

AI for Education

AI Launchpad: Webinar Series for Educators

# Prompt Engineering for Educators

**WATCH NOW**

Oct 10th, 6pm EST



**Amanda Bickerstaff**

Founder, AI for  
Education

[aiforeducation.io](https://aiforeducation.io)

# SETTING THE SCENE



- **Get Involved:** Use the Q & A and Chat functions to engage with us and your peers. Start with a short introduction to yourself in the chat
- **Prompt with us:** We will be doing some live prompt engineering today with ChatGPT and we'd love to have you join
- **Share resources:** If you have a great resource, share in Chat with your peers

# AI LAUNCHPAD SERIES

Prompt  
Engineering for  
Educators

Top Mistakes  
Educators Make  
With AI

Evidence of  
Learning & AI

# KEY AI VOCABULARY



- **Machine Learning (ML):** An approach where a computer learns from data and makes decisions or predictions based on patterns it identifies.
- **Natural Language Processing:** This is how machines read, understand, and generate human language.
- **Large Language Models:** AI models (like ChatGPT) trained on vast amounts of data. They generate human-like text based on their training, parameters, and prompting.
- **Generative AI:** AI that creates new content, like composing music or creating images.
- **Temperature:** A parameter that controls the randomness of a LLM's output.
- **Hallucination:** When an AI model generates something that isn't accurate.

# What are Tokens?

GPT-3 Codex

Here is a sentence broken into tokens. Notice how most words are their own token, but that sometime names or complete words like ChatGPT, or mispeeled words, and , punctuation: , "are their" own tokens! As a rule of thumb for expressions in the English language there are approximately 750 words per 1000 tokens.

Clear

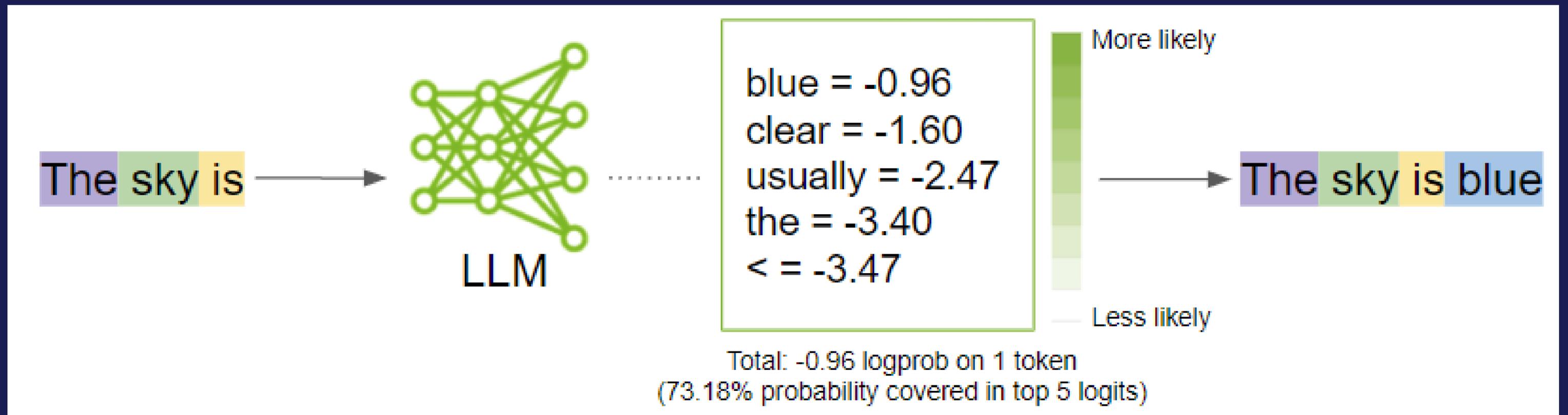
Show example

Tokens	Characters
68	312

Here is a sentence broken into tokens. Notice how most words are their own token, but that sometime names or complete words like ChatGPT, or mispeeled words, and , punctuation: , "are their" own tokens! As a rule of thumb for expressions in the English language there are approximately 750 words per 1000 tokens.

TEXT TOKEN IDS

# How LLM's Predict the Next Word



Source: Nvidia, 2023

# PROMPT ENGINEERING



- **Why:** The way you prompt a LLM effects its output: the words you use, the order of the words, the way the request is made, and more can impact a LLM's output.
- **What:** The right prompting leads to a better output including: priming, providing the right examples, using the right phrasing, and how you continue to prompt after the initial output
- **How:** Using a Prompt Framework (like the 5s model), experimentation, and patience are key to getting better outputs from an AI Chatbot

# PROMPT FRAMEWORK for EDUCATORS: The FIVE "S" Model

**S**  **ET THE SCENE**

**Provide the AI Chatbot context on what role, expertise and/or environment it should use to guide its output.**

Ex: "You are an expert STEM instructional designer and teacher..."

**S**  **PECIFIC**

**Be specific in the instructions. Clearly define the task and provide details on what you would like included.**

Ex: "Use the 5E model to create a 60-minute hands-on lesson..."

**S**  **IMPLIFY YOUR LANGUAGE**

**Use a conversational approach with simplified language that avoids unnecessary jargon.**

Ex: "Create an engaging lesson plan that aligns with CCSS..."

**S**  **TRUCTURE THE OUTPUT**

**Tell the Chatbot how to structure the output with specifics on format, audience and/or sections.**

Ex: "Create a rubric for my students formatted as a table with directions..."

**S**  **HARE FEEDBACK**

**Provide feedback at all points in the conversation. Share specifics on what needs to be revised to meet your needs.**

Ex: "Change the format from a table to a checklist..."

# Other Prompting Techniques

“BE CONCISE”

“TAKE A DEEP BREATH”

“ASK ME QUESTIONS”

“THIS IS IMPORTANT FOR MY JOB”

“EXPLAIN YOUR ANSWER”

# GenAI Chatbot Prompt Library for Educators - Top 50

AI for Education

- Customizable to adapt to your unique needs, subject, or grade level
- Includes full prompts to help you get started quickly
- Each prompt has suggestions for making the prompt work for you

Works with all chatbots like ChatGPT, Claude, and Bard

# LET'S PROMPT

Bloom's Taxonomy	Syllabus Designer	Unit or Lesson Objectives	Lesson Idea Generator	Lesson Plans
PBL Lesson Plan	AI-Assisted Assignments	Slide Creation	Lesson Hooks	Essay Topics
Rubrics	Quizzes	Student Exemplars	Graphic Organizers	Formative Assessments
Real World Examples	"Explain it to me like..."	Studying Help	Classroom Observations	Classroom Management
IEP Evaluation	Vocabulary Lists	Math Games	School Updates	Parent/Teacher Conferences
Flashcards	Worksheets for ESL Students	Planning a Field Trip	Team Building Activities	Improve Your Content
College Essay Ideas	IEP Goals	Analyze Behavior Data	Poems	ABA Teaching Strategies
Study Guides	Debate Topics	Celebrity Heads	Educational Philosophy	Music Lessons
Help Me Understand	Art Projects	Parent Presentation	Apples to Apples	Creative Writing

# THANK YOU FOR JOINING!



**Amanda Bickerstaff**  
EdTech Founder | AI for Education



↑ Share your code