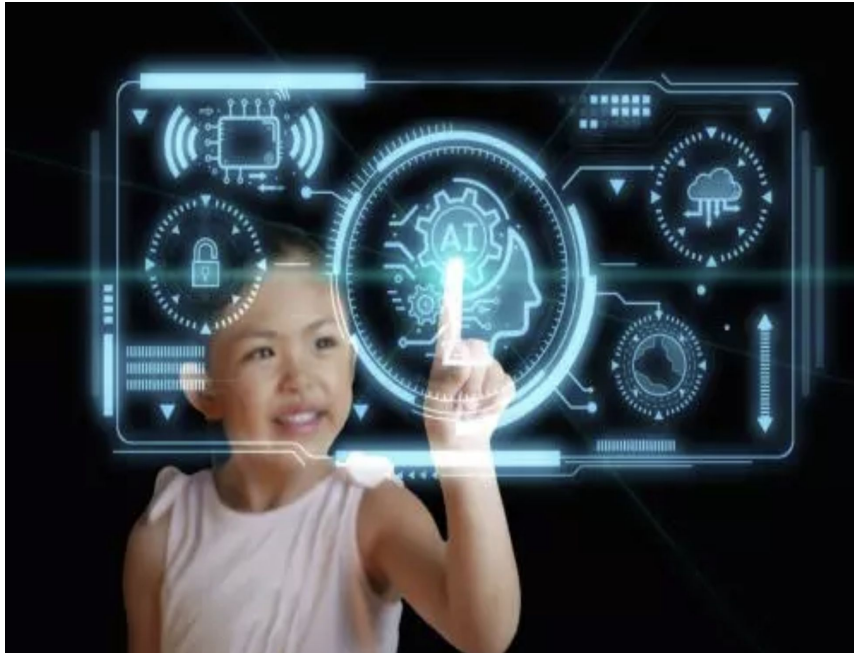
Culturally Responsive Considerations with Artificial Intelligence



ChatGPT

CoPilot

A Culturally-Responsive Approach to using AI

Basics of AI prompting and Guided Practice

- Macro-prompts
- Micro-prompts
- Culturally Responsive Micro-prompts
- Contextualized Culturally Sustaining Micro-prompts

Communicating with AI- The Powerful Prompts

What are Prompts? are the instructions you give to AI tools to guide them toward a specific outcome, like **asking** a question or **telling** AI what you want.

The Craft of Prompt Engineering- Crafting clear and effective prompts is an essential skill (prompt engineering). Like having a conversation.

- Be specific/contextualized
- Build context
- Create a natural flow

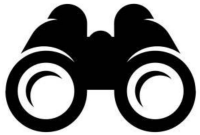
Making AI Work for You

Think of prompting AI as engaging in a dialogue. By giving clear, structured prompts, you can guide the AI to produce better, more accurate responses.

Prompt Library for Educators- ChatGPT

Macro Prompting

Macro Prompt :



a) **High-level instructions** : Macro prompting involves giving broader, less detailed commands. The prompt focuses on the overarching task or outcome, leaving room for the system to interpret and decide on details.

b) **General guidance** : The AI is expected to fill in gaps or interpret subtasks based on a big-picture goal.

c) **Use case** : Useful when you want the system to handle most of the decisions and steps involved in generating a response. For example, "Design a literacy lesson for Kindergarten students/Design a Physics lesson for Grade 12 Science students/Design a panel discuss framework for Sustainable Development for grad students" is a macro prompt, where the AI determines the structure and details of the content.

Macro Prompting - Practice

Macro Prompt :

ChatGPT | Claude | Jasper AI | CoPilot | Gemini | Perplexity | Open AI Playground

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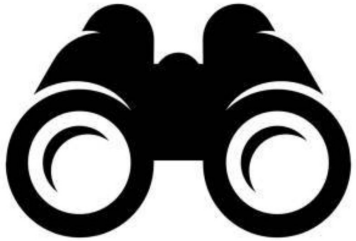
Macro Prompt:

Create your own macro-prompt using an GenAI tool of your choice or the ChatGPT that you signed up for prior to this session.

Example



Macro-Promptin

Design a literacy lesson plan for Kindergarten students

Kindergarten Literacy Lesson Plan

Theme: Letter Recognition and Phonics

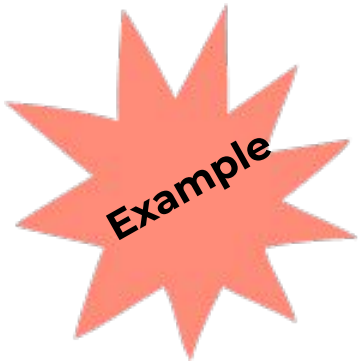
Duration: 30-40 minutes

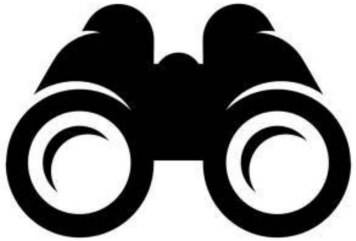
Objective:

- Students will be able to recognize the letter "S" and its corresponding sound /s/.
- Students will practice writing the letter "S" and identify objects that start with the "S" sound.

Materials Needed:

- Alphabet chart
- Flashcards with pictures of objects starting with "S" (sun, sock, snake, star, etc.)
- Whiteboard or chart paper
- Markers or dry-erase markers
- Playdough (optional)
- "S" letter worksheet (with space for tracing and drawing objects starting with "S")
- Song: "The S Sound Song" (or any phonics song that includes the /s/ sound)
- Small toy or object starting with the "S" sound (optional)





Macro-Promptin

Grade 12 Physics Lesson Plan: Projectile Motion

Lesson Title: Understanding Projectile Motion with Real-Life Applications

Grade Level: 12 **Subject:** Physics **Duration:** 60 minutes **Topic:** Projectile Motion

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Lesson Objectives: By the end of the lesson, students will be able to:

- Define projectile motion and identify key components (initial velocity, angle of projection, range, height, and time of flight).
- Apply kinematic equations to solve problems involving projectile motion.
- Analyze real-life applications of projectile motion.
- Conduct a hands-on experiment to observe and calculate projectile trajectories.

Example

Panel Discussion Framework for Sustainable Development for Graduate Students

Title:

Bridging Knowledge to Action: A Graduate Student Perspective on Sustainable Development

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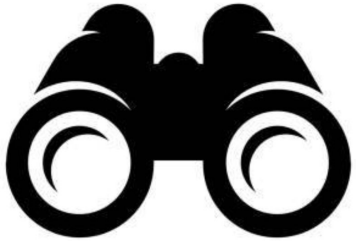


Macro-Promptin

1. Objective of the Panel Discussion:

- To engage graduate students in a dialogue about the importance of sustainable development in their respective fields of study.
- To showcase interdisciplinary approaches, research initiatives, and practical strategies that contribute to sustainability.
- To inspire critical thinking and innovation for tackling global sustainability challenges.
- To facilitate networking among graduate students, academics, and practitioners working on sustainable development.

Acronym- ‘CREATE’

Clarity/Character:

- Clearly **define** the task or **intent** of the prompt. Describe the role the AI is to assume. Avoid using filler words or jargon” (Act as…; a university professor teaching first year BEd students, a Grade 1 teacher)

Relevant/Request:

- Provide **relevant details** (specific keywords, facts, tone, audience). Clearly and specifically define the request. “I want you to…” (Summarize, organize, compare, analyze, elaborate, reimagin, explain, design, etc.)

Examples:

- Give examples to **provide context and direction** (website link, upload a document) and be ethically engaged in your use of the AI (more to come)

Avoid ambiguity/Additions:

- Focus on the key information. Refine the task by deleting unnecessary details. Describe a point of view to consider or a style to use.

Tinker: Test and refine- multiple iterations

- For example, a 3-part lesson plan or assessment rubric (dialogue, syllabus, lesson plan, assessment, VR exp.)

Evaluate/Extras:

Evaluate output, adjust, any additional information you wish to provide.

Micro-Prompting

Micro Prompt:

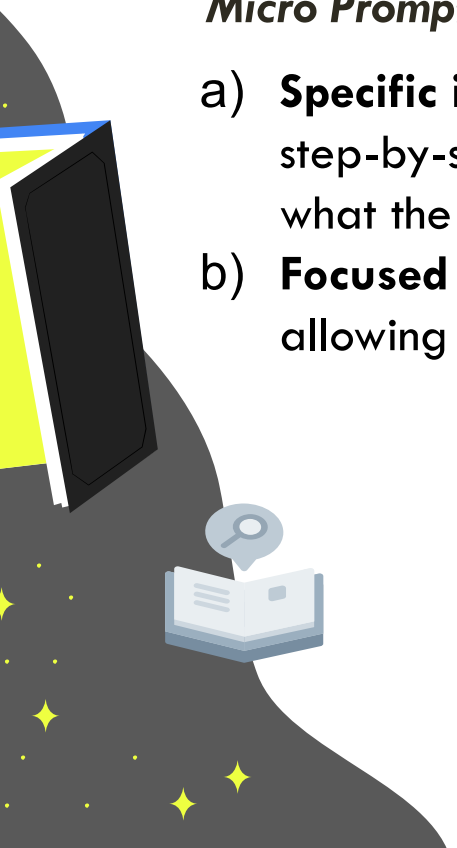
a) **Specific instructions** : Micro prompting involves providing detailed, step-by-step instructions or constraints to the AI. It narrows down the scope of what the AI should do, addressing each small component of the task.
b) **Targeted control** : This approach directs the AI to act on specific subtasks, allowing more precise control over the outcome.
c) **Use case** : This is helpful when you want granular control over how the AI performs the task. For example, "*Create a three-part multiliteracies lesson plan for Kindergarten students that is 30-minutes in length to help develop their phonological awareness. Make this lesson interactive and hands-on and focus on the emergent literacy stages components to inform this lesson.*" is a micro prompt, giving more focused guidance on structure, length, and content.

Micro Prompting - Practice

Micro Prompt:

a) **Specific instructions:** Micro prompting involves providing detailed, step-by-step instructions or constraints to the AI. It narrows down the scope of what the AI should do, addressing each small component of the task.

b) **Focused regulation:** This approach directs the AI to act on specific subtasks, allowing more precise regulation over the outcome.



Micro-Prompting

Create a three-part multiliteracies lesson plan for Kindergarten students that is 30-minutes in length to helps develop their phonological awareness. Make this lesson interactive and hands- and focus use the emergent literacy stages components to inform this lesson.

Kindergarten Phonological Awareness Lesson Plan

Length: 30 minutes

Focus: Phonological Awareness (Rhyming, Syllables, Beginning Sounds)

Emergent Literacy Stages Components:

- **Pre-Alphabetic Stage** (Understanding that letters and sounds form the building blocks words)
- **Partial Alphabetic Stage** (Starting to associate letters with sounds, understanding the relationship between sounds and spelling)
- **Full Alphabetic Stage** (Recognizing and manipulating phonemes, rhyming, and syllable words)

Micro-Prompting

Design a Grade 12 Physics lesson focused on Newton's Third Law of Motion. The lesson should include a clear learning objective, an engaging hands-on activity (e.g., balloon rockets or action-reaction demonstrations), step-by-step instructions, and assessment criteria. Ensure the content aligns with curriculum standards and encourages critical thinking and collaboration among students.

Grade 12 Physics Lesson Plan: Newton's Third Law of Motion

Lesson Topic: Newton's Third Law of Motion

Duration: 60 minutes

Grade Level: 12

Learning Objective:
By the end of the lesson, students will be able to:

1. Explain Newton's Third Law of Motion and its application to everyday scenarios.
2. Analyze and demonstrate action-reaction pairs using hands-on activities.
3. Collaborate to design experiments that showcase Newton’s Third Law.
4. Evaluate the relationship between force, mass, and acceleration in action-reaction scenarios.

Sustainability Panel- Graduate Students

Design a structured panel discussion framework for students focused on Sustainable Development. The should outline a diverse panel of 4-5 experts from f environmental policy, education, economics, and co leadership, ensuring varied perspectives on sustain challenges and solutions. Identify 3-4 core themes discussion, such as climate justice, sustainable innc partnerships, and educational initiatives. Include a s that covers the introduction, panelist presentations, Q&A, and audience interaction, with clear time alloc the moderator's role in guiding the conversation, ma and ensuring inclusivity. Describe strategies to foste engagement, such as live polling, breakout discussi floor Q&A. Conclude with a focus on desired outcor increased awareness, actionable insights, and netw opportunities to promote critical thinking and collab participants.

Micro-Prompting

1. Panelist Selection

To ensure a broad and diverse range of viewpoints, the panel will consist of experts from different but complementary fields related to sustainability:

1. **Environmental Policy Expert**
   Focus: Governmental frameworks, international agreements, and policy implications of sustainability.
2. **Economist/Sustainable Development Specialist**
   Focus: The economic viability of sustainability initiatives, green economies, and financing sustainable development goals (SDGs).
3. **Community Leadership/NGO Expert**
   Focus: Local level initiatives, community-based solutions, equity, and climate justice in marginalized communities.
4. **Education/Research Expert**
   Focus: Integrating sustainability into educational systems, research innovations, and preparing future generations for sustainability challenges.
5. (Optional) **Technologist/Innovator**
   Focus: Technological advancements driving sustainability (e.g., clean energy, sustainable agriculture, circular economy practices).

Create- Critical Examination of Text Sets

Create Your Own Text Set to Support Culturally Relevant Pedagogy

Interrogate

Identify

Build

Plan

Use

Reflect