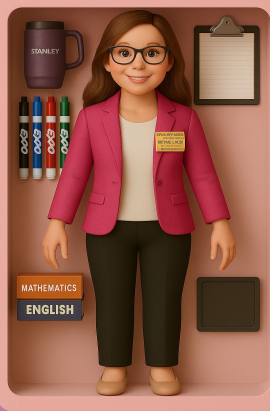


CURRICULUM LEADER



Dr. Tina Lauer
Curriculum and Instruction Coordinator

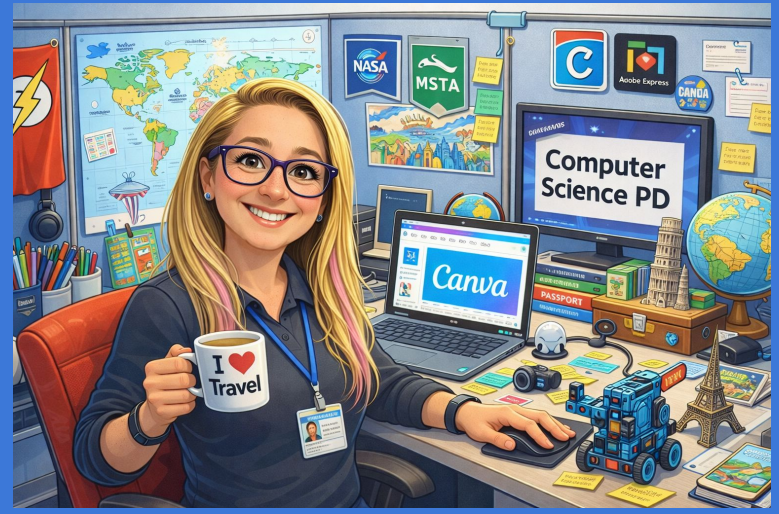


INSTRUCTIONAL COACHING
CURRICULUM DEVELOPMENT
TECHNOLOGY IN THE CLASSROOM

Chatbots & Curriculum: A New Era for K-12 Instructional Design



From First Prompt to
Instructional
Thinking Partner...
Reimagining
Curriculum Design in
the Age of AI



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A Stroll Down Memory Lane...

When was the first time you used a Chatbot?



Ah... memories.

I am at Sonny's in Philadelphia. Where should I go next for fun.

If you're looking for more fun activities in Philadelphia, here are a few suggestions:

1. Visit the Philadelphia Museum of Art: Located just a short distance from Sonny's, the Philadelphia Museum of Art is renowned for its vast collection of art from around the world. Explore the exhibits and enjoy the impressive architecture, including the famous "Rocky Steps" that lead up to the entrance.
2. Explore Reading Terminal Market: Head to Reading Terminal Market, one of America's oldest and largest public markets. You'll find a wide array of food vendors, fresh produce, meats, baked goods, and unique specialty shops. It's a great place to grab a bite to eat and experience the lively atmosphere.
3. Take a stroll through Independence National Historical Park: This historic park is home to significant landmarks such as the Liberty Bell, Independence Hall, and the Benjamin Franklin Museum. Immerse yourself in American history as you explore these iconic sites.
4. Enjoy a walk along Boathouse Row: Located on the Schuylkill River, Boathouse Row is a series of historic boathouses with beautiful architectural designs. Take a leisurely stroll along the riverbank and admire the rowers on the water. The area is particularly enchanting in the evening when the boathouses are illuminated.
5. Explore the Philadelphia Zoo: If you're a fan of wildlife, consider visiting the Philadelphia Zoo. It's one of the oldest zoos in the United States and houses a diverse collection of animals from around the world. You can enjoy up-close encounters, educational exhibits, and even feed some of the animals.

Remember to check the opening hours and any COVID-19 guidelines for each location before you visit. Have a great time exploring Philadelphia!

What is a chatbot?

- A chatbot is conversational AI designed for dynamic, back-and-forth thinking. In instructional design, it serves as a thought partner—accelerating curriculum revision, standards alignment, scale development, and lesson ideation.
- Its power lies in conversation: you shape the direction, refine the output, and build understanding through iteration.

Understanding the AI Landscape

Conversational Thought Partners

[ChatGPT](#) | [Claude](#) | [Gemini](#)

Embedded Productivity AI

[Copilot](#) | [Google Workspace AI](#)

Document-Based Assistants

[NotebookLM](#) | [ChatPDF](#)

Education-Specific AI Platforms

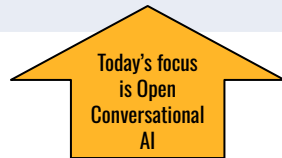
[MagicSchool](#) | [SchoolAI](#) | [PearStart](#) | [Khanmigo](#)

The question isn't "Which AI?" It's "Which AI for this task?"

Choosing the Right Tool for the Task...

A Quick Comparison

Feature	Open Conversational AI	Education-Specific AI Platforms
Interaction	Open dialogue	Structured inputs
Purpose	Exploration and ideation	Task production
Flexibility	Iterative & adaptive	Template-driven
Best For	Brainstorming & revision	Classroom-ready outputs



Strengthening Curriculum Design with AI


- Refines essential questions and enduring understandings
- Clarifies learning targets and success criteria
- Strengthens alignment to state and national standards
- Supports iterative revision of units and assessments
- Surfaces alternative perspectives and instructional ideas

Professional Guardrails for AI Use

- Verify content & refine all outputs
- Protect student data - NO Personal Identification Information (PII) uploads
- Apply professional judgment
- Keep pedagogy at the center

What can I help with?

How can we align our current curriculum with MO state standards and research-based best practices/pedagogy for increased student achievement?

+  Tools



I'm from Missouri.
But, you can replace
MO to personalize the
prompt to your specific
standards.

Deepening the Prompt

If We Want More Detail, We Must Specify:

- Exact standard language
- Cognitive level (DOK/Bloom's)
- Desired format
- Assessment expectations
- Differentiation needs

How I've Used AI in Curriculum Work

Program Vision

- K-12 Visual Arts (Rationale and Philosophy)

Curriculum Framework Development

- Computer Science Essentials (Enduring Understandings and Learning Targets)
- Industrial Technology (Enduring Understandings, Essential Questions, Learning Targets, and alignment to National Standards)
- Accounting 1 (Transfer Goals)
- Business Management & Web Design (Enduring Understandings and Essential Questions)

Assessment & Learning Design

- Middle School Robotics (Breaking down the Standards, Learning Activities, Assessment & Extension)

Lesson Design

- Elementary Computers

DESIGN Prompt Model™



D Define the task

E Establish context

S Specify cognitive level

I Identify format & assessment

G Guide differentiation

N Notice & refine



<https://bit.ly/4uwVdb7>

Let's Build a Prompt Using DESIGN

D - Define the task

- Develop a proficiency scale

E - Establish Context

- Aligned to MO ELA 7.RL.2.D

S - Specify Cognitive Level

- Include progression from foundational understanding to transfer

I - Identify Format & Assessment

- Organize into a 4 level scale (1 = Getting Started → 4 = Advanced)
- Include sample assessment ideas

G - Guide Differentiation

- Include supports and extension tasks

N - Notice & Refine

- Run the prompt again and adjust language for clarity

What Does That Prompt Look Like?

Develop a **7th grade ELA** proficiency scale aligned to **MO ELA RL.7.3.A**.

Include **student-friendly learning targets** and a clear learning progression from foundational understanding to transfer.

Organize the **scale into four levels labeled**: 1 = Getting Started, 2 = In Progress, 3 = On Target, and 4 = Advanced. Clearly define **Level 3 as the standard for proficiency**. Provide **sample assessment evidence** aligned to each level.

Include **differentiation ideas** for below target learners and advanced learners.

Does the Output Actually Match the Standard?

“N” - Notice & Refine

Synthesize Ideas from Multiple Texts (Approaching Texts as a Researcher): Text in Forms			
7.RL.3.A	Compare and contrast a written story, drama or poem to its audio, filmed, staged or multimedia version, analyzing how the techniques unique to each medium contribute to meaning.	Techniques Unique to Each Medium Novelists, poets, journalists, filmmakers, musicians, etc. use the techniques at their disposal to convey their message.	Techniques Unique to Each Medium Students reading Anne Frank's <i>The Diary of a Young Girl</i> could compare and contrast the mood created by her narration with the mood created by the musical score in the movie version of her story. Some examples of techniques: <ul style="list-style-type: none">• Novelists—figurative language, characterization, etc.• Journalists—quotes, photographs• Filmmakers—lighting, musical score
What does the standard actually require students to do?			

<https://dese.mo.gov/media/pdf/curr-mls-ela-7-standards-with-examples>

Notice & Refine: Professional Judgment Matters

When reviewing AI output, ask:

- Does the response truly align to the standard?
- Does it reflect the expected level of thinking?
- Are the learning targets and progressions clear?
- What might need to be refined in the prompt?

DESIGN is a cycle — refinement improves the results.

Try It Now: DESIGN a Prompt

Choose one task:

- ★ **Align a Lesson:** Ask AI to align a lesson to standards
 - Example Resource: [Elementary science lesson](#)
- ★ **Strengthen a Proficiency Scale or Rubric** - Ask AI to improve clarity, progression, or assessment evidence.
 - Example Resource: [Sample Proficiency Scale](#)
- ★ **Create Something New** - Provide a standard and generate aligned learning targets, a lesson, or a scale.

Use the DESIGN model to structure your prompt.

Reflect on Your Prompting

- Did your first prompt give you what you needed?
- If not, what did you refine or clarify?
- How could AI support other curriculum tasks in your work?

Remember: Better prompts lead to better thinking partners.

Key Takeaways

Conversational AI works best when prompts are intentional.

Use the DESIGN Prompt Model™ to guide your prompting:

- D – Define the task
- E – Establish context
- S – Specify cognitive level
- I – Identify format & assessment
- G – Guide differentiation
- N – Notice & refine

Resources:

- [Missouri Learning Standards](#)
- [Google Notebook LM with MO State Curriculum Standards and Resources](#)
 - Use as a guideline to create your own notebook for other standards.
- [DESIGN Prompt Model™ handout](#)

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<https://bit.ly/LAUEREDTECH>



Sneak Preview of my
ISTE Google Booth
Demo Slam:
[Designing Learning
Progressions in Minutes with
NotebookLM](#)

Your Feedback is Important!

Please take a moment to fill out the session survey.



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