

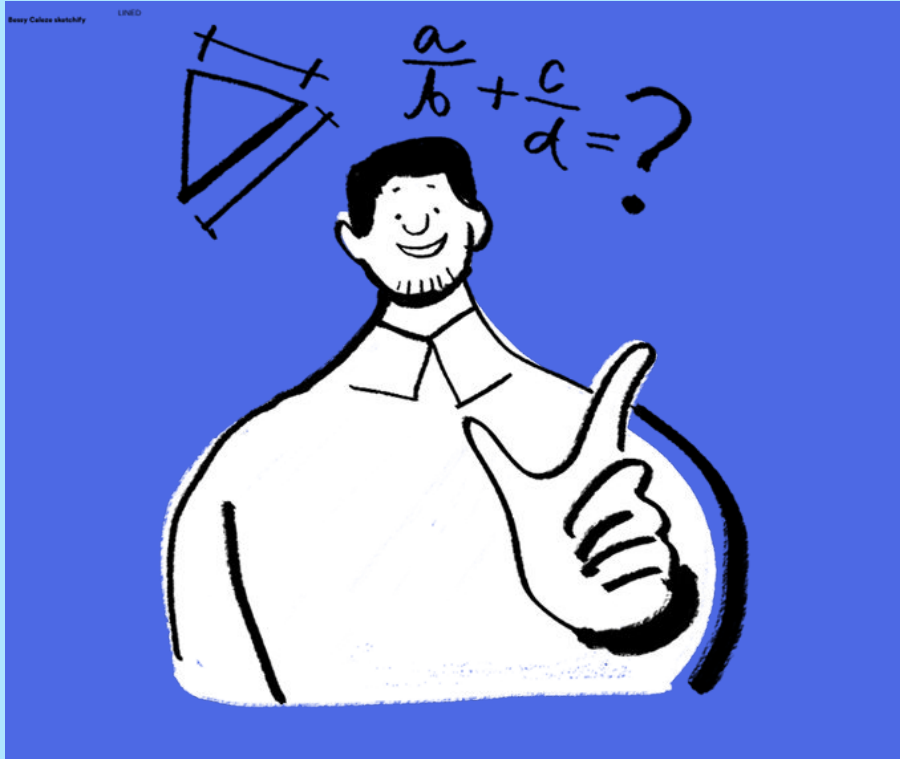


# What do we talk about when we talk about AI?

*Helping Students Question, Critique and Understand AI in Your Subject*



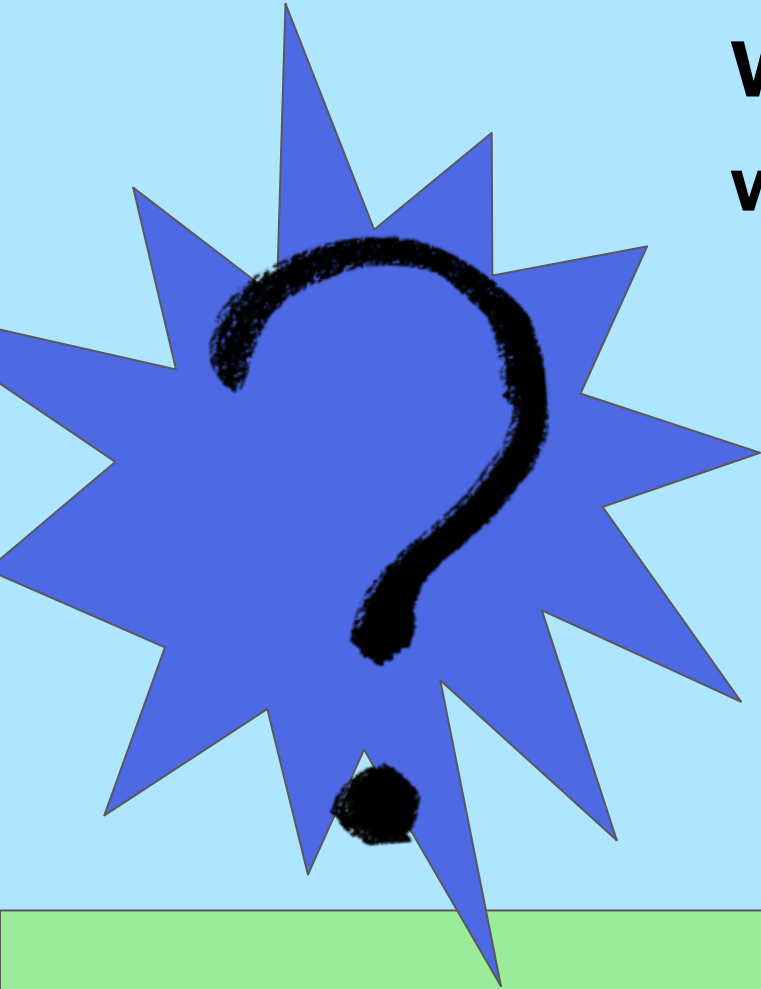
**Presenters:** Shea Stripling ([sheas@uchicago.edu](mailto:sheas@uchicago.edu)) and Mahmoud Harding ([mharding@uchicago.edu](mailto:mharding@uchicago.edu))



**AI is already in our schools.**

**But we don't always talk about it the same way.**

When you hear ***“AI in schools.”***  
what words come to mind?





**What do you notice about  
the words everyone said?**

**These differences in language**

# A very brief history of AI

**1950s & 60s**

**1990s & 2000s**

# Today ...

**Source:** Dick (2019)

# In K-12 do we really mean Generative AI?

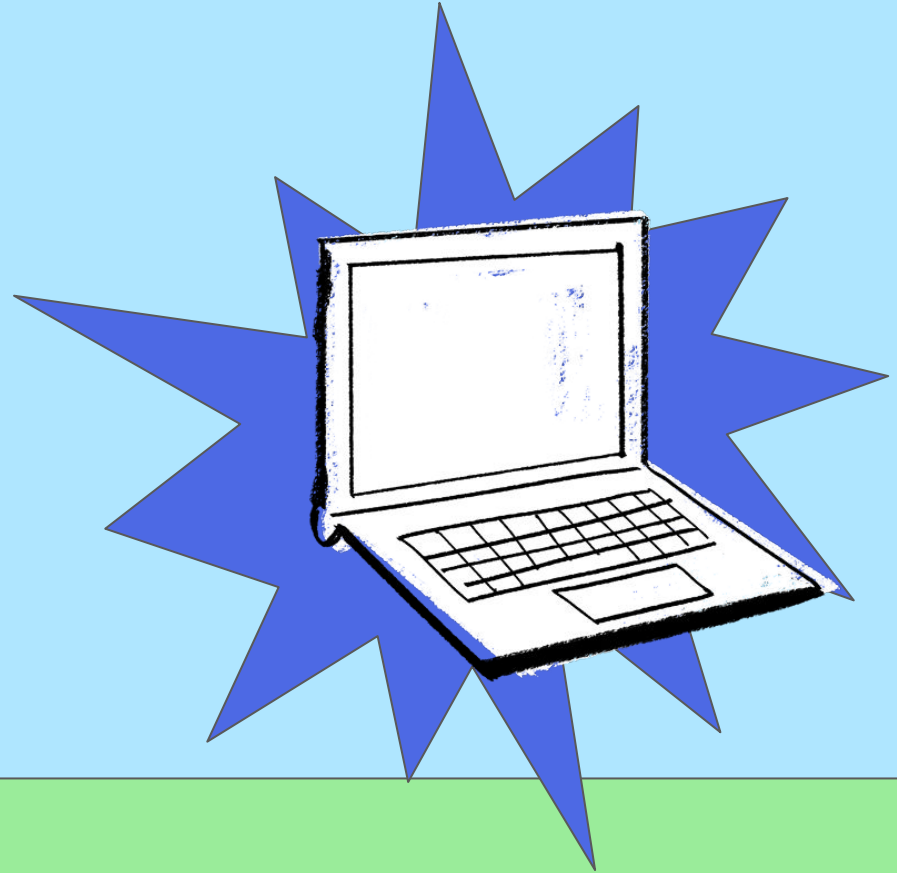
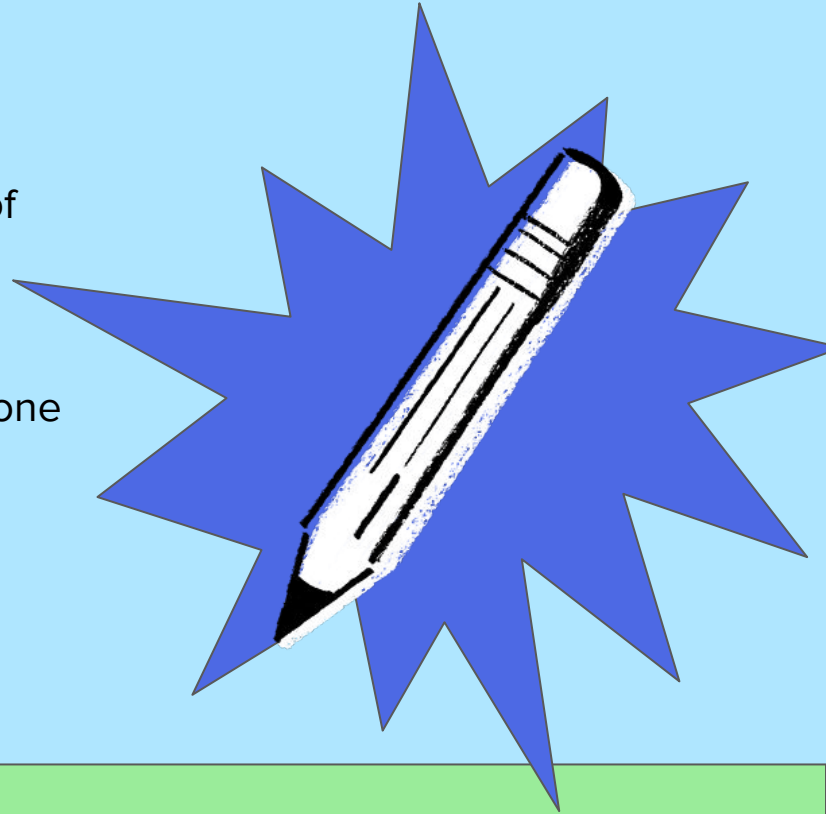


Image source: juicy\_fish on Freepik

# Generative AI (GenAI) isn't magic—it's data

- Have you ever used GenAI to produce an image of person?
- Chances are, your images share something in **common**—not just with each other, but with everyone else's in this session. Any guesses?



# Generative AI (GenAI) isn't magic—it's data



give me a picture of a black kid drawing

# Generative AI (GenAI) isn't magic—it's data

- **Why?** Image models often default to right-handed actions because:

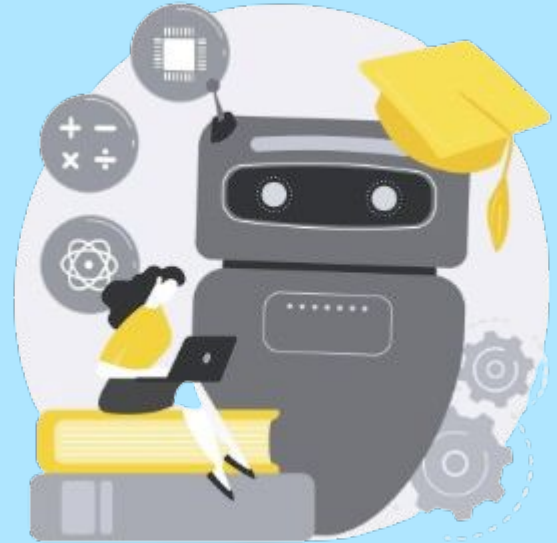


# Data → Data Literacy → AI Literacy → AI Competency

- Data → values in any form or medium (e.g., numbers, text, images, audio, video) representing observations, measurements, attributes, or events
- Data Literacy → reading, interpreting, assessing reliability, analyzing, drawing conclusions, explaining
- AI Literacy → Data Literacy + a foundational conceptual understanding of AI
- AI Competency → Data Literacy + AI Literacy + use, engage, interact, develop, or manage AI systems

# AI Literacy

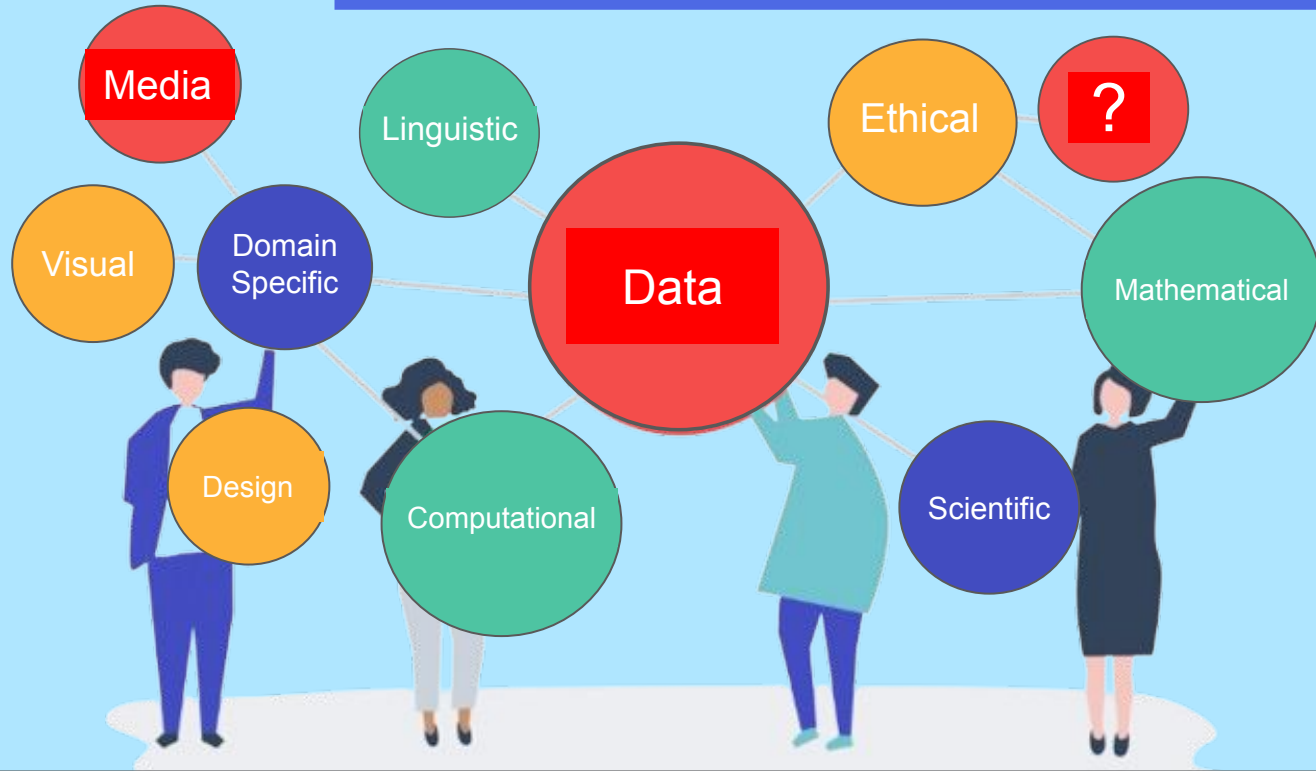
A foundational conceptual understanding of AI



**Source:** Chou (2025)

**Image source:** vectorjuice on Freepik

# AI Literacy is a profoundly interdisciplinary field



Source: Chou (2025)

Image source: rawpixel on Freepik

# AI Literacy is more than just knowing how to write LLM prompts

IBM warns AI spend fails without AI literacy

*“Domain experts who understand the data and the context of the data are now more important than ever,”* calling data *“an artifact of the human experience.”* - Phaedra Boinodiris

Source: [IBM warns AI spend fails without AI literacy | The Deep View](#)

Quote: Phaedra Boinodiris

# AI Competency

Use, engage, interact, develop, or manage AI systems

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- ✓ Use AI to complete specific tasks ethically, responsibly, and productively

**Note:** Based on subject area and task

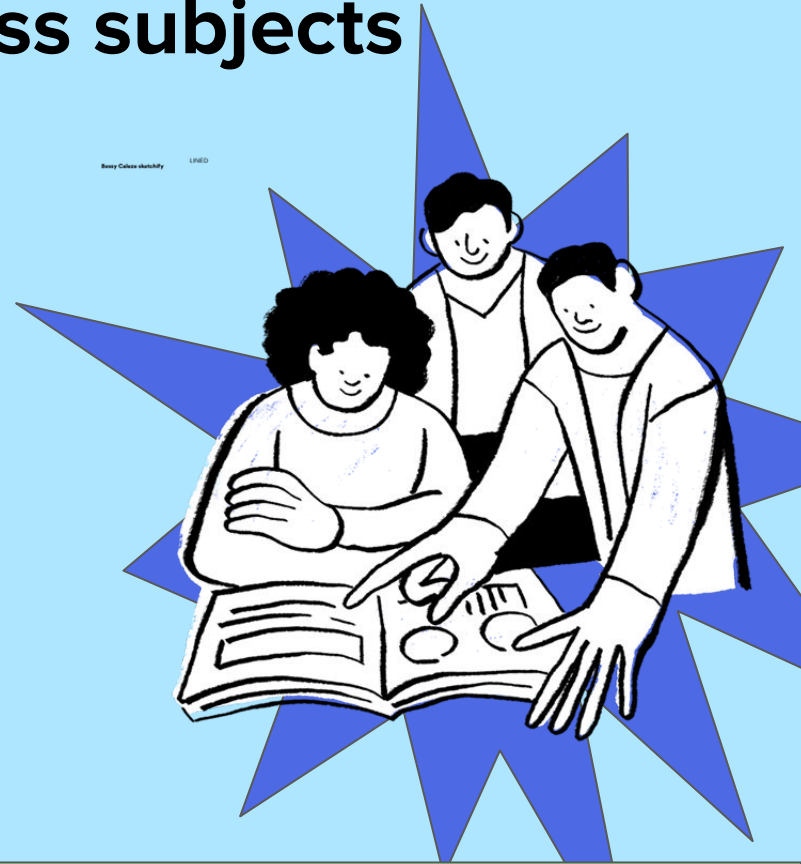


**Source:** Chou (2025)

**Image source:** ChatGPT-5.5

# AI shows up differently across subjects

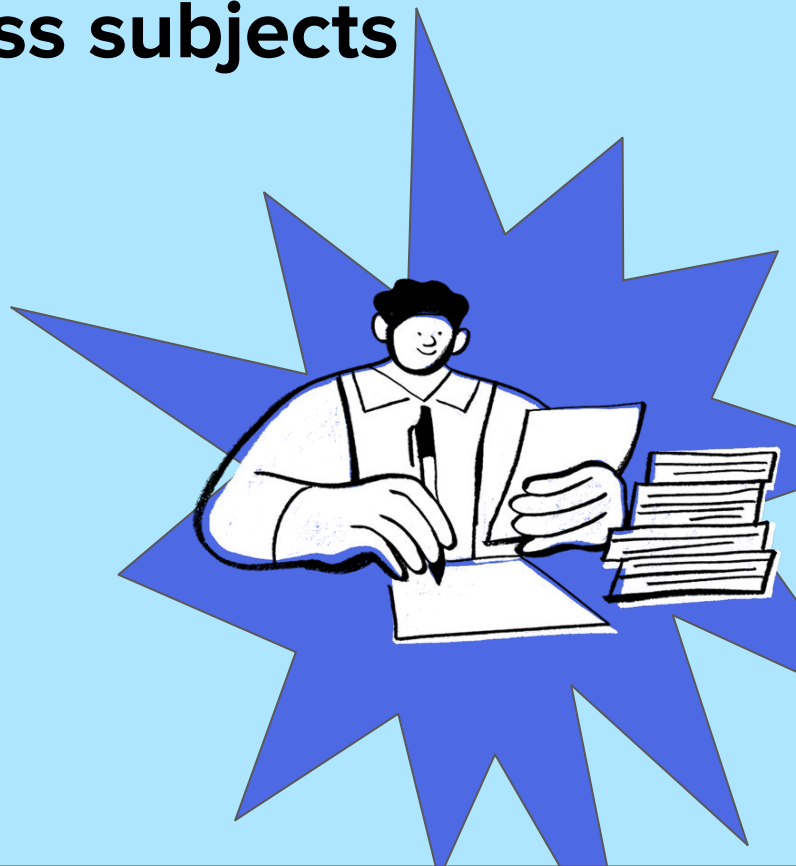
- What conversations about AI belong naturally in your subject area?



# AI shows up differently across subjects

In English Language Arts:

- What makes a voice original?
- If AI writes for us, what happens to authorship?
- What does revision mean when AI helps?



# AI shows up differently across subjects

## In Science:

- How do we verify whether AI outputs are accurate?
- What powers data centers?
- How do infrastructure and energy connect to AI?



# AI shows up differently across subjects

## In Social Studies:

- Who benefits from AI?
- Who is impacted?
- How do bias and governance affect outcomes?
- How do we verify sources?



# AI shows up differently across subjects

## In the Arts:

- What makes art human?
- What role does interpretation play?
- Can AI replicate lived experience?





**Where do you see AI  
showing up in your subject?**

# AI Values Ranking Activity

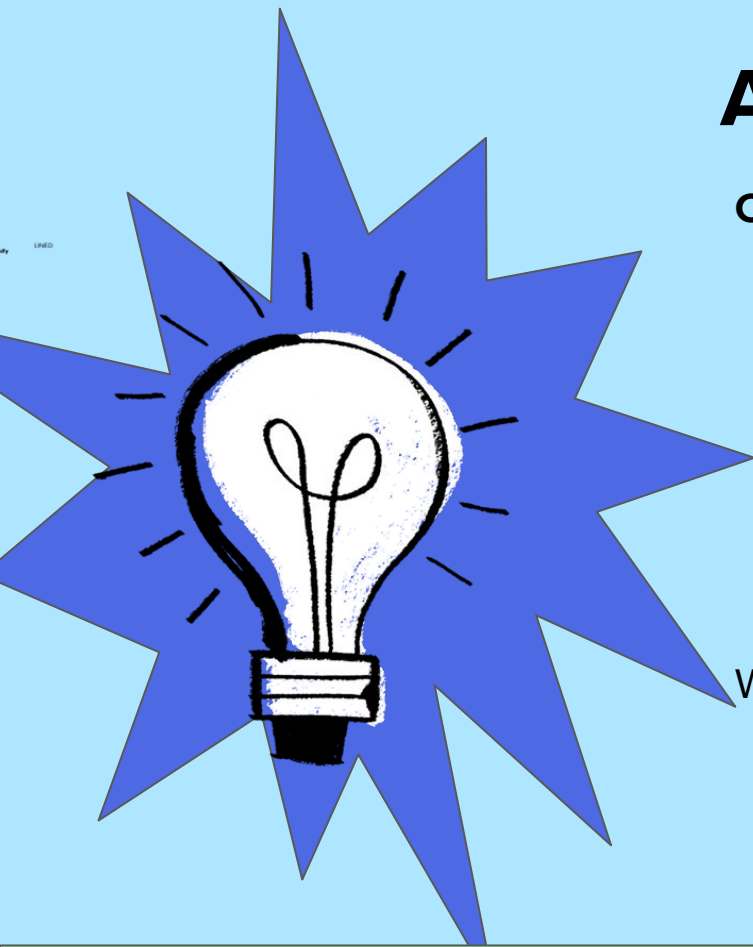
## Choose Your Statements

- Yellow: Learning and Student Experience
- Red: Information Quality and Accuracy
- Green: Ethics, Bias, and Responsibility
- Blue: Academic Integrity and Ownership
- Pink: Human vs. AI Thinking
- Orange: Access & Equity

We'd like you to choose:

- **One statement that highlights a benefit**
- **One statement that raises a concern**
- **One additional statement of your choice**

Choose your top three statements as a table and **be prepared to defend your choices!**

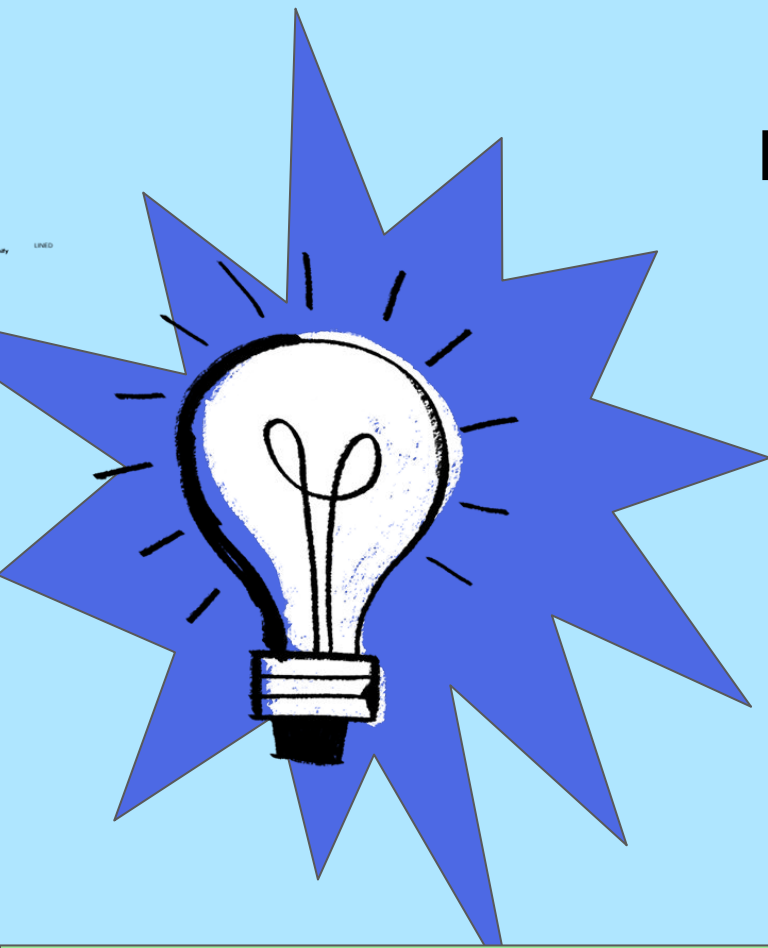




# Which classroom tasks would you feel comfortable using AI for?

## Choose Classroom Tasks

- Review the list of classroom tasks on your worksheet.
- Select three tasks you would feel comfortable including in your classroom AI contract. Choose tasks that are realistic for your subject area or ones you might actually try with students (You can also add your own!)

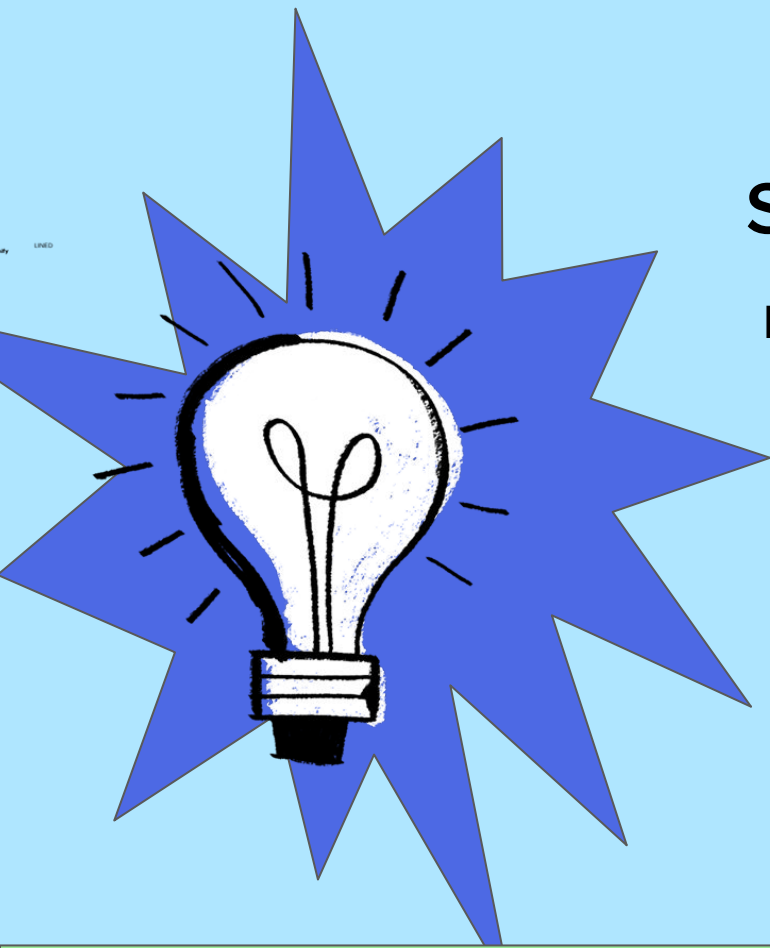


# Build Your AI Classroom Contract

For each task you selected, define how AI will and will not be used in your classroom. Be specific enough that a student could clearly understand expectations without additional explanation.

A strong AI contract:

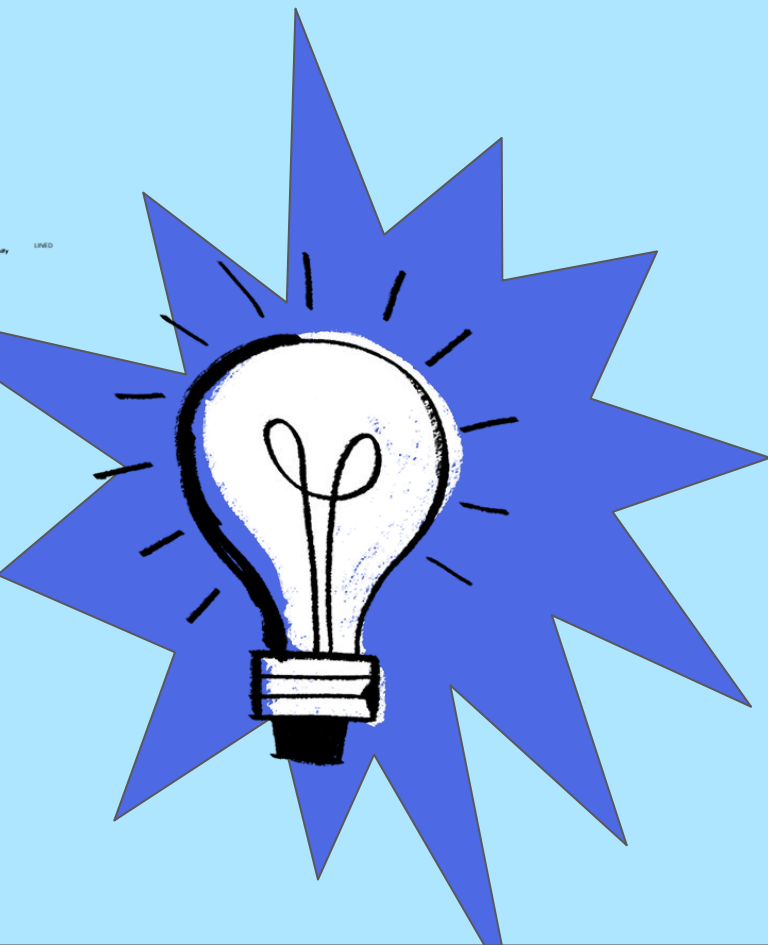
- **Clearly defines appropriate AI use**
- **Sets clear boundaries for student ownership and responsibility**
- **Explains what students gain from following the expectations**



# Share Your AI Classroom Contract

**Be ready to share:**

- One task included in your AI contract
- One rule or boundary you created
- Your reasoning behind that decision
- What students gain in return for following your contract



# Bring It Back to Students

Bring your completed AI contract back to your classroom and share it with students.

Use it as the beginning of a conversation and invite students to discuss:

- Which expectations feel fair
- Which boundaries protect learning
- What kinds of AI use actually help them learn
- How trust and responsibility should work in your classroom

Revise and refine the contract together as your classroom continues learning about AI.

# Get the Slides



**Also, we'd just love to stay in touch!**





**Additional resources for  
data literacy, data science,  
and AI literacy**

# Sites, papers, articles, etc. referenced during the workshop

- [Asking for a friend ... which jobs are safe from AI? : Planet Money](#)
- [Cats in Latent Space \(How GenAI models create images\)](#)
- [Large Language Models explained briefly \(How data and math work together to put together text\)](#)
- [The Modern Language Association's Student Guide to AI Literacy \(Students reflect on their own use of AI\)](#)
- [Guidelines for Assessment and Instruction in Statistics Education \(GAISE\) Report](#)
- [Pre-K–12 Guidelines for Assessment and Instruction in Statistics Education II \(GAISE II\): A Framework for Statistics and Data Science Education](#)
- [Data.gov Glossary: Data vs. Information: An official website of the United States government](#)
- [Data Science 4 Everyone: State of the Field 2025: Data Science and Data Literacy Education in US K-12](#)