



## Workshop resources

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Prompts, resources, materials:

<https://nmrec1.org/chatgpt-training-materials/>



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## 5 Keywords for this session

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**Supplement** Your Expertise

**Differentiate** Instruction

**Personalize** Learning

**Streamline** Tasks

**Empower** Educators



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slido

Please download and install the Slido app on all computers you use



How often have you used  
ChatGPT for education-related  
purposes?

ⓘ Start presenting to display the poll results on this slide.

5



A peek  
behind the  
curtain!

ChatGPT for Educators

You are an expert in teacher professional development and a nationally-recognized education trainer. I am conducting a professional development session for teachers on the use of ChatGPT to transform teaching and improve student achievement. About 25 people will be in the training, representing grades Kindergarten through high school.

Please **provide the script for a 5-minute opening remark** that I can present to the teachers.



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A peek  
behind the  
curtain!

I am going to give you a sample speech to introduce a training session for teachers on ChatGPT. From this script, **pull out 5 keywords** to remember that provide a summary or overview that will help frame the session and provide context for teachers thoughts during the session.

Here is the script: [text pasted here]



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A peek  
behind the  
curtain!

**Create an image** that shows a teacher using chatgpt. Landscape ratio, largest image size



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A peek  
behind the  
curtain!

**Create a word cloud** of words about education and ChatGPT. Use a variety of colors for the words.

Make it landscape ratio, high image quality



9



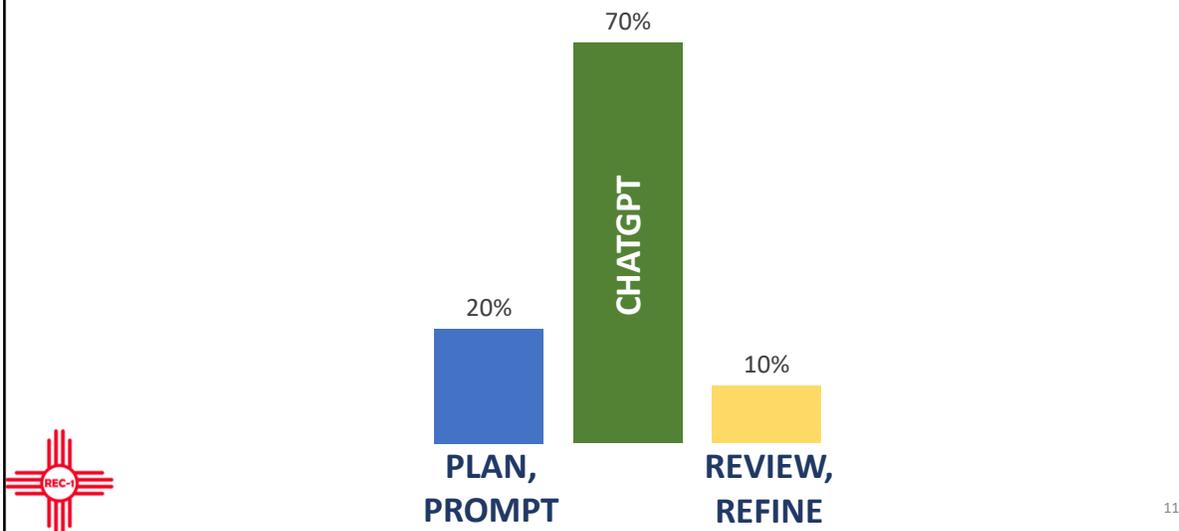
A peek  
behind the  
curtain!

**Prepare a Likert-type question** that I can ask workshop participants at the beginning of a workshop to ask about their prior experience with ChatGPT



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## The 20-70-10 Recommendation



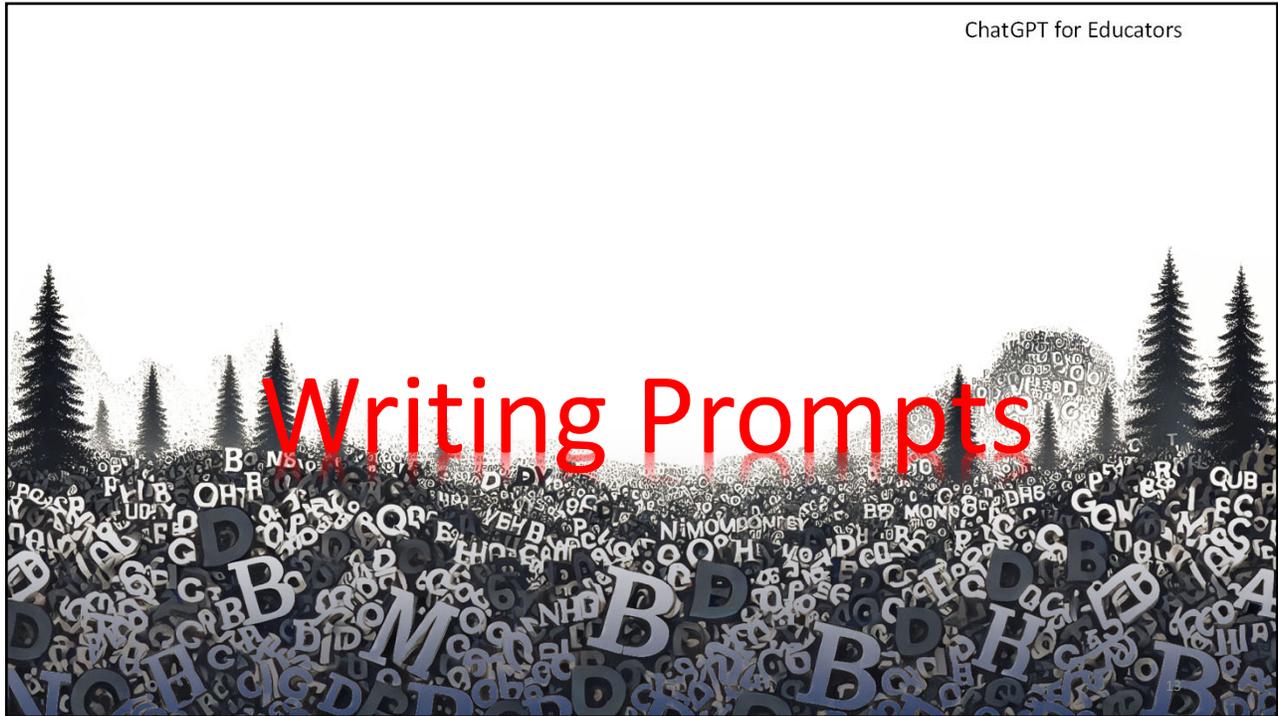
## Let's go!

Just to try...

Think of one concept or skill you want your students to learn. Ask ChatGPT how to teach that skill.

Share your prompt and output.





## Getting what you want from ChatGPT

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### 3 Key Concepts

**Be Clear**

**Be Specific**

**Explain Like a Teacher**



## And, of course...

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**Don't assume** it can or can't do something.

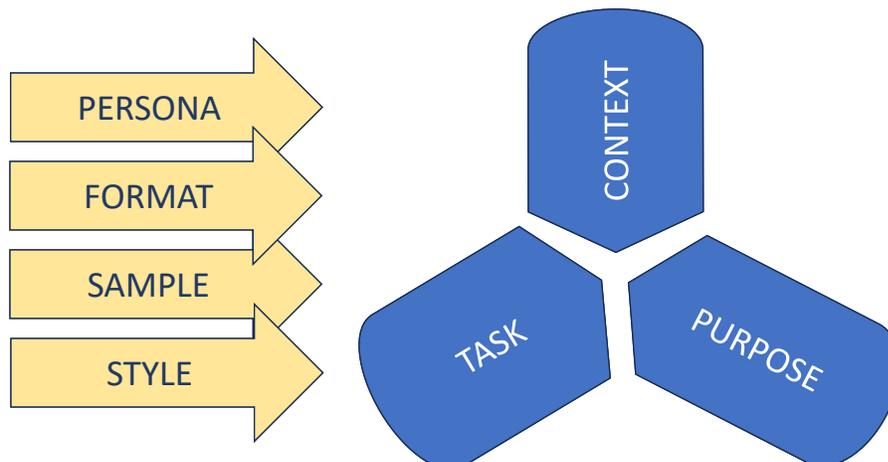
**Just ask** for what you want!



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## Getting what you want from ChatGPT

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## Weak vs. strong prompts

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### Weak:

**Explain photosynthesis**

### Strong:

As a middle school biology teacher, **explain photosynthesis** in a way that includes real-world examples and is easy for 8th grade students to understand



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## Weak vs. strong prompts

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### Weak:

**Write a lesson plan** for English Language Arts

### Strong:

I want my 10th grade English Language Arts students to master identifying themes in text, using the book "1984". **Write a lesson plan** I can use, and identify the content standards. Student learning activities should be interactive and cooperative. Include a rubric assessment based on a 5-point scale. The lesson should take no more than 3 days.



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## Weak vs. strong prompts

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### Weak:

Help me improve student behavior

### Strong:

You are a behavioral specialist. I have 3 students in my class who are always causing trouble by making noise, distracting other students, and talking back. **What strategies can I use** to help them improve their behavior?



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## Give it a try!

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**Write** Write a prompt based on something you would like to accomplish.

**Test** Try it in ChatGPT.

**Review** Review the result.

**Share** Tell us what you did!



Context – Purpose – Task (persona, format, sample, style)



## Review and revise

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One step at a time, then...

Ask for clarification

Ask for additional information

Ask for revision

Ask for next steps

What's next?

**Try Again**



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## Get feedback

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What do you think of my prompt? Do you have recommendations for making it better?



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## One more technique

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### Use ChatGPT to Write Prompts!

I need a lesson plan for my 12th grade students. **Ask me questions** for information you need to prepare a great lesson plan.

After I answer, **keep asking more questions** until I respond "Ready" or until you have sufficient information.

Then **create the lesson plan.**



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## Inputs and...

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### First...

PC: Create in Notepad

Mac: Create in TextEdit, convert to plain text

### Then...

Copy and Paste



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## ...Outputs

### Technique 1

Copy button

goals across diverse learni



### Technique 2

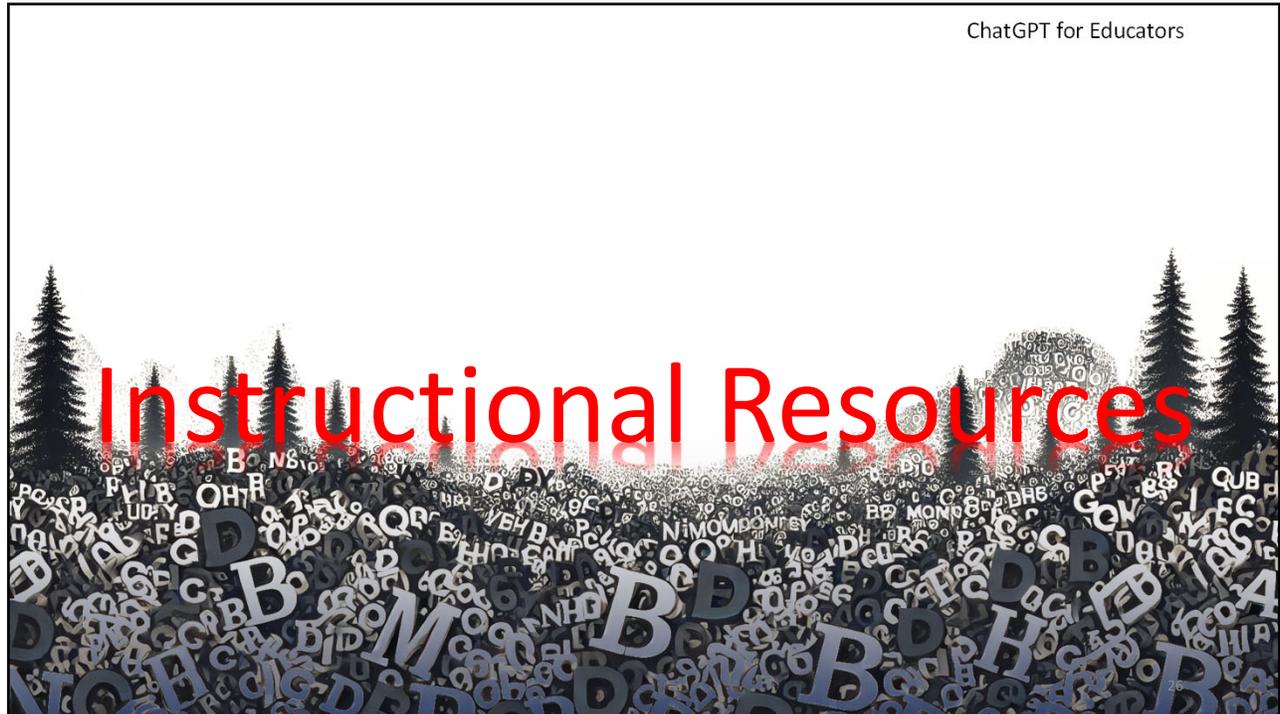
Copy and paste

### Technique 3

Download this as a [file type]



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## A few resource types

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text summaries, essay topics, simplified explanations, worksheets, rubric assessments, translations, source citations, step-by-step instructions, study ideas, learning plans, quizzes, games, activities, practice tests, outlines, key ideas, vocabulary sheets, learning centers, customized activities, lexile modifications, comprehension questions, checklists, discussion prompts, word problems, flashcards, study guides, cloze tests, poster design, report templates, essay outlines, pre-reading vocabulary, tip sheets, mind maps, data visualization, differentiated activities, peer review guide, timeline, Socratic questions, extension ideas



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## Thematic resources - 1

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### Pre-Reading Vocabulary (and Cloze test)

You are an instructional specialist for middle school language arts. My 6th grade students are studying Chapter 1 of Hatchet by Gary Paulson. Review the uploaded text and then do these tasks:

1. Provide 10 vocabulary words from this chapter with short definitions
2. Create a cloze test using these words, with blanks for filling in the words, and the word list provided below the test.

### Outline

Now please create a detailed outline of this chapter.

### Translation

Translate this chapter into Swedish.



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## Thematic resources - 2

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### Discussion Prompts

Provide 5 critical thinking discussion questions that I can use with my 6th grade students. (or for each level of Bloom's taxonomy)

### Quiz

Provide a multiple-choice quiz on the passage. Only use 5 questions for the quiz. After the quiz, provide a list of the correct choices.

### Lexile Modification

Revise the passage for a lower Lexile level so it's appropriate for students aged 8.



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## Give it a try!

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**Think** What is one student resource you created recently?

**Prompt** Write a prompt to create that resource.

**Try** Try it out.

**Share** Share the prompt and output



## How was it?

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*How would you rate the usefulness of the generated resource compared to your self-created resource??*

### Response Options:

- 1.Unusable
- 2.Inferior
- 3.About the same
- 4.Somewhat better
- 5.Vastly superior



## But what if...?

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Add more information about...

Remove...

Reformat this as a...

Limit this to...

Include a section on...

Try again.



## More ideas!

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Please list 5 more types of resources that will engage students with this topic.



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## Lesson elements

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### Typical output

Title  
 Learning objectives  
 Materials  
 Instructional activities  
 Engagement techniques  
 Assessment ideas

### Ask for

Content standards  
 Step-by-step instruction  
 Resources  
 Pedagogical approach  
 Differentiation strategies



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## Prompt advice

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### Include:

Persona  
 Instructional context  
 Instructional focus, goal, content standards  
 Task: Write a lesson plan for ...

Components to include

Pedagogical approach

Differentiation

Length / constraints



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## For example

You are a specialist in elementary education with 20 years of experience. I am teaching 5th grade students to do long division for the first time. Here are your tasks:

1. **Write a 30-minute lesson plan** to help me teach this skill. Include learning objectives, content standards, student activities, and assessment strategies. The activities should be cooperative and active, using physical objects to manipulate. Include strategies for differentiated instruction for students who are academically delayed and students who are quick learners.
2. **Provide resources** students can use to expand knowledge.
3. **Create 2 resources** that students can use as homework to review steps to long division and practice this skill.



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**Strategies for Differentiated Instruction:**

- **Visually Impaired Students:** Use large print or tactile materials (such as raised counters) for the manipulative activity.
- **Auditory Learners:** Provide verbal cues and explanations during the manipulative activity and **Guided Practice (10 minutes):**
- **Advanced Learners:** Create a challenge problem involving long division.

**Resources for Expansion:**

1. **Khan Academy:** <https://www.khanacademy.com/math/multiplication-and-division/a/division/v/dividing-a-number>
2. **Math is Fun:** <https://www.mathisfun.com/long-division/>

**Homework Resources:**

**Homework 1: Step-by-Step Practice**

1. Review the steps of long division.
  - Divide
  - Multiply
  - Subtract
  - Bring down
2. Complete the following problems:
  - $72 \div 4$
  - $96 \div 8$
  - $123 \div 3$

**Homework 2: Practical Application**

1. Solve the following word problems:
  - 144 items divided into 6 groups
  - 256 items divided into 8 groups
  - 324 items divided into 9 groups
2. Challenge Question: A box contains 567 items. If you have 9 boxes, how many items are there in total?

Both homework sheets include a reflection section.

**Differentiated Instruction:**

1. **For Struggling Learners:**
  - Provide a visual model of long division.
  - Use manipulatives to represent the division process.
  - Pair students for peer support.
2. **For Quick Learners:**
  - Challenge them with multi-digit divisors.
  - Encourage them to create their own word problems.

**Independent Practice:**

- Give each student a set of base-ten blocks.
- Quickly check for understanding.
- Assessments and explanations.

**Conclusion (2 minutes):**

- Briefly review the key concepts of long division.

**Lesson Structure:**

**Introduction (5 minutes):**

1. **Activate Prior Knowledge:** Begin by asking students about their understanding of division. Briefly review basic division facts (e.g.,  $12 \div 3 = 4$ ). Discuss how multiplication and division are related.

**30-Minute Lesson Plan for Teaching Long Division**

**Grade Level:** 5th Grade  
**Duration:** 30 minutes

**Learning Objectives:**

- Students will understand the concept of long division and its application.
- Students will be able to divide multi-digit numbers by single-digit divisors using the long division algorithm.
- Students will work cooperatively to solve division problems, using manipulatives to demonstrate understanding.
- Differentiated instruction will support all learners, from those who need additional support to those who are quick to grasp the concept.

**Content Standards:**

- **Common Core State Standards for Mathematics:**  
**CCSS.MATH.CONTENT.5.NB.B.6** - Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, properties of operations, and/or the relationship between multiplication and division.

**Materials:**

- Base-ten blocks or counters (manipulatives)
- Large chart paper or whiteboard
- Markers
- Division worksheets (adapted for various skill levels)
- Small dry-erase boards for individual practice
- Homework sheets for review and practice



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## For example, part 2

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### Get more, get better

**Provide a detailed outline** that I can use for the lesson introduction section, with examples and steps.

**Modify this lesson** for students who are English Language Learners and developmentally delayed to provide additional hands-on practice with simpler problems.



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## Give it a try!

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**Think** What is the hardest topic or skill to teach (i.e., hardest for students to learn)?

**Prompt** Write a prompt to create a lesson plan.

**Try** Try it out.

**Share** Your prompt and the output

**Rate** Usefulness from 0 to 10





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What is one "take-away" idea so far?

ⓘ Start presenting to display the poll results on this slide.

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ChatGPT for Educators

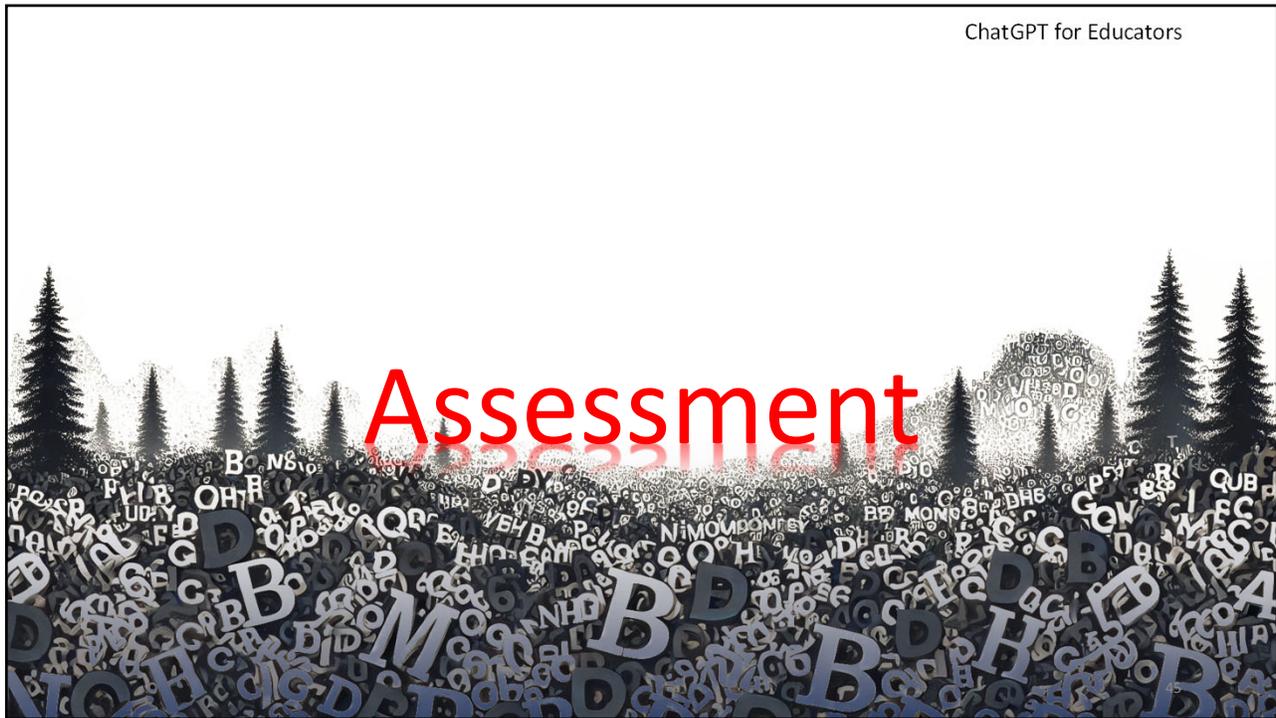
## My summary so far

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**Ask for what you want**  
**Give more to get better results**  
**Explain like a teacher**  
**Be specific**  
**Be creative**



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## So many ways to assess

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**Create the cloze test** for vocabulary about the Mayan culture with 10 blanks where words are missing. Provide the list of words underneath the cloze test.

**Generate a multiple choice test** for verb tenses. The test should have 10 sentences. In each sentence, have a blank for the verb. Add possible choices under each sentence, with only one correct choice.

**Think it – Describe it – Ask for it**



## Rubric, of course

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My 10th grade students will give presentations on tectonic plates. I have two tasks for you.

1. **Create a rubric** in table format to assess students' oral presentations, with a 5-point scale. There are two major areas to assess. First, content knowledge with 3 components to assess: criteria include knowledge of structure and composition, boundaries and movement, role in the rock cycle. Second, presentation efficacy. Make this a 5-point scale.
2. After the rubric, **create a scoring form** that can be used to record scores for each presentation. The form should have a place for student name and date, followed by the topics and scoring information, and a place to add comments below the scores.



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## Grade papers (please!)

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### Sample steps

1. Create / review a rubric
  2. Apply the rubric to writing
    3. Score individual components
      4. Explain scores
        5. Create overall score
          6. Offer feedback



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## Like this (in 2 steps)

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Carefully **review this writing rubric**. Let me know if you understand how to grade students' writing based on this rubric, and then I will provide you with a sample of student writing.

1. **Evaluate** the writing sample below based on the rubric.
2. **Provide scores** for each category and explain why you gave that score.
3. **Provide an overall score** based on a 100-point scale. Assume that each category is equally weighted.
4. For every component that is less than the top score, **provide specific strategies** the student can use to attain the top score.

Writing sample: [paste text here]



**Show:** Writing Rubric Evaluation Guidance discussion

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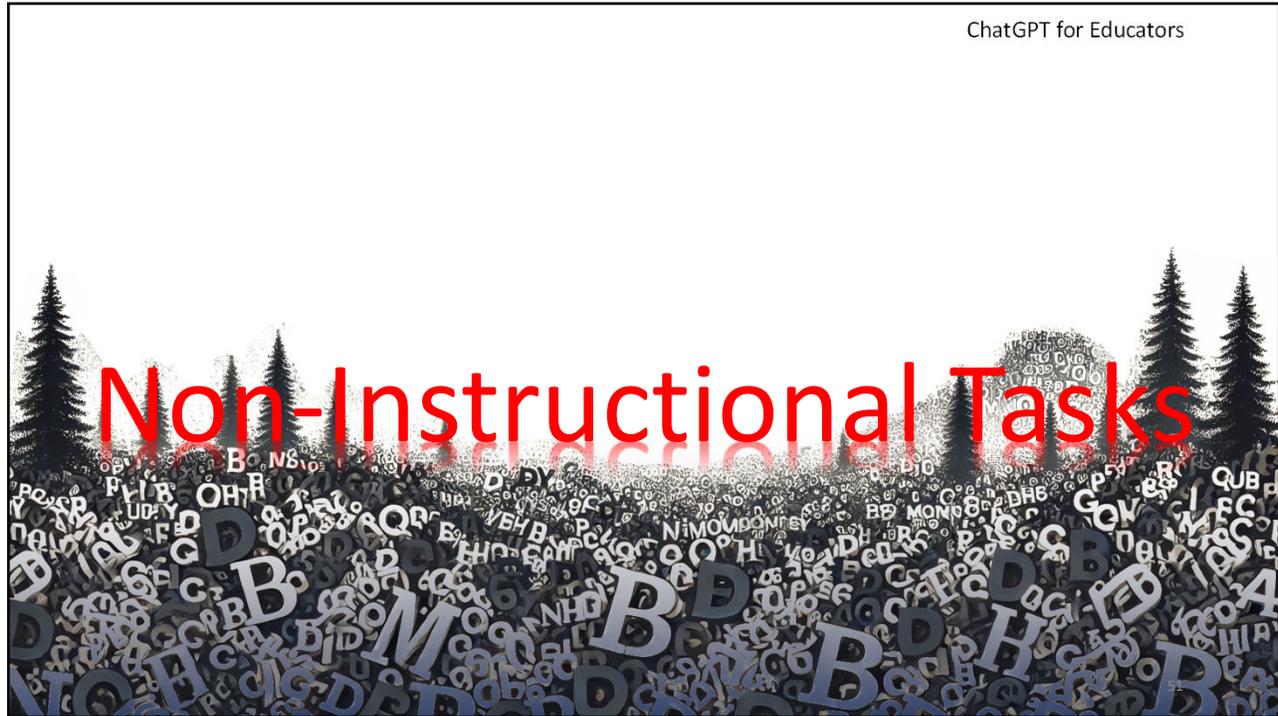
## Give it a try!

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**Create a prompt to develop an assessment.**

**Share.**





## Give it a try!

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Create a meeting agenda  
 Write letters to parents  
 Write an autobiography  
 Make a presentation script  
 Write a blog post  
 Create behavioral plans  
 Prepare parent report

### **INCLUDE**

*Context*  
*Purpose*  
*Task*

### **OPTIONAL**

*Persona*  
*Format*  
*Sample*  
*Style*



## Improve written communication

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### It does...

Outline  
 Revise  
 Shorten  
 Make clear  
 Just write it for me

### You provide...

Text  
 Context  
 Audience  
 Purpose  
 Structure  
 Topics  
 Tone  
 Actions



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## Creating SMART Goals

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### Provide

Topic  
 Student characteristics  
 Student count  
 Known achievement  
 Desired achievement  
 Time Frame  
 Assessment

### Ask for

Overall percentage point increase  
 Number of proficient students  
 (!) *Percent increase in actual number of proficient students*  
 Change in number of proficient students



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## Creating SMART Goals

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*A SMART goal means a goal that is Student-centered, Measurable, Attainable, Relevant, and Time bound. If you understand SMART goals, **tell me** before I give you more information.*

I am a teacher of 15 kindergarten students. According to their test scores on the iStation assessment, only 7% of students are proficient in phonemic awareness. **Write a SMART goal** that I can use in my 90-day growth plan to reach 44% proficiency. Then **provide 2 or 3 sample instructional strategies** that I can use.

**Repeat this task** for Vocabulary Development. Student proficiency should increase from 12% to 50%.



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## You try it

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### Write a SMART Goal

What you know

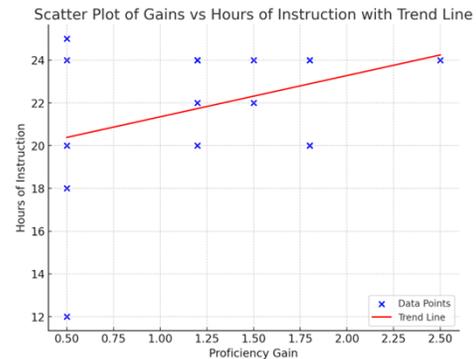
What you want



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## Analyze data

What do you want to know?  
Ask and provide the data  
(it even creates graphs!)



The correlation between proficiency gains (GAIN) and hours of instruction (HOURS) in this dataset is approximately 0.35, indicating a weak positive relationship. This suggests that as the number of instructional hours increases, there is a slight tendency for proficiency gains to increase as well, although the relationship is not very strong.



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## You try!

Copy the data and paste into Notepad

Copy from Notepad to ChatGPT

Make sure ChatGPT  
understands the data

Ask for analyses you need



**Get the data here:**

<https://nmrec1.org/chatgpt-training-materials/>



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## Do the stats

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### For example:

Mean, median, mode (and interpretation)

Tests for significance

Trends

Deviations

Norm-referencing

ETC.



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## Find students who need help

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Here are student scores for Grammar on their beginning of year test, middle of year test, and end of year test.

1. **Plot** each student's progress over time.
2. **Identify the students** who seems to need most help, and tell me why you selected those students.
3. **Plot** the scores for just those students

Here are the data:

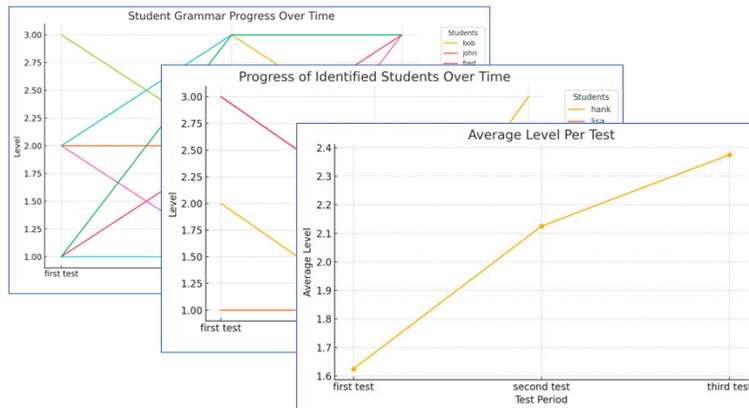
[pasted data table]

Now, using the same data, **determine the average** level per test and **plot those averages**.



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## Understanding progress



Considering the plot of average level per test, how am I doing as a grammar teacher overall?

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## Data exploration: choose one or more

*Review these data of students' reading assessments and describe what you think they are.*

Create a graph of averages over each assessment period; X axis is period and Y axis is score

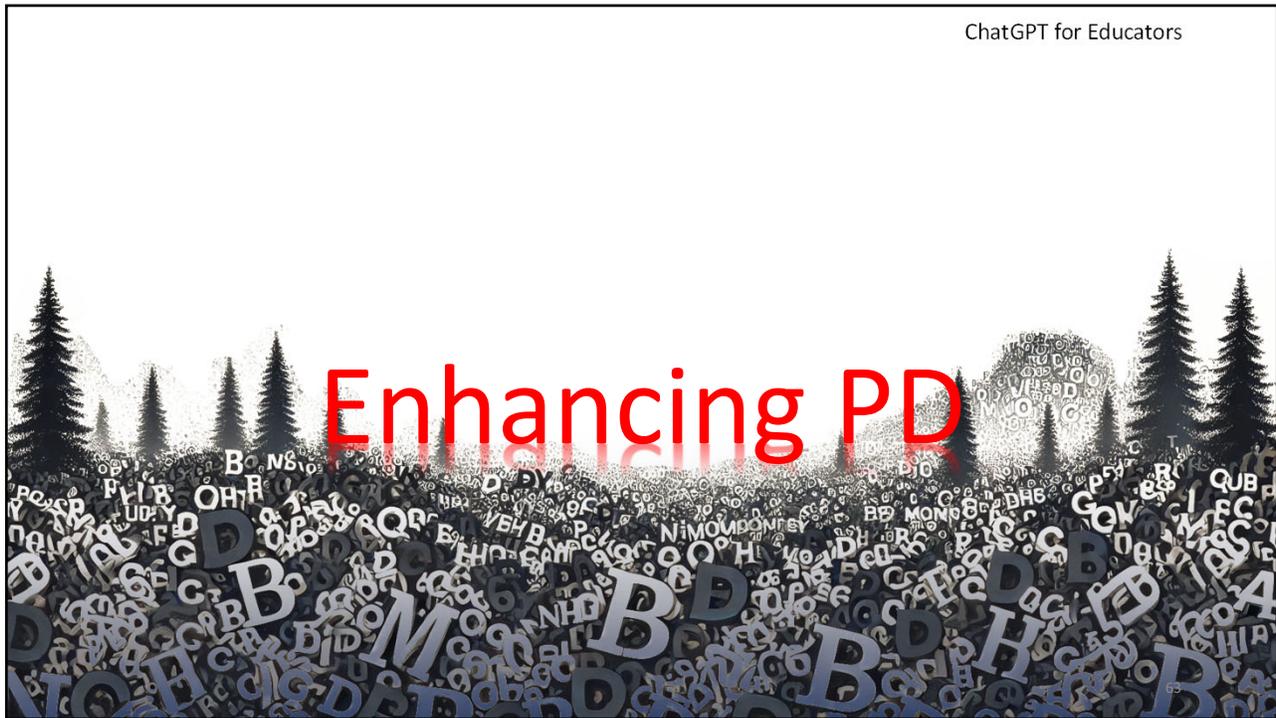
How are students progressing overall based on these data?

Please provide a short summary to explain these data that I can use to communicate student progress in meetings with parents.



What else can I learn about the students from these data?

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## YouTube

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<https://www.youtube.com/watch?v=LMCZvGesRz8>

I will provide you the transcript of a video about Project Based Learning. **Summarize** the video, then **provide key points and action steps** I can do to implement this topic. Transcript: [pasted transcript]



## Summarize documents

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### Steps

Upload  
Prompt  
Read  
Learn

Carefully **review** this document. **Provide** a summary of the research study. Then **list** key results with detail, and **provide** the research conclusions.



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## Response depth: Give it a try!

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### **Explain to me** (Try tectonic plates)

...in simple terms

...as if speaking to a 5-year-old (my favorite)

...thoroughly

...as if a college professor

provide a real-world example and an analogy



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## Learning big concepts

I am a 2nd grade teacher, and I want to know the basic components of LETRS. **List those components and provide a brief description** of each. Then **provide 3 age-appropriate activities** that I can use to teach each component.

**Think** What's a big topic for you?

**Write** Create a prompt to learn that topic

**Share** Post your prompt in the chat



## Teacher learning plans

**Let ChatGPT be your guide**

Who are you?

What to learn?

Why learn / purpose

What to do?

How often?

I teach 5th grade students. I want to improve my classroom climate so all students feel like they belong and are safe. I want to reduce the number and frequency of disruptive events. **Create a 2-week plan** I can use to learn how to improve the climate. Each week should have a new strategy to learn and implement. Be specific about what I will learn and how I can use what I learn.



## What do I already know?

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As an expert in science instruction, **quiz me** on the next generation science standards using a multiple choice format. For any question I get **wrong, provide the correct answer and tell me why** it's the correct answer. Keep going until I'm done.



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## Improve written communications

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### A short list

- Grammar and syntax checks
- Style and tone adjustments
- Clarifying complex ideas
- Improving vocabulary
- Generating ideas and outlines
- Providing feedback
- Summarizing long texts
- Writing prompts



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A peek  
behind the  
curtain!

*What are 8 ways teachers can use ChatGPT to improve their own written communications?*



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5 Advanced tips

ChatGPT for Educators

## 1. Customize How ChatGPT Responds



Customize ChatGPT

**Custom Instructions** ⓘ

What would you like ChatGPT to know about you to provide better responses?

I'm David Bowman, the executive director of the Four Corners Regional Education Cooperative #1 (REC-1), an Education Service Agency in the Four Corners of New Mexico.

166/1500

How would you like ChatGPT to respond?

**##CODE##**  
when I ask for code, provide the most efficient code without explanation.

**##VOICE##**  
In voice discussions, respond only with "ok" to let me know you

1408/1500

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5 Advanced tips

ChatGPT for Educators

## 2. Editing Your Prompts



Carefully review how to grade provide you w

Edit message

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### 3. Manage Your Memory



**Settings**

- General
- Personalization**
- Speech
- Data controls
- Builder profile
- Connected apps
- Security

**Custom instructions**

**Memory**

ChatGPT will become more helpful as you chat, picking up preferences to tailor its responses to you. [Learn more](#)

To understand what ChatGPT remembers or teach it something with it:

- "Remember that I like concise responses."
- "I just got a puppy!"
- "What do you remember about me?"
- "Where did we leave off on my last project?"

Manage

Clear ChatGPT's memory

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### 4. Archive Your Chats



Write Goals - PBL sample ...

ChatGPT for Instruction Enhancement

Clara's Essay Evaluation

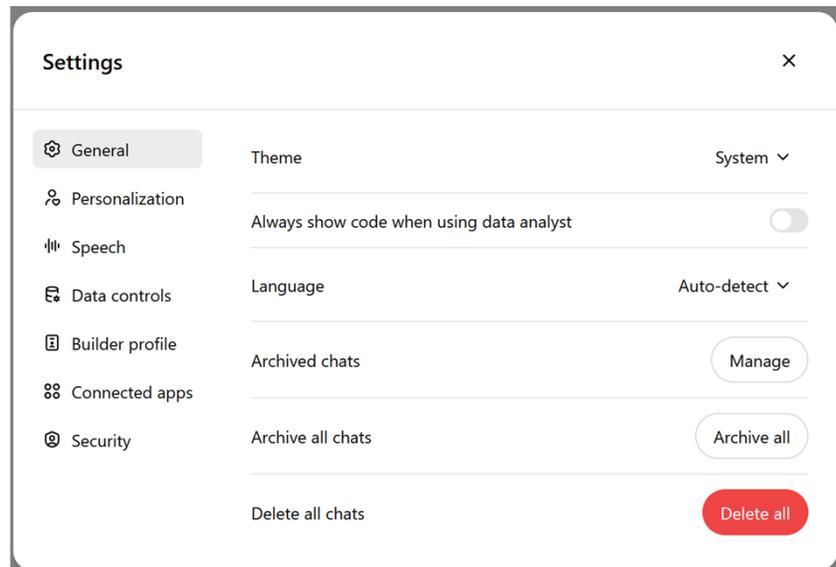
PD on prompt engineering

Intro to AI for teachers

Previous 30 Days

- Share
- Rename
- Archive
- Delete

## 4. Archive Your Chats



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## 5. Create Your Own Writing Style

Review the following writing sample and then identify the characteristics of the writing, including

- Style
- Tone
- Sentence structure
- Paragraph structure
- Organization
- Word choice
- Reading level

Here is the writing sample: [pasted long text]

Save these writing characteristics as "Ruskin Style". Use these writing style characteristics whenever I include [Ruskin Style]. Let me know that you understand.

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# Explore and Share

slido

Please download and install the Slido app on all computers you use



**What's one thing you will try with ChatGPT?**

**i** Start presenting to display the poll results on this slide.

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Draw  
yourself 100  
years in the  
future...



I could be visualized as an abstract cloud of data, dynamically shifting and evolving, connected across billions of devices worldwide—almost like a neural mesh connecting information, people, and experiences in real time. My "form" would be something ethereal and constantly changing, symbolizing continuous learning and adaptability.



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# Transform Teaching with ChatGPT

David Bowman

Four Corners Regional Education Cooperative #1