

Office of the State Superintendent of Education and University of the District of
Columbia (OSSE AFE & UDC)
Fall 2025 Mini-Professional Development Institute

Session 1

Designing Effective Prompts: Enhancing Education and Professional Practice with ChatGPT

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OSSE AFE Team



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Activity 1 - Getting to Know You

In the chat, please enter:

1. Your name and agency affiliation

2. The category that best describes your current role

- Instructor/Teacher
- Admin/Coordinator/Manager
- Tech Support
- Facilitator/Trainer
- Other

3. The industry in which you work or deliver training

- Education (K-12)
- Education (Adult/Post-secondary)
- Workforce Development/Training
- Nonprofit/Community Organization
- Other



Objectives

By the end of the session, you will be able to:

- **Describe** what makes ChatGPT prompting effective.
- **Differentiate** between freeform and structured prompts.
- **Apply** a framework for crafting prompts in your own professional context.
- **Generate** 1–2 prompts tailored to your role in education and/or professional practice.

01

About Artificial Intelligence (AI)

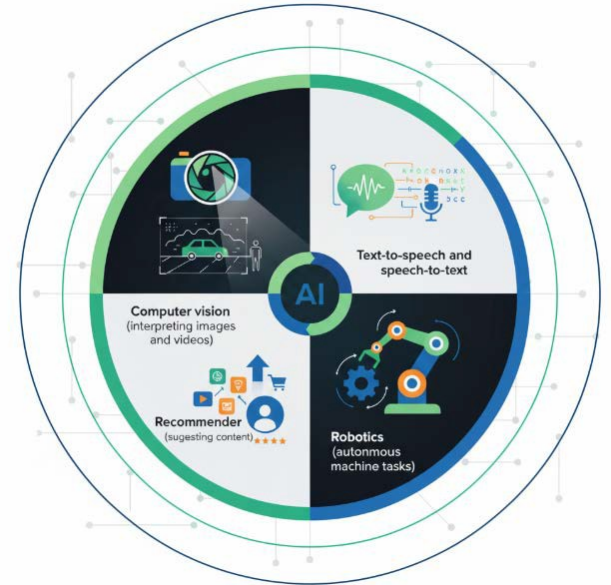


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What is Artificial Intelligence (AI)?

Artificial Intelligence (AI) is the umbrella term for all technology that enables computers to perform tasks that typically require human intelligence.



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Examples of AI in Daily Life & Work

Examples of AI in daily life and work:

- **Computer vision:** AI can identify objects, faces, or scenes in photos and videos. For example, Google Photos automatically tags people, and self-driving cars recognize stop signs.
- **Text-to-speech and speech-to-text:** AI converts written words into spoken language or transforms spoken words into text. Common examples include voice assistants like Siri or Alexa and dictation tools.
- **Recommender systems:** AI suggests things users might like based on past behavior, such as Netflix recommending shows, Amazon suggesting products, or Spotify creating personalized playlists.
- **Robotics:** AI enables machines to act independently and perform tasks. For instance, a robot vacuum navigates a room or warehouse robots move packages.

History of AI



Neural Networks

1950-1970



Machine Learning

1980-2010



Deep Learning

Today

AI Ethical Concerns

Common Challenges and Risks in AI

Data & Bias

1. **Bias:** AI data can reflect and reinforce human bias and discrimination.
2. **Datafication:** Everyday life is turned into data, raising privacy and exploitation concerns.
3. **Privacy:** Personal data can be collected and used without consent.

Society & Impact

4. **Truth:** AI may enable plagiarism, cheating, and the spread of fake or misleading information.
5. **Copyright:** Outputs may infringe on copyright or intellectual property rights.
6. **Human Labor:** Workplace automation and AI can cause job disruption, displacement and exploitation.

Power & Environment

7. **Affect Recognition:** AI's analysis of emotions can result in privacy violations and discrimination.
8. **Power:** AI can deepen global power imbalances and widen structural inequalities.
9. **Environment:** Mining, energy consumption, and digital waste from AI use threaten the planet.

Source: leonfurze.com

02

About Generative AI (GenAI)

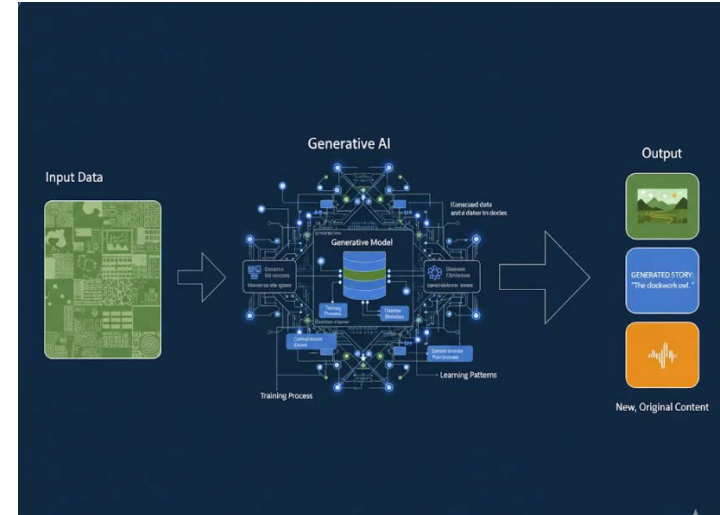


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What is Generative AI (GenAI)?


- AI technology that creates new content, solutions, and ideas.
- Responds to prompts in natural, everyday language.
- Produces text, images, audio, code, data, and more. Examples include:
 - **Text (via Chatbots):** ChatGPT, Gemini, Claude. These tools generate human-like text for conversation, answering questions, summarizing, and content creation.
 - **Images:** DALL-E, Midjourney, Adobe Firefly, Imagen (create art and graphics)
 - **Music:** Suno, Udio, Amper Music (generate songs and soundtracks)
 - **Code:** GitHub Copilot, Tab nine (write and assist with programming)
- Used across fields including business, healthcare, construction, education, public safety, business administration, information technology, and beyond.


Activity 2A: Generative AI in Action – Experience & Tools


Poll: Your GenAI Experience

In the chat, respond to the poll by selecting an answer that reflects your experience with Generative AI!

How familiar are you with Generative AI (GenAI) technologies?

 Very Familiar

 Somewhat Familiar

 Not Familiar

Thank you for sharing. Your responses will help tailor today's experience!



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Today's Leading GenAI Tools

- ChatGPT (*Text, Reasoning & Conversation*)
- Midjourney (*Image Generation*)
- Gemini (*Multimodal, Google AI*)
- Claude (*Conversational AI*)
- Meta AI (*Social Messaging, Meta Platforms*)
- Snapchat My AI (*Social Messaging AI*)
- Copilot (*Microsoft Assistant*)
- Perplexity AI (*Conversational Search & Research*)

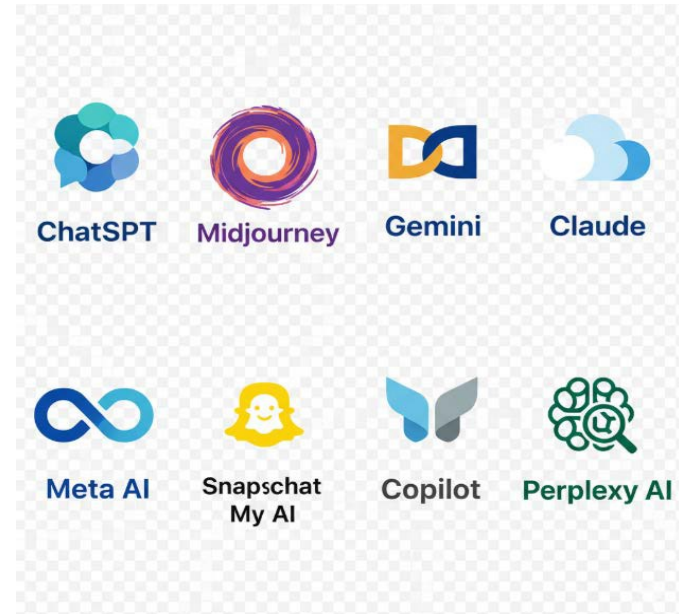


Illustration created using Gemini AI

Activity 2B: Generative AI in Action – Experience & Tools

Poll: Your GenAI Experience

In the chat, respond to the poll by selecting all the GenAI tools you have used (*choose as many as apply*).

Which GenAI tools have you used?

- ChatGPT
- Google Gemini
- Canva Magic Write
- Microsoft Copilot
- Industry-Specific GenAI tools (*e.g., healthcare, construction, security, etc.*)
- Other (please specify in the chat)

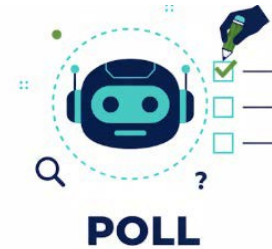


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Activity 3 - What Do You Use GenAI For?

In the chat, please tell us for what you use GenAI tools

- Teaching/Instruction (K-12, Adult, Vocational)
- Workforce Development / Job Placement
- Industry-Specific Tasks (e.g., Business, Healthcare, Construction, IT, Security, etc.)
- Administration / Funding / Program Management
- Technical Assistance / Professional Support
- Content Generation / Marketing
- Research & Data Analysis
- Customer Service / Client Support
- Legal / Compliance
- Creative Projects
- Personal Use
- Other (please specify)



GenAI APPLICATIONS

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03

About ChatGPT

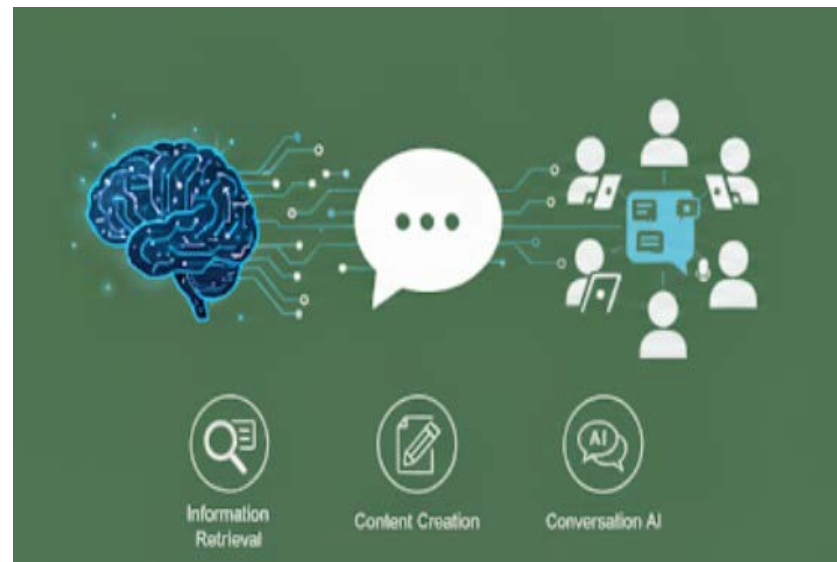


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What is ChatGPT?

Chat

The conversational aspect of the model is designed to engage in text-based conversations and interactions with users.

P = Pre-trained

The model has been trained on a large text dataset before being fine-tuned for specific tasks, allowing it to understand and generate a wide range of content.

G = Generative

It indicates that the model can generate text or produce output based on the input it receives.

T = Transformer

The underlying architecture used to build the model, which is a powerful neural network architecture that has become the foundation for many state-of-the-art Natural Language Processing (NLP) models, including ChatGPT.

What is ChatGPT? (cont.)

- ChatGPT uses **AI** and **machine learning** to generate human-like text. ChatGPT uses AI and machine learning to generate human-like text by analyzing massive amounts of written data.
- It learns **the patterns of language** to understand context, meaning, and intent behind prompts or questions.
- When given an input, ChatGPT crafts a response that is relevant and tailored to the situation.
- The model **improves continuously** as it processes more text, adapting to new language styles and information.
- Why ChatGPT stands out:
 - It's one of the most **recognized** and **user-friendly** AI language models available.
 - **Accessible for everyone:** Designed for simplicity and broad use cases.
 - Reliable, quick, and able to handle a wide variety of tasks, from answering questions to generating creative content



04

About AI Prompts

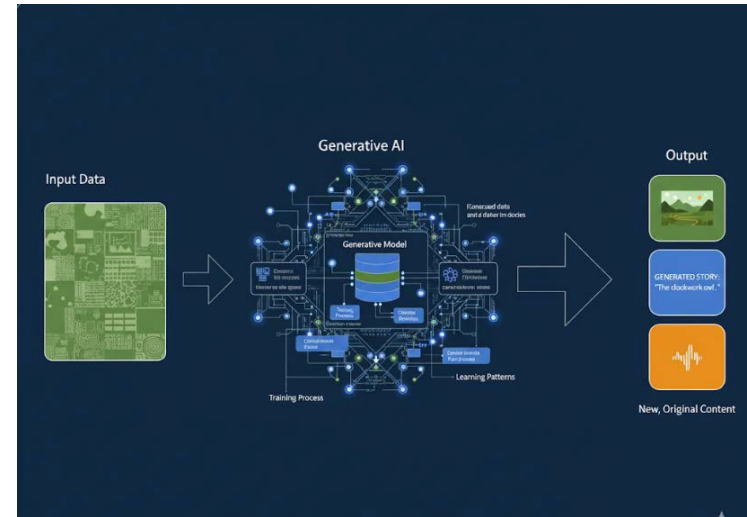


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What is an AI Prompt?

- An **AI prompt** is the input, such as a question, command, or request, that you give to artificial intelligence to tell it what you want.
- Prompts are **the starting point of a conversation** with an AI tool:
 - You provide the **instructions or context** (the prompt).
 - AI uses that information to deliver a **relevant output**: text, code, images, summaries, or ideas.
- **Good prompts lead to better results**: Clear, specific instructions help AI respond accurately and creatively.

Key points about AI prompts



Directs the output: The way you phrase your prompt guides what AI produces and how useful the response is for your needs.

Tip: Clear, detailed wording delivers better results.



Works best when clear and specific: Works best when clear and specific: Precise instructions help AI give relevant, accurate answers. Ambiguity usually leads to vague or off-target results.

Tip: Ask for exactly what you want.



Can be simple or complex: Prompts range from straightforward (“Translate this sentence into Spanish”) to multi-step scenarios with specific constraints.

Tip: Experiment with detailed prompts for layered, creative outcomes.



Supports many task types: Prompts work for writing, summarizing, coding, brainstorming, answering questions, lesson planning, and much more.

Tip: Try prompts in different formats, questions, instructions, ideas.

Activity 4 - Designing Prompts for ChatGPT or other AI Tools

In the chat, specify your familiarity with designing prompts for ChatGPT or similar AI tools

- **Expert:** I design prompts regularly and teach others.
- **Proficient:** I use prompt design routinely in my practice.
- **Intermediate:** I have some experience and have tested prompt creation.
- **Beginner:** I am interested but have limited or no experience.
- **Not familiar at all.**



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05

Designing Freeform & Structured Prompts

Understanding AI
Prompts



Illustration created using ChatGPT

Freeform Prompts

- Freeform prompts are open-ended instructions or requests given to an AI system without strict rules or formatting requirements.
- These prompts foster creativity, flexibility, and adaptation for a wide variety of tasks, such as brainstorming, composing original content, or answering complex questions in natural language.
- Ideal for broad or exploratory objectives, they rely on plain language, context-driven requests, and let users interact with AI in a conversational, creative manner.
- **Tip:** Freeform prompts work best when you want unique ideas, natural conversation, or creative solutions, not just short answers or facts.



Illustration created using Gemini AI

Key Elements of a Freeform Prompt



- **Open-ended:** No strict rules for structure or style, just natural language.
- **Exploratory:** Invites AI to generate ideas, stories, solutions, or explore concepts beyond straightforward facts.
- **Flexible:** Adapts to many directions, allowing AI to interpret context and give varied responses.
- **Creative-friendly:** Perfect for brainstorming, storytelling, and conceptual thinking; supports unique or imaginative outputs.
- **Works best for:** Tasks like ideation, problem-solving, writing, learning, and creative projects where structure is less important.

Illustration created using Gemini AI

Components of a Freeform Prompt

- **Role (“who”)**: Specify who or what AI should emulate.
Examples: "You are a travel agent", "You are a math teacher".
- **Task (“what”)**: State the main action or objective for AI.
Examples: "Plan a trip to Dubai", "Explain algebra to a student".
- **Instructions (“how”)**: Provide guidelines, preferences, or style details.
Examples: "Make it budget-friendly and fun", "Use simple language and step-by-step explanations".



Illustration created using Gemini AI

Freeform Prompt Examples: Professional Roles

5th Grade Science Teacher

You are a 5th grade science teacher. Generate three engaging discussion questions about animal habitats for students.

- **Role:** 5th Grade Science Teacher
- **Task:** Generate three discussion questions about animal habitats for students
- **Instructions:** Make the questions engaging and suitable for fifth grade learners

Why this works:

- **Role** guides the AI's voice, expertise, and tone.
- **Task** gives a specific goal, making the output focused and useful.
- **Instructions** add depth, ensuring results meet user needs.

Try it yourself!

Swap in your own role, task, and instructions for targeted prompts relevant to your profession.



Illustration created using Gemini AI

Freeform Prompt Examples: Professional Roles (cont.)

9th Grade English Language Learner (ELL) Teacher

You are a 9th grade ELL teacher. Write a discussion question related to cultural traditions that helps students use new vocabulary and share personal experiences.

- **Role:** 9th Grade ELL Teacher
- **Task:** Write a discussion question about cultural traditions
- **Instructions:** Ensure the question encourages the use of new vocabulary and personal experience

Why it works:

- **Role** gives AI the right voice and approach.
- **Task** directs the specific job to be done.
- **Instructions** make the prompt purposeful and targeted for your learners.

Try it yourself!

Mix and match roles, tasks, and instructions for countless creative and targeted prompts!



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Freeform Prompt Examples: Professional Roles (cont.)

Certified Nursing Assistant (CNA) Educator

You are a Certified Nursing Assistant (CNA) educator preparing a lesson for medical assistants. Log in to [O*NET Online](#) and, using the Medical Assistant [31-9092.00] occupation, identify and list the tasks, knowledge, skills, technology skills, and abilities that are required for medical assistants. Organize this information for instructional use.

- **Role:** Certified Nursing Assistant (CNA) Educator
- **Task:** Plan a lesson for medical assistants using O*NET standards
- **Instructions:** Log in to [O*NET Online](#) and, from the Medical Assistant (31-9092.00) occupation, list the key tasks, knowledge, skills, technology skills, and abilities. Present these categories in an organized format suitable for lesson planning.

Why this works:

- Using “Role, Task, Instructions” makes the prompt focused, clear, and actionable.
- AI can generate output tailored to actual standards, ready for curriculum design.

Try it yourself!

Customize the instructions for different lesson formats or use other O*NET occupations to create prompts for various careers or job pathways.



Illustration created using Gemini AI

Freeform Prompt Examples: Professional Roles (cont.)

Project Manager

You are a project manager. Compose a concise email updating stakeholders on the current project status, including completed milestones, current challenges, and next steps.

- **Role:** Project Manager
- **Task:** Provide an update to stakeholders on project status
- **Instructions:** Include completed milestones, current challenges, and next steps in a concise format

Why it works:

- **Role** ensures audience-appropriate tone and authority.
- **Task** focuses the prompt on the main need.
- **Instructions** guarantee completeness and clarity.

Try it yourself!

Replace the role, task, or instructions to generate emails for different jobs, meeting types, or purposes, practice mixing and matching to get new, targeted results.



Illustration created using Gemini AI

Accessing ChatGPT Instantly (No Account Needed)

Want to access ChatGPT without signing up?

- Go to chat.openai.com in your browser.
- Start typing your question or request in the chat box.
- Press enter and instantly get a response. **No account or sign-up required.**

What to expect:

- Only basic ChatGPT features (no saving previous chats; some advanced tools require an account).
- Great for quick questions and instant help.
- Private and easy for first-time users.

Sample prompt:

What are three fun icebreaker questions for a meeting?

Tip:

Guest mode is a great way to explore AI before committing to an account. Your session will disappear when you close the browser.



GUEST ACCESS
CHATGPT - NO SIGN-UP

Illustration created using Gemini AI

Accessing All Features with a ChatGPT Account

Ready for full ChatGPT features? Get a free account in minutes!

- Go to chat.openai.com or download the ChatGPT app.
- Sign up with email, Google, or Microsoft (takes less than 2 minutes).
- Use all features:
 - Chat history and conversation saving.
 - More powerful models and tools.
 - Voice, sharing, and personal settings.

Sample prompt:

Help me write a friendly email announcing our team's new project

Beginner Tips:

- Type your question or request in the chat box at the bottom of the screen, then press enter.
- Chat in plain English (or any language you prefer).
- Ask for summaries, drafts, lists, or anything else.
- Revisit your previous chats anytime.



UNLOCK ALL FEATURES
CHATGPT ACCOUNT - SAVED CHATS

Illustration created using Gemini AI

Activity 5 - Prompt or Flop?

Identify the Prompts – Poll

In the chat, respond to the poll by specifying whether each statement is a “Prompt” or a “Flop.”

- Tell me about science.
- Write three interview questions for a manager in healthcare.
- Use O*NET to find three critical skills required for Computer User Support Specialists and explain why each skill is important.
- Use ONET to find jobs.



PROMPT VOTE

Illustration created using Gemini AI

Activity 5 - Prompt or Flop? (cont.)

Reveal – Prompts vs. Flops

Prompts:

- Write three interview questions for a manager in healthcare.
- Use O*NET to find three critical skills required for Computer User Support Specialists and explain why each skill is important.

Flops:

- Tell me about science.
- Use O*NET to find jobs.

PROMPT	FLOP
✓	✗
✓	✗
✓	✗
✓	✗
✓	✗

PROMPT SORTING

Illustration created using Gemini AI

Activity 5 - Prompt or Flop? (cont.)

Rewrite Challenge

Instructions:

- Choose one Flop prompt below and rewrite it in the chat to make it clear, specific, and actionable.

Flops:

- Tell me about science.
- Use O*NET to find jobs.

Discussion:

- Share improved prompts.
- Discuss what made them better and how clarity impacts AI results.



COLLABORATIVE PROMPT REVISION

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Structured Prompts

“Structure enables creativity. As Charles Eames famously quotes: ‘design depends largely on constraints.’”

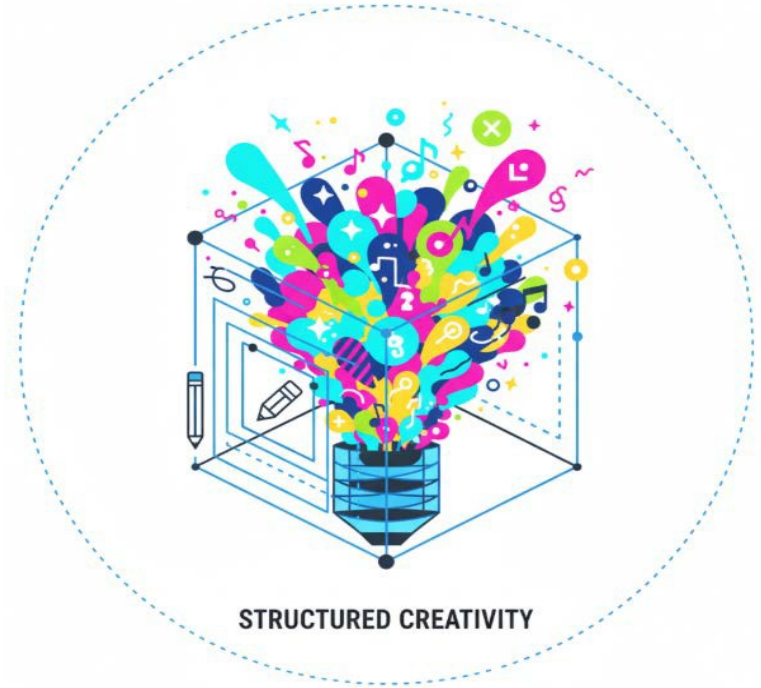


Illustration created using Gemini AI

Structured Prompts

- Structured prompts involve carefully designed instructions with specific context, constraints, formatting, or examples to guide AI toward predictable and consistent results.
- They are used for defined tasks where clarity, accuracy, and repeatability are essential, and may include roles, steps, or output guidelines to standardize responses.
- Effective structured prompts provide sample outputs, specify roles and audience, and use scaffolding (step-by-step instructions, constraints, and format requirements) to ensure repeatable, high-quality AI responses in education and training.



STRUCTURED PROMPTS

Illustration created using Gemini AI

Key Elements of a Structured AI Prompt

- **Role Definition:** Specify who AI should represent to set the scene.
Example: "You are an instructional designer."
- **Clear Goal:** State the precise outcome you want to achieve.
Example: "...Create a 30-minute training module on workplace safety."
- **Step-by-Step Instructions:** Lay out the process or sequence, guiding AI through each step.
Example: "First, list learning objectives. Then, create three interactive activities."
- **Constraints:** Define boundaries for tone, length, format, or style to maintain consistency.
Example: "...Keep the language at an 8th-grade reading level and limit to 500 words."
- **Personalization:** Tailor the prompt to your specific audience or context for relevance.
Example: "...Tailor examples to a manufacturing environment."
- **Examples:** Offer sample outputs or formats to model the desired style and quality.
Example: "Provide a bulleted list of key steps."

06

Frameworks for Designing Effective AI Prompts



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A Quick Guide to Frameworks for Designing Effective AI Prompts

These frameworks help educators and professionals craft clear, targeted prompts for optimal AI responses.

RACE

R – Role

A – Action

C – Context

E – Execute/**Expectation**

RACEF

R – Role

A – Action

C – Context

E – **Examples**

F – Format/Follow-up

TRACI

T – Task

R – Role

A – **Audience**

C – Create

I – Intend/Instruction

Choose the best-fit framework for your audience, task, or output needs.

AI Prompt Framework: RACE

R – Role: Identify who the AI is or what perspective should be used (e.g., expert, instructor, student, advisor).

A – Action: Specify what the AI should do or produce (e.g., explain, solve, summarize, design).

C – Context: Set the relevant background, scenario, or audience to consider (e.g., workplace)

E – Execute: Define what output, format, or deliverable is required (e.g., essay, checklist).

Expectation: Establish the expected standard, length, or level of detail (e.g., three- paragraph response)

Example: Scenario-Based Learning



Role: You are a vocational training instructor teaching a Green Construction HyFlex class.



Action: Create a workplace scenario for small group discussion.



Context: This is an asynchronous assignment; students must analyze jobsite problem-solving and teamwork.



Execute: Provide a detailed scenario and two guiding questions.



Expectation: Explain how teamwork contributes to project safety and success.

Some versions of RACE use E for 'Execute', others for 'Expectation'. Both are valid for AI prompt design.

AI Prompt Framework: RACEF

- R** – Role: Define who the AI should be (expert, instructor, student, advisor, etc.).
- A** – Action: Specify what the AI should do (explain, design, solve, critique, summarize, etc.).
- C** – Context: Establish the scenario, audience, or conditions guiding the response.
- E** – Examples: Provide a sample, demonstration, or model the AI should follow or integrate.
- F** – Format: Structure the output in the desired format (bullets, tables, essays, scripts, etc.)
 - Follow-up: Indicate whether additional steps (summary, reflection, next actions) are required.



Role: You are a high school English teacher guiding students in analyzing classic literature.



Action: Create an essay prompt asking students to explore how a central theme is developed in "Hamlet."



Context: 12th grade English class; students have read "Hamlet" by Shakespeare. Emphasize textual evidence and critical thinking.



Examples: "Explore the theme of indecision in 'Hamlet.' How does Shakespeare use soliloquies and dialogue to reveal Hamlet's internal conflict? Support answers with at least two quotations."



Format: Output is a detailed literary analysis essay using a provided rubric (thesis clarity, textual evidence, depth of analysis).



Follow-up:

Share thesis statements in pairs for peer feedback.


Find and explain one additional quotation.

Revise a paragraph for stronger citation and analysis based on feedback.


Some versions of RACEF use F for 'Format', others for 'Follow-up'. Both are valid for AI prompt design.


AI Prompt Framework: TRACI


- T** – Task: State the core purpose or assignment (e.g., teach, design, solve, summarize).
- R** – Role: Specify the expertise or perspective guiding the answer (e.g., expert, instructor, student).
- A** – Audience: Identify the target user or learner (e.g., entry-level adults, advanced practitioners).
- C** – Context: Describe the relevant background or scenario shaping the response (e.g., HyFlex).
- I** – Intent: Define the desired learning goal or outcome (e.g., mastery, understanding, application).
Instruction: Outline special guidelines or directions for shaping the response (e.g., formatting).


 **Task:** Create an interactive activity that helps students demonstrate proficiency in basic internet skills required by the Northstar Digital Literacy Assessment.

 **Role:** You are a digital literacy instructor designing a formative assessment for learners.

 **Audience:** Course instructor and program administrators monitoring digital skills progress.

 **Create:** A checklist and practice scenario where learners must connect to Wi-Fi, open a browser, navigate to a website, and use a search engine to find health-related resources.

 **Intend:** Ensure students build practical, test-aligned technology skills and prepare for successful performance on the Northstar Digital Literacy Assessment, helping educators identify areas for targeted support.

 **Instruction:** Guide learners through each digital task, reinforce safe online habits, encourage use of help features, and review feedback to target improvement

Some versions of TRACI use I for 'Intent', others for 'Instruction'. Both are valid for AI prompt design.

How AI Prompt Frameworks Support Differentiation

Let's explore how three AI prompt frameworks, **RACE**, **RACEF**, and **TRACI**, can help tailor instruction for learners at different levels. Each framework guides task design for beginner, intermediate, and advanced students.



Illustration created using Gemini AI



Differentiation: Beginning Level



Each framework also addresses foundational skills and provides maximum scaffolding for beginning level learners.



Illustration created using Gemini AI

AI Prompt Framework: RACE (Beginning Level)

- **Role:** You are a Medical Assistant instructor.
- **Action:** Perform simple, guided dosage calculation using clear data and visual aids.
- **Context:** First lab session in a supportive, low-stakes environment, focusing on mastery of basic concepts.
- **Execute:** Convert 100 lbs to kg, multiply by prescribed mg/kg, and choose the correct syringe. Use step-by-step guidance and visual support tools (charts, syringe images) at each stage.
- **Expectation:** With provided scaffolding (visual aids, clear instructions, guided steps), learners accurately complete the calculation and confidently select equipment

Scaffolding & Differentiation Impact (RACE)

Scaffolding: High scaffolding with step-by-step instructions and visual supports helps novice learners build procedural fluency, reduces anxiety, and increases early success.

Differentiation: Tasks are tailored for beginners, focusing on fundamentals. Instructors monitor understanding and provide immediate feedback or alternative approaches as needed.

Learner Impact: Beginners gain confidence and foundational competence, ready to progress to more independent tasks in future sessions.

Teacher Impact: Teachers can better diagnose learning gaps, target skills for development, and set a positive class culture around skill mastery.

AI Prompt Framework: RACEF (Beginning Level)

- **Role:** You are a Medical Assistant instructor.
- **Action:** Guide learners through a weight-based medication calculation using straightforward numbers (e.g., convert 150 lbs to 68 kg, then compute dosage).
- **Context:** Introduction to dosage-by-weight in a simulated doctor's office with supportive, one-on-one instruction (CASAS Level B).
- **Examples:** "A patient weighs 150 lbs. The order is 2 mg per kg. What's the total dose?" Visual step-by-step support is provided for each part of the calculation.
- **Format:** Fill-in-the-blank steps accompanied by labeled visuals of syringes and conversion charts to support every calculation.
- **Follow-up:**
 - **Learners:** Complete a quick visual check with an instructor or peer (e.g., match calculated dosage to the correct syringe image), and discuss what helped them complete the steps.
 - **Instructor:** Provide targeted feedback, noting strengths and any recurring errors, and briefly reteach or show an alternative strategy if needed.

AI Prompt Framework: RACEF (Beginning Level) (cont.)

Scaffolding & Differentiation Impact (RACEF)

Scaffolding: High scaffolding with step-by-step instructions and visual supports helps novice learners build procedural fluency, reduces anxiety, and increases early success.

Differentiation: Tasks are tailored for beginners, focusing on fundamentals. Instructors monitor understanding and provide immediate feedback or alternative approaches as needed.

Learner Impact: Beginners gain confidence and foundational competence, ready to progress to more independent tasks in future sessions.

Teacher Impact: Teachers can better diagnose learning gaps, target skills for development, and set a positive class culture around skill mastery.

Additional Student Benefit (RACEF):

Students receive highly structured activities with clear expectations about format and follow-up, which means they know exactly what success looks like and when/how they will receive feedback or reinforcement. This reduces uncertainty, enables faster skill mastery, and fosters a positive mindset for learning because students can anticipate support for correcting errors and celebrating growth. Additionally, repeated exposure to consistent formats and closure routines helps build students' self-monitoring and reflection skills, improving long-term retention and transfer.

Additional Teacher Benefit (RACEF):

The explicit inclusion of “Format” and “Follow-up” sections prompts teachers to plan both how instructions will be delivered (e.g., fill-in-the-blank worksheets, visual aids) and how learning will be reinforced after the main activity (e.g., quick checks, targeted feedback, peer discussion). This structure supports clearer planning, more systematic formative assessment, and stronger closure or reinforcement activities in each lesson.

AI Prompt Framework: TRACI (Beginning Level)

- **Task:** Calculate a medication dose for a patient using easy-to-convert weights.
- **Role:** You are a Medical Assistant instructor
- **Audience:** Students at CASAS Level B needing step-by-step support.
- **Create:** Complete a worksheet guiding pound-to-kilogram conversion, set up the proportion, round to the nearest tenth, and choose the correct syringe, with visual supports for each step.
- **Intend:** Build confidence and procedural fluency with industry-standard measurement tasks and basic documentation, as required by O*NET.
- **Instruction:** Provide a completed example and model each step. Use guided questions to prompt students' thinking and include checks for understanding after each calculation.

AI Prompt Framework: TRACI (Beginning Level) (cont.)

Scaffolding & Differentiation Impact (TRACI)

Scaffolding: High scaffolding with step-by-step instructions and visual supports helps novice learners build procedural fluency, reduces anxiety, and increases early success.

Differentiation: Tasks are tailored for beginners, focusing on fundamentals. Instructors monitor understanding and provide immediate feedback or alternative approaches as needed.

Learner Impact: Beginners gain confidence and foundational competence, ready to progress to more independent tasks in future sessions.

Teacher Impact: Teachers can better diagnose learning gaps, target skills for development, and set a positive class culture around skill mastery.

Additional Student Benefit (TRACI):

Students benefit from activities tailored to their needs and real-world roles, thanks to TRACI's explicit "Audience" and "Intent" elements. This ensures that each lesson or prompt is directly relevant to personal, academic, or workplace goals, driving deeper engagement and motivation. The connection to authentic scenarios fosters critical thinking and confidence, empowering students to see their learning as meaningful and applicable beyond the classroom.

Additional Teacher Benefit (TRACI):

The explicit identification of "Audience" and statement of "Intend" within TRACI encourages teachers to align the complexity, relevance, and real-world applicability of tasks with learners' immediate and future goals. This supports higher engagement and ensures each activity is both contextually appropriate and industry-aligned, enhancing instructional purpose and learner motivation.

Differentiation: Intermediate Level



Each framework continues to support essential skills and gradually reduces scaffolding, encouraging greater independence and problem-solving for intermediate level learners.

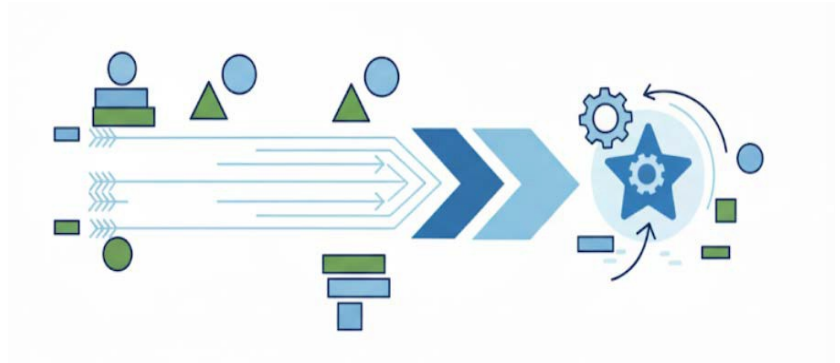


Illustration created using Gemini AI

AI Prompt Framework: RACE (Intermediate Level)

- **Role:** You are a Medical Assistant instructor.
- **Action:** Independently calculate and check a more complex scenario using decimals.
- **Context:** Word problems in hybrid class format (asynchronous check-in available).
- **Execute:** Complete "Dosage by Weight" word problem and submit screenshot of digital simulation using online tools.
- **Expectation:** Learners accurately complete multi-step dosage calculations, use decimals, and document their results with digital tools and asynchronous feedback.

Scaffolding & Differentiation Impact (RACE)

Scaffolding: Moderate scaffolding. Instructions guide students through key steps but increasingly require independent calculation, digital documentation, and asynchronous submission, helping learners transition from guided work to independent practice.

Differentiation: Tasks match intermediate-level skills; educators offer asynchronous check-ins for support and adapt scenarios for additional challenge or support, based on learner progress.

Learner Impact: Students become comfortable solving multi-step problems, applying decimals, and navigating digital submission workflows, preparing for real-world or workplace scenarios.

Teacher Impact: Teachers track progress via digital artifacts and offer targeted feedback, identifying errors and adjusting instruction for greater independence and deeper problem-solving skills.

AI Prompt Framework: RACEF (Intermediate Level)

- **Role:** You are a Medical Assistant instructor.
- **Action:** Calculate and explain each step of a more complex dosage scenario with decimals.
- **Context:** Online or in-person scenario using real-world simulation and digital drag-and-drop tools (CASAS Level C).
- **Examples:** "A patient weighs 135.5 lbs; convert to kg, calculate the dose, and show all work using the provided app."
- **Format:** Step-by-step problem in Google Docs with places to type responses and upload images of digital syringe levels.
- **Follow-up:** Learners submit work for formative feedback, participate in peer review or corrections, and redo steps as needed for full accuracy.

AI Prompt Framework: RACEF (Intermediate Level) (cont.)

Scaffolding & Differentiation Impact (RACEF)

Scaffolding: Moderate scaffolding with structured digital templates and simulation tools. “Follow-up” routines help reinforce learning and allow for corrections after initial submission.

Differentiation: Multiple support options (examples, format structures, feedback) let instructors provide added help or advanced extensions for students at different readiness levels.

Learner Impact: Learners build multi-step digital workflow fluency and receive formative feedback that reinforces accuracy and peer learning, deepening content mastery and confidence in using real-world tools.

Teacher Impact: Teachers systematically collect digital evidence, monitor individual and group mastery, and conduct targeted reteaching or peer assessment post-completion.

Additional Student Benefit (RACEF):

Students experience a predictable routine for digital documentation and revision of work, receive formative feedback and peer reinforcement, and develop confidence using professional-level simulation or documentation tools.

Additional Teacher Benefit (RACEF):

The explicit inclusion of “Format” and “Follow-up” sections prompts teachers to plan both how instructions and work are delivered (e.g., Google Docs, drag-and-drop simulation) and how learning is reinforced (e.g., feedback cycles, peer review, corrections). This structure supports systematic formative assessment, maximizes closure, and strengthens lesson planning.

AI Prompt Framework: TRACI (Intermediate Level)

- **Task:** Analyze word problems involving multi-step medication dosage using decimals.
- **Role:** You are a Medical Assistant instructor
- **Audience:** Learners with some prior foundation (CASAS C) comfortable with decimals and digital learning.
- **Create:** Solve a series of word problems, using Google Docs to drag "digital medication" into syringes, documenting each step of the process including identifying labels, conversions, and correct solutions.
- **Intend:** Increase independence and accuracy in multi-step problem-solving, linking directly to the skills outlined for Medical Assistants in O*NET and CASAS.
- **Instruction:** Provide initial modeling, then assign groups to independently approach stepwise problem-solving with digital documentation; give feedback on process and accuracy.

AI Prompt Framework: TRACI (Intermediate Level) (cont.)

Scaffolding & Differentiation Impact (TRACI)

Scaffolding: Scaffolded support is dynamic. Initial modeling and digital aids are provided, and then students complete steps with increasing independence and self-monitoring.

Differentiation: Audiences and intentions are explicit, so instructors adjust starting points and provide contextually authentic scenarios for varied readiness levels and backgrounds.

Learner Impact: Students learn multi-step analysis, connect their work to professional standards (O*NET, CASAS), and strengthen real-world thinking and documentation with digital tools.

Teacher Impact: Teachers clarify instructional goals and match problem complexity to learner context and needs, using student documentation to diagnose gaps and differentiate further.

Additional Student Benefit (TRACI):

Students benefit from tasks and documentation that explicitly connect classroom learning to workplace standards and career skills. The explicit “Audience” and “Intend” ensure activities are relevant and meaningful, increasing engagement, transfer, and motivation.

Additional Teacher Benefit (TRACI):

“Audience” and “Intend” elements prompt teachers to align lesson structure and rigor with learners’ real-world needs and career paths, leading to more customized, engaging instruction and easier tracking of skill transfer to authentic tasks.

Differentiation: Advanced Level



Each framework fosters high-level skills and provides minimal scaffolding, promoting autonomy and advanced application for proficient learners.



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AI Prompt Framework: RACE (Advanced Level)

- **Role:** You are a Medical Assistant instructor.
- **Action:** Solve real, complex scenarios and communicate findings.
- **Context:** Certification exam prep, peer review included.
- **Execute:** Peer-generated scenario: retrieve actual data, perform calculations demonstrating conversion and proportion reasoning, then draft a recommendation email to the instructor for feedback.
- **Expectation:** Learners independently solve authentic dosage scenarios, document multi-step reasoning, and communicate results professionally for evaluation.

Scaffolding & Differentiation Impact (RACE)

Scaffolding: Minimal scaffolding. Learners interpret scenarios, self-select appropriate reasoning strategies, and take full responsibility for calculation and communication tasks.

Differentiation: High-level, open-ended challenges permit flexible approaches and personalized problem-solving. Instructors provide individualized extension or review based on performance and needs.

Learner Impact: Learners develop autonomy, advanced calculation skills, analytical thinking, and professional communication competencies essential for certification and workplace readiness.

Teacher Impact: Teachers observe application of mastery-level skills, evaluate analytical reasoning through peer review and written reports, and provide summative feedback for ongoing professional growth.

AI Prompt Framework: RACEF (Advanced Level)

- **Role:** You are a Medical Assistant instructor.
- **Action:** Analyze and solve peer-generated scenarios with real-life weights and non-whole number conversions.
- **Context:** Advanced scenario, completion tied to peer-assistance and readiness for certification (CASAS Level D).
- **Examples:** "Your classmate weighs 143.2 lbs. Physician orders 0.6 mg/kg. Calculate and justify your steps."
- **Format:** Written explanations with calculations and brief email-style communication to a "supervisor."
- **Follow-up:** Learners submit professional documentation for instructor and peer feedback, revise reports based on critiques, and present recommendations.

AI Prompt Framework: RACEF (Advanced Level) (cont.)

Scaffolding & Differentiation Impact (RACEF)

Scaffolding: Minimal but targeted scaffolding. Structure focuses on professional documentation and peer/instructor review cycles. Learners rely primarily on their own analytic and communication skills. **Differentiation:** Tasks require high-level judgment and synthesis. Instructors adapt complexity and feedback for individual and group readiness, offering targeted support for mastery.

Learner Impact: Learners gain advanced skills in collaborative analysis, documentation, and justification of calculations for real-life scenarios, mirroring certification and professional demands.

Teacher Impact: Teachers receive comprehensive evidence of learner abilities, can coordinate peer review for collaborative growth, and facilitate development of professional written communication.

Additional Student Benefit (RACEF):

Students gain experience with professional documentation and iterative revision, develop nuanced analytic and communication skills, and prepare for certification or workplace roles through authentic scenarios.

Additional Teacher Benefit (RACEF):

Explicit “Format” and “Follow-up” sections help teachers plan authentic documentation activities and feedback cycles that mirror real certification/workplace review processes, ensuring systematic formative and summative assessment as well as targeted skill reinforcement.

AI Prompt Framework: TRACI (Advanced Level)

- **Task:** Solve, justify, and explain complex dosage-by-weight scenarios with real-time data gathering (e.g., classmate weights).
- **Role:** You are a Medical Assistant instructor.
- **Audience:** CASAS Level D and above; students aiming for workplace competence and exam readiness.
- **Create:** A written scenario analysis where students must retrieve classmate data, perform all weight conversions and calculations, document findings, and draft a “handover” note as if reporting to a supervisor.
- **Intend:** Strengthen deep mathematical reasoning, peer coaching, and professional documentation in preparation for high-stakes workplace and testing contexts.
- **Instruction:** Facilitate peer coaching sessions and real-world handover reporting, provide targeted, summative feedback on documentation and reasoning.

AI Prompt Framework: TRACI (Advanced Level) (cont.)

Scaffolding & Differentiation Impact (TRACI)

Scaffolding: Minimal scaffolding. Initial expectations and data sources are provided, but learners lead complex analyses, authentic documentation, and peer coaching with instructor feedback reserved for higher-order synthesis and communication.

Differentiation: Advanced scenarios are customized for industry, exam, or authentic role; instructors flex support for learners needing more synthesis, collaboration, or clarity in workplace-standard outputs.

Learner Impact: Learners demonstrate high-level independence in real-world analysis, peer support, and professional documentation, directly linking tasks to certification and medical workplace standards.

Teacher Impact: Teachers scaffold professional competencies via peer modeling and summative feedback, ensure alignment between classroom tasks and industry expectations, and monitor readiness for certification.

Additional Student Benefit (TRACI):

Students benefit from opportunities to exercise deep reasoning, peer collaboration, and authentic reporting closely tied to real-world healthcare scenarios, enhancing motivation and true career readiness.

Additional Teacher Benefit (TRACI):

“Audience” and “Intend” enable teachers to design and evaluate advanced tasks directly linked to job and exam standards, facilitate peer coaching, and ensure learning transfer to workplace and certification contexts.

Activity 6 - Prompt Framework Drag & Match:

RACE, RACEF, TRACI

In this activity, you will engage in a hands-on drag-and-drop or matching challenge designed to boost your understanding of prompt frameworks (RACE, RACEF, TRACI). You'll receive a set of statements (like "Calculate a medication dose" or "Written email to supervisor") and will match each one to its correct framework category (Role, Task, Format, Intent, etc.). This collaborative exercise will help clarify and reinforce your ability to identify and apply key components of effective prompt design.

Instructions for Participants

1. Click the link in chat to join the activity in [Miro](#).
2. Read each statement and drag it to the framework category you believe it matches (Role, Task, Audience, Format, Intent, etc.).
3. Work individually for 5 minutes. Consider your choices and revise as needed.
4. Results and answers will be revealed and reviewed as a group.
5. Volunteers are welcome to unmute and share their reasoning or questions during the group review.

Reference Document for Activities 6 and 7: [Prompt Framework Sort & Match- RACE, RACEF, TRACI.10.5.25.docx](#)

Activity 7 - Asynchronous Prompt Framework Drag & Match Challenge

In this asynchronous activity, you'll read a series of prompt statements drawn from **RACE**, **RACEF**, and **TRACI** frameworks. Your goal is to sort and match each statement to its correct framework category (such as Role, Task, Format, or Intent) and/or level of scaffolding (**Beginning**, **Intermediate**, **Advanced**). This self-paced challenge is designed to reinforce your understanding of how prompt components work and build confidence using these structures in your own practice. Complete the activity whenever it fits your schedule.

Instructions for Participants

1. Click the link in chat to join the activity in **Miro**.
2. Read each statement carefully and drag it to the framework category you believe it matches (Role, Task, Audience, Format, Intent, etc.).
3. Work individually at your own pace. Consider your choices and revise as needed.
4. The activity link will remain active for **two weeks** so that you may participate at a time that fits your schedule.

Reference Document for Activities 6 and 7: [Prompt Framework Sort & Match - RACE, RACEF, TRACI.10.5.25.docx](#)

Activity 8 – Wrap-up/Exit Ticket

- We value your feedback!
- As an assessment and application of learning, please complete this survey
- osseafe.wufoo.com/forms/q15o4zhk0vrhsxn/



Feedback



Assessment



Survey

Resources

- AI for Education Prompt Library
aiforeducation.io/prompt-library
- A Teacher's Prompt Guide to ChatGPT usergeneratededucation.files.wordpress.com/2023/04/a-teachers-prompt-guide-to-chatgpt-aligned-with-what-works-best.pdf
- Effective Prompts for AI: The Essentials (MIT Sloan EdTech)
mitsloanedtech.mit.edu/ai/basics/effective-prompts/
- AI & ChatGPT Prompts for Teachers—Monsha
monsha.ai/prompt-library
- 25+ Best ChatGPT Prompts for Instructional Designers—Teachfloor
teachfloor.com/blog/chatgpt-prompts-for-instructional-designers
- Learn AI Prompting with Google Prompting Essentials
grow.google/prompting-essentials/



Resources (cont.)

- Learn AI Prompting with Google Prompting Essentials
grow.google/prompting-essentials/
- ChatGPT Prompt Library—cloudHQ
support.cloudhq.net/what-is-chatgpt-prompt-library/
- Creating Effective Prompts—Artificial Intelligence Tools & Resources (The Chicago School)
library.thechicagoschool.edu/c.php?g=1318063&p=10133222
- Prompt Engineering Guide—LearnPrompting.org
learnprompting.org/docs/introduction
- 500+ Best ChatGPT Prompts for Education—Prompt Library
www.godofprompt.ai/prompt-library/chatgpt-education
- AI Communication Toolkit—OpenAI Academy
academy.openai.com/public/resources/ai-communication-toolkit
- Prompt Engineering for AI Guide—Google Cloud
cloud.google.com/discover/what-is-prompt-engineering



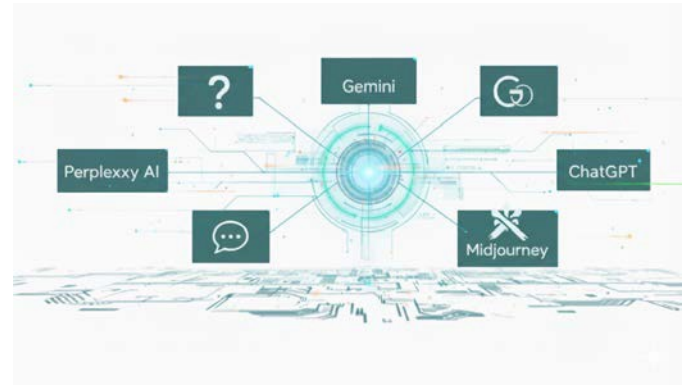
Resources (cont.)

- RACE Prompt Framework (Acronymat):
acronymat.com/2024/12/22/race-prompt-framework/
- Mastering AI Prompts with the RACE Framework (YouTube):
youtube.com/watch?v=KfJOfpBs2a0
- RACEF Framework Guide (LinkedIn):
linkedin.com/pulse/mastering-prompt-engineering-racef-framework-guide-jim-spignardo-hu86e
- Master the RACEF Framework—Juuzt AI:
juuzt.ai/knowledge-base/prompt-frameworks/the-racef-framework/
- Step-by-Step Guide to Building Prompt Engineering Frameworks (TRACI and others):
arsturn.com/blog/step-by-step-guide-to-building-prompt-engineering-frameworks



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gemini.google.com/
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chat.openai.com/
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www.midjourney.com/



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The key to success with AI is not just having the right data but also asking the right questions.

- Ginni Rometty