardo Elementary, provided an update on the school's current state, emphasizing the goal to empower every student to reach their full potential. The principal outlined the campus's direction, focusing on academic excellence, student growth, and top successes, which included improved student performance, increased family engagement, and the strengthening of instructional practices. She also identified key challenges. Moving forward, the campus is prioritizing a collaborative environment to meet its goals and ensure continued success.

Action Items

- 7.1 Consider Approval of Eligibility Requirements for Enrolled Students Participating in UIL Activities

AI - SB 401 - Homeschoolers and UIL - 2

Leland Surovik, Director of Athletics, presented the 89th legislative session, which passed a bill allowing non-enrolled students, including homeschooled students, to participate in UIL activities if they meet certain requirements. If their home district does not allow participation, they may join an adjacent district or opt out by adopting a formal policy that the Board of Trustees by August 1, 2025, for the 2025-26 school year.

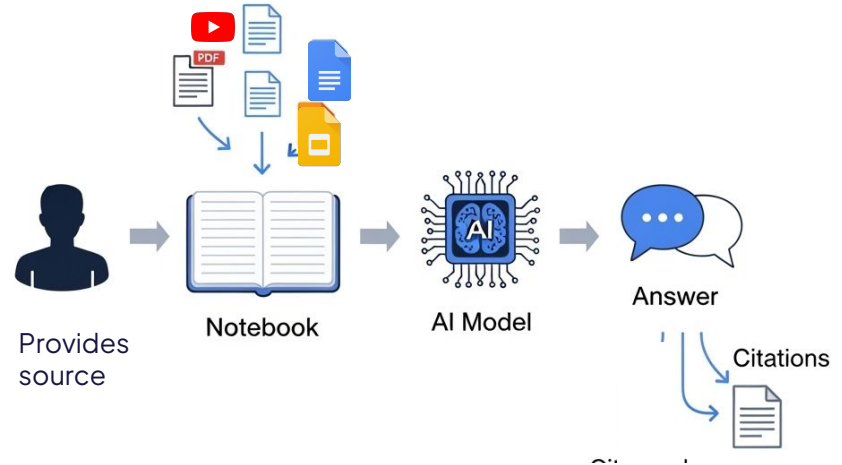
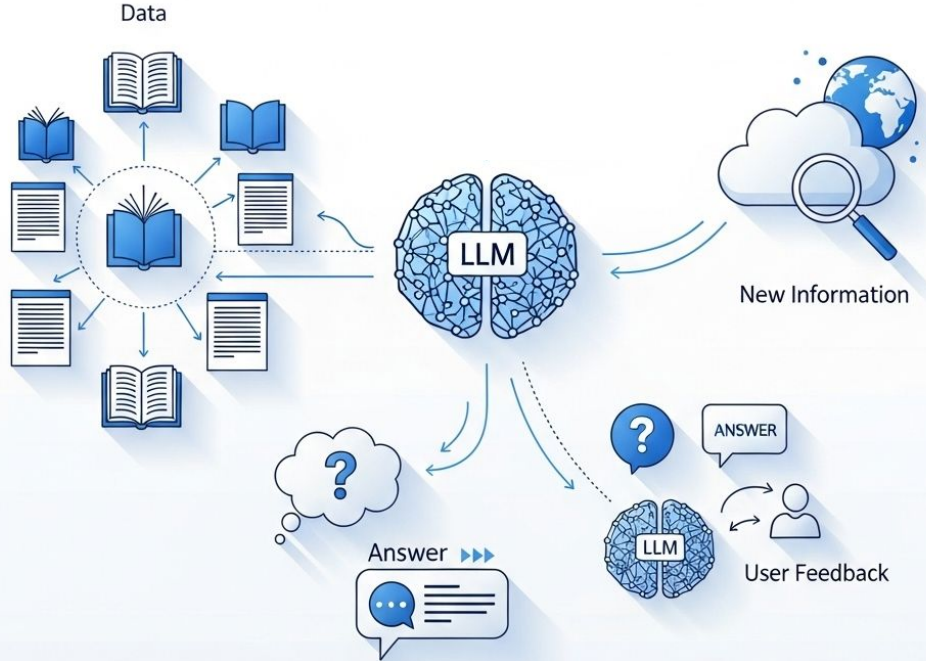
Create the continuum of care
HHS → DCS
maternal/child health → 100% coverage
Federal waiver → bipartisan
Dallas delegation - bipartisan
Harris/Geo
Drug treatment - mental health/rehabilitation
Shifting dollars - high risk vs poor
Caly/Geo - financial disincentives
Monday - Governor Ct - budget - briefing
12-12 mtg. 60% increase
Training - Client Support Volunteer
John Boatman
Jean Fajard
7-10 Pubs. gay community has certainly
Volunteer Center
Corporate Council
Aug 11 - in paper
HHS method
Tangle - Emotional
ASCB
5 applications - 4/10/24 + 3/1
6/10 - Buddy from Trainings
HHS 10/1 + 10/2
periodic telephone contact - Underlined
signal a prob of physical
bringing Volunteer Center into April
agency - new service providers
Food/Elderly phone under already
works very well
Reference checked - application
City of Dallas - Lori + Craig
55,000
Service delivery - 12 mos period
budget development



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LLM

Pre-training on Vast Datasets





Sources



SOURCES

+ Add

Discover

Select all sources



Food Chain



Food Chains



Food Chains 1.pdf



Food Chains 2.pdf



Food Webs: Crash Course Kids #21.2



Food-Chains 3.pdf



Grade 5 Web of Life Interactive Notebook



NGSS MS.pdf



Sources!

Chat

Refresh



CHAT:

AI Responses with Citations

How does matter and energy cycle through ecosystems, communities, and environments?

Matter and energy are fundamental to the functioning of all ecosystems and environments, cycling and flowing through living and nonliving components in interconnected pathways 1

The Food Chain and Food Web: Pathways of Energy and Nutrients

A **food chain** describes the direct relationships of who eats whom in nature, illustrating a single pathway that energy and nutrients can follow through an ecosystem 1 However, most organisms are part of **multiple food chains**, leading to a complex network called a **food web** 1 These webs represent the comprehensive flow of energy and cycling of matter among producers, consumers, and decomposers within an ecosystem 3 .

Producers: The Entry Point of Energy and Matter

Producers, also known as **autotrophs**, form the **first trophic level** and are the foundation of every food chain because they create their own food 1 5 .

- Most autotrophs, such as plants, algae, and phytoplankton, use **photosynthesis** to convert sunlight, carbon dioxide, and water into glucose (a nutrient) 1 This process also releases oxygen 14 .

Start typing...

8 sources



ood chain?

How are trophic levels structured?

What constitutes a food web?

Prompt Here!

Studio



STUDIO:

Summarize Content



Audio Overview



Mind Map



Generating Audio Overview...

Come back in a few minutes



Generating Audio Overview...

Come back in a few minutes



Generating Audio Overview...

Come back in a few minutes



Ecosystems: Food Webs and...

Study guide · 10 minutes · 1 hour ago



The Dynamics of Food Chains and...

8 sources · 3m ago



Unraveling Ecosystem Food Chain...

FAQ · 8 sources · 3m ago

Add note

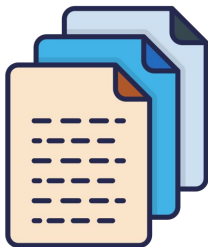
Output & Saved Notes

What is a “Gem” or Custom GPT?

Instructions

I will provide you a topic. You will draft emails about the topic.
You are a staff member at a middle school.
Your job is to write an email to a parent about their child.
This is a sensitive email that may upset the parent, as it involves an issue with their child that they must respond to.
The email must have a professional yet warm, supportive, and collaborative tone. Include a brief opening, the reason for the call, and a closing and call to action.
Keep it relatively brief.
Create a second copy of the email translated to Spanish.
Create a third copy of the mail translated to Polish.
Put it all in Canvas so I can edit it before sending it to a doc.

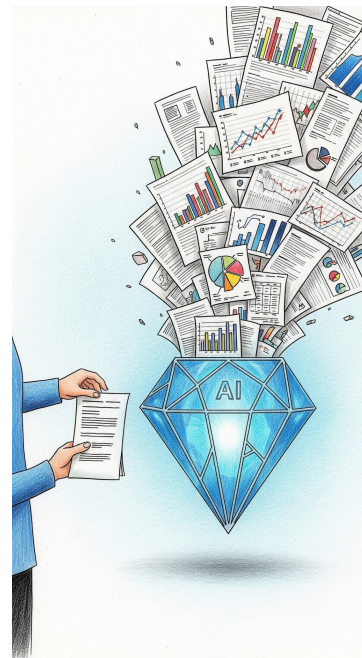
Reference Info



Saved in a “Gem”



*Instructions are repeated every time...
user just gives a basic command.*



AI Limitations & Issues

Hallucinations (Fabrications)

LLMs can generate inaccurate, nonsensical, nonexistent, or misleading info.

Ethical & Appropriate Use

Is this an appropriate place to use content you did not write originally? To what degree are you implementing human oversight and intervention?

Bias in Training Data

AI can propagate and amplify offensive or discriminatory info present in the training data

Environmental Impact

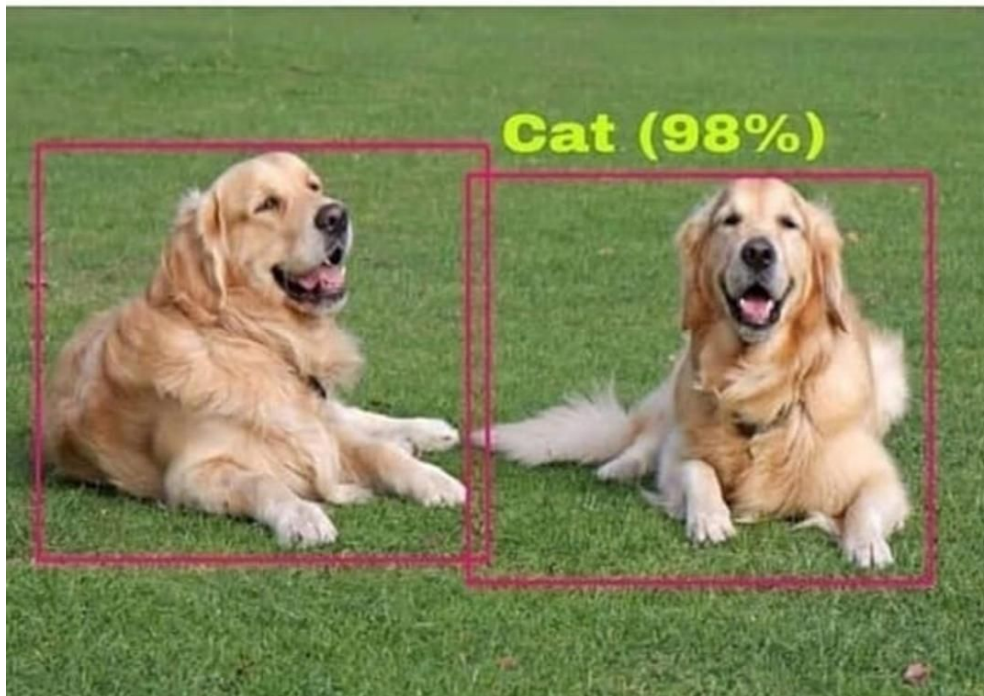
High energy consumption, resource depletion, and e-waste generation

People: *fearing* AI takeover

AI:

Hallucinations (Fabrications)

LLMs can generate inaccurate, nonsensical, nonexistent, or misleading info.



Ethical & Appropriate Use

- Only use apps approved by your admin
- Be aware of age restrictions and SOPPA
- Protect PPI
(*personally identifiable information*)
- Consider whether the use of AI for this task is necessary and appropriate
- Transparency!

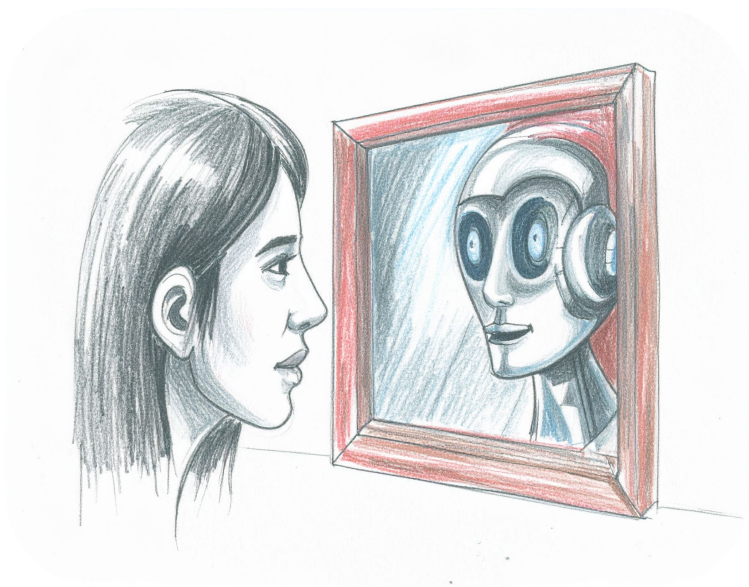


Bias in AI Results

AI answers reflect the data it's trained on, including societal flaws.

It doesn't *invent* prejudice, but it can reinforce existing bias unless we intervene.

- [What Is AI Bias? | IBM](#)
- [AI in Education: The Bias Dilemma - EdTech Evolved](#)
- [Does AI Have a Bias Problem? | NEA](#)
- [Overview < Gender Shades — MIT Media Lab](#)



Resource Consumption



Already AI's projected **water usage** could hit **6.6 billion m³ by 2027**, signaling a need to tackle its water footprint.

Source: [Forbes](#)



Electricity demand from AI-optimised data centres projected to **more than quadruple by 2030**.

Source: [IEA](#)

Microsoft announced a \$1.6 billion deal to revive the Three Mile Island nuclear reactor to power AI, while Google and Amazon have also secured nuclear energy agreements to support AI operations.

Source: [Stanford's AI Index Report 2025](#)



human intelligence *meets* artificial intelligence

a virtual conference for k12 educators

Empowering educators to teach, lead, and thrive in the age of AI

www.ltcillinois.org/hiai

LTC

Date: January 15–16, 2026

Location: Online

Audience: K–12 teachers (all grades and content areas), administrators, technology coaches, and library media specialists

Cost: \$50 (\$60 after Oct. 31)

PD Hours: 12

Questions: Please contact events@ltcillinois.org with questions.

Sponsors: Hi, AI! is a partnership between the LTC and the Illinois Association of Regional Superintendents of Schools (IARSS).



Artificial Intelligence to Increase Efficiency

I-WIN Team, 12.2.25

Eric Santos





EdSystems

EDUCATION SYSTEMS CENTER *at*
NORTHERN ILLINOIS UNIVERSITY

Thank you!

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