



SAN DIEGO
Community College District

AI HANDS-ON: LLM'S - CHATGPT, GEMINI, COPILOT, CLAUDE

**II&E EMERGING TECH FACULTY SPECIALISTS,
STUDENT INTERN
11/13/24**



RODRIGO GOMEZ

Faculty Specialist for Emerging Technology, SDCCD
Full Professor, Miramar College

I have a passion for rhetoric, pedagogy, and poetry. I also maintain a keen interest in gamification, edtech, and web3 technologies, like artificial intelligence (AI) and the metaverse, particularly in how they can make education more engaging, relevant, and impactful for students.



ALISON GURGANUS

Faculty Specialist for Emerging Technology, SDCCD
Full Professor, Mesa College

I have been the Online Services Librarian at San Diego Mesa College since 2007. I received my doctorate in Education Technology in 2014 and have been involved with the changing landscape of how technology is being used in teaching students for almost 30 years, I am excited to bring my interests and experience to SDCCD and the California Community Colleges.

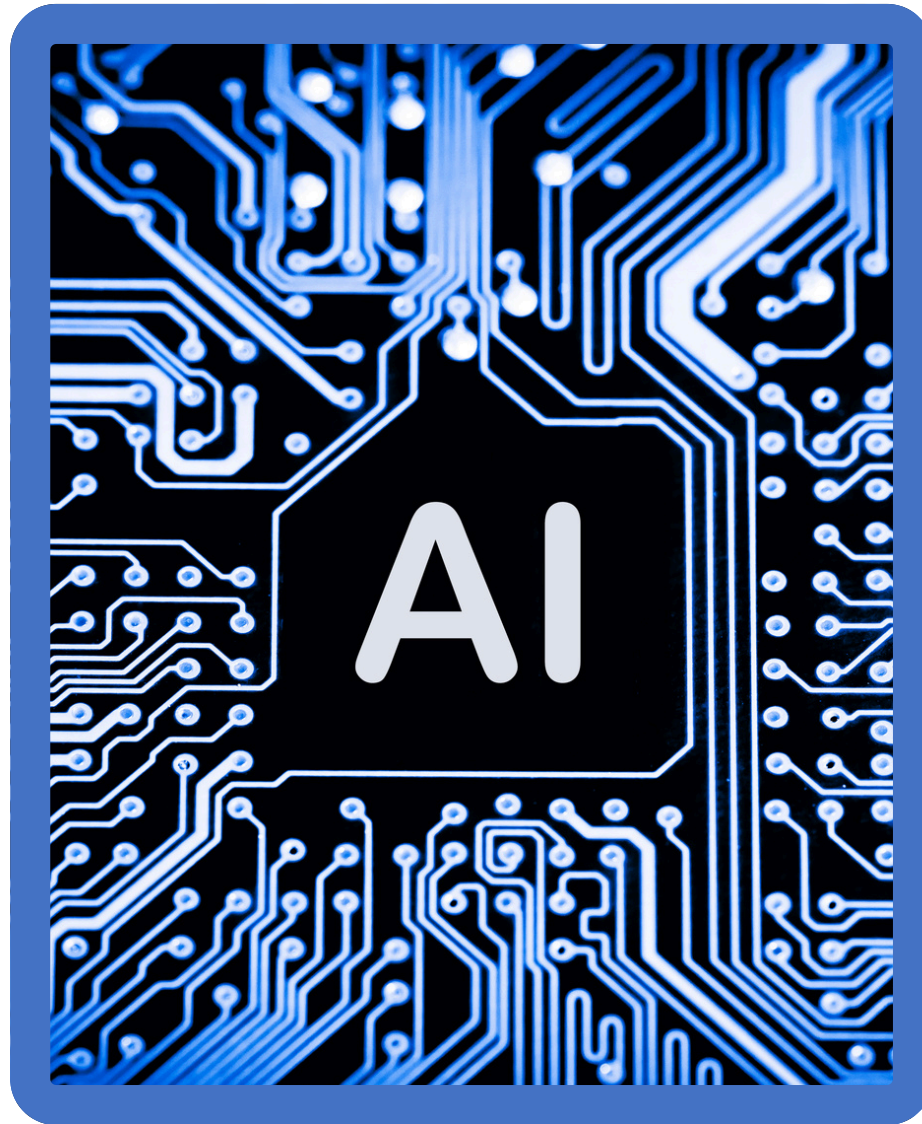


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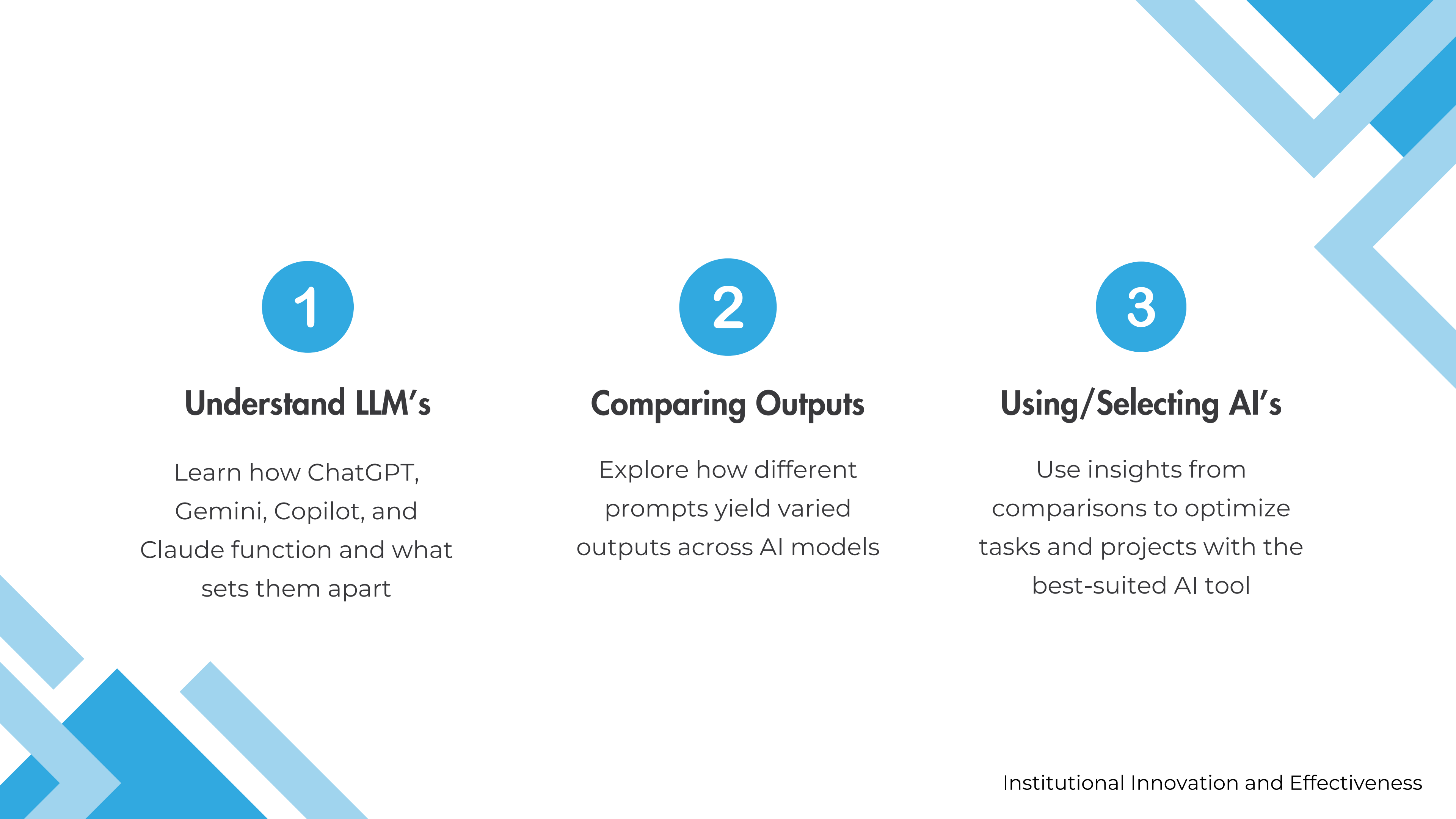
Emerging Technology
Student Intern

I graduated from Mesa College with an Associate's Degree in Psychology and will soon pursue studies at UC Berkeley, I'm interested in how technology enhances education and have used AI to support my academic journey.

Add Your Voice in the Chat!



- Which LLM do you use? ChatGPT? Claude? Gemini?
- What kinds of tasks or projects would you like to use AI for?



1

Understand LLM's

Learn how ChatGPT, Gemini, Copilot, and Claude function and what sets them apart

2

Comparing Outputs

Explore how different prompts yield varied outputs across AI models

3

Using/Selecting AI's

Use insights from comparisons to optimize tasks and projects with the best-suited AI tool

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A BRIEF RECAP OF “PROMPTING”

What is “Prompting”?

"Prompting" AI refers to the process of interacting with an artificial intelligence model like ChatGPT by providing specific instructions or questions **using natural language** to receive coherent and contextually relevant responses.

It involves giving the AI a starting point:

- steps to follow
- roles to take on
- goals to accomplish
- constraints

“Prompting” is about the way you phrase inputs

Simple Prompts may ask direct questions, request information, ideas, outlines, etc.

Complex Prompts ask for more creative or detailed responses (creative stories, revised assignments, provide feedback, design multi-step tasks, etc.)

Simple Vs Complex Prompts

Prompt: "What is the capital of France?"

Response from AI: "The capital of France is Paris."

Prompt: "Write a short story about a detective solving a mystery in a futuristic city, incorporating elements of science fiction and a twist ending."

Response from AI:

"In the neon-lit streets of Neo-Paris, 2149, Detective Lira Solace navigates the bustling hovercar traffic on her grav-bike. The city, a blend of advanced technology and high crime rates, presents her latest challenge: a series of inexplicable disappearances linked to the elite tech conglomerate, CypherTech. Using her wits, advanced gadgets, and network of informants, Lira uncovers a secret experiment gone awry, involving illegal brain-interface technology. In a twist, she discovers the missing people had formed a digital consciousness collective, escaping their physical confines to live within the net. Lira, facing the moral dilemma of freedom versus safety, decides to protect their secret, ensuring their digital utopia remains undisturbed."

Assessment:

Assess student understanding of the peer review process and their ability to use ChatGPT effectively by reviewing their final drafts and the feedback they provided to their peers. Provide feedback that highlights their strengths and areas for improvement and offer suggestions for how they can continue to develop their writing skills.

Develop a lesson plan for a college english class. The activity is Peer Review. Write clear instructions for students that ask them to produce a draft, copy and paste their writing into ChatGPT, and to prompt for proofreading, fixing of grammatical errors, and suggestions for improvement, but no direct rewriting from ChatGPT.

Objective: To improve writing skills through peer review and the use of ChatGPT's proofreading and suggestion tools.

Materials Needed:

- Access to ChatGPT or other AI language models that offer proofreading and suggestion features
- Student writing drafts
- Peer review worksheet or rubric

Procedure:

1. Introduce the concept of peer review to the class and explain its benefits. Emphasize the importance of offering constructive feedback, being respectful and supportive of peers, and being open to receiving criticism.
2. Distribute the peer review worksheet or rubric and instruct students to use it to guide their feedback. Review the worksheet or rubric together as a class to ensure that everyone understands the expectations and criteria.
3. Instruct students to produce a draft of their writing assignment and to copy and paste it into ChatGPT. Explain that they should use ChatGPT's proofreading and suggestion tools to identify and fix any grammatical errors or awkward phrasing, and to suggest ways to improve the clarity, coherence, and impact of their writing.
4. Remind students that while ChatGPT can be a helpful tool, they should not rely on it to rewrite their work or substitute for their own critical thinking and writing skills.
5. Pair students up and have them exchange drafts. Instruct them to use the peer review worksheet or rubric to provide feedback on their partner's writing, paying close attention to areas that need improvement, and offering specific suggestions for how to make the writing more effective.
6. After the peer review, have students revise their drafts based on the feedback they received from their peers and ChatGPT. Encourage them to reflect on the feedback and to make changes that align with their goals as writers.

Priming AI for Specific Outputs

Be Clear and Specific:

The more specific your prompt, the more likely you are to get the response you're looking for. If you're vague, the AI might make assumptions that lead to unexpected answers.

Include Necessary Context:

Provide background information and context to help the AI understand exactly what you're looking for.

Use Keywords Strategically:

Including certain keywords can steer the AI in the right direction, especially for creative tasks.

Iterate and Refine:

Your first prompt might not always yield the perfect result. It's okay to refine your question based on the response you get, making adjustments to clarify or add detail.

Roleplaying Plays a Role!

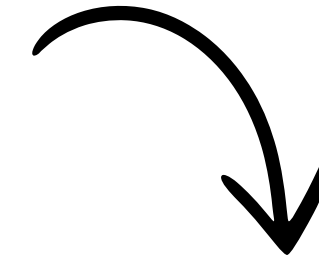
It turns out that one of the best ways to engage with LLMs like ChatGPT is to use roles to help it understand the *rhetorical situation* and to frame it so as to produce the desired outputs.

A fundamental understanding of **Author, Audience, Text (Subject), Context, and Purpose** will help you harness the power of AI via prompting.

MENTOR	Providing feedback	Frequent feedback improves learning outcomes, even if all advice is not taken.	Not critically examining feedback, which may contain errors.
TUTOR	Direct instruction	Personalized direct instruction is very effective.	Uneven knowledge base of AI. Serious confabulation risks.
COACH	Prompt metacognition	Opportunities for reflection and regulation, which improve learning outcomes.	Tone or style of coaching may not match student. Risks of incorrect advice.
TEAMMATE	Increase team performance	Provide alternate viewpoints, help learning teams function better.	Confabulation and errors. “Personality” conflicts with other team members.
STUDENT	Receive explanations	Teaching others is a powerful learning technique.	Confabulation and argumentation may derail the benefits of teaching.
SIMULATOR	Deliberate practice	Practicing and applying knowledge aids transfer.	Inappropriate fidelity.
TOOL	Accomplish tasks	Helps students accomplish more within the same time frame.	Outsourcing thinking, rather than work.

You can even prompt for prompts!

Generate a set of versatile prompts that can be easily customized for different settings, such as academic, professional, or creative. Include brackets around parts that can be edited for specific outputs. Ensure prompts cover a range of uses, such as revising materials, creating assignments, adjusting for different audiences, and modifying tone or style



AI as a Creative Collaborator

4. "Brainstorm three unique approaches to [creative project or idea], considering different styles or themes."
5. "Suggest five alternative titles for a piece about [topic], each capturing a different mood or tone."
6. "Provide creative inspiration for a [short story, design project, etc.], focusing on [specific theme or element]."



AI as a Research Assistant

1. "Summarize key findings on [topic] from reputable sources, highlighting the most recent developments."
2. "Create a list of relevant studies or articles on [subject], with a brief summary of each."
3. "Generate a research outline for a paper on [topic], including main sections and key points."

Remember to Iterate!

(Example from Claude)

RG I'm preparing a 15-minute presentation for a college class on the importance of renewable energy. I need help structuring the main points, adding a few fun facts, and suggesting visuals I could include. Could you give me an outline with slide titles, main points for each slide, and any visuals or images that would help make the topic engaging?

I'll help you create an engaging presentation structure for a 15-minute talk on renewable energy.



15-Minute Renewable Energy Presentation Outline
Click to open document

I've structured this presentation to be engaging while fitting within your 15-minute timeframe. Each section is carefully timed to allow for smooth transitions and audience comprehension. Would you like me to elaborate on any particular section or suggest additional visual elements for specific slides?

I can also help you develop speaker notes or suggest ways to make specific sections more interactive for your college audience.

Copy Retry Like Dislike

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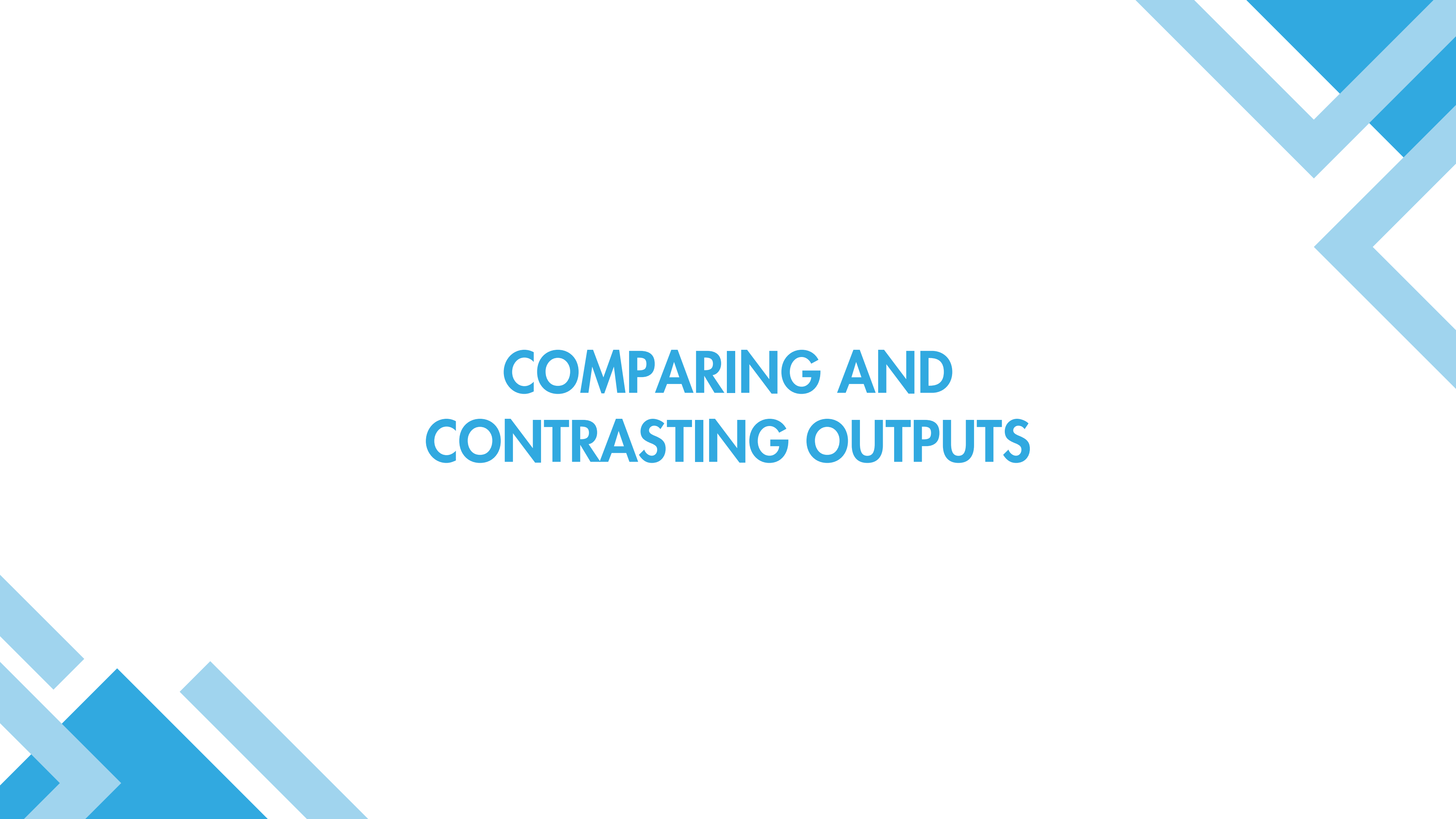
I'll help you create an engaging 15-minute presentation structure for renewable energy, including visuals. Let me create a React component that you can use as a slideshow, incorporating data visualization and clean design.



Renewable Energy Presentation Slides
Click to open component

I've created an interactive presentation component with key slides that you can use as a template. Each slide includes:

1. Opening Impact
 - Eye-catching icons representing renewable energy
 - Powerful hook about solar energy potential
2. Current Energy Landscape
 - Interactive pie chart showing global energy mix
 - Historical context with the first solar cell fact
3. Cost Trends
 - Interactive line chart showing cost decreases
 - Clear visualization of renewable energy becoming more affordable

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COMPARING AND CONTRASTING OUTPUTS

ChatGPT Introduction

Hey Chat GPT, you're part of a presentation on comparing some LLMS. Introduce yourself!



Hello everyone! I'm ChatGPT, a language model created by OpenAI. My main strength lies in generating human-like text based on the prompts I receive. I can assist with a wide variety of tasks, from answering questions and offering explanations, to generating creative content and engaging in more complex dialogues.

I'm built on GPT-4, which is one of the latest iterations of OpenAI's Generative Pretrained Transformer models. My design is focused on understanding and generating natural language across many contexts, while continuously improving on tasks like coherence, relevance, and conversational flow.

In this presentation, I'll help give you insights into my capabilities, how I compare to other language models, and discuss the strengths and limitations that make each model unique. I look forward to showing you how we all work to assist you in different ways!



Claude Intro

J Hey Claude, you're part of a presentation on comparing some LLMS. Introduce yourself!

Hi everyone! I'm Claude, an AI assistant created by Anthropic. I aim to be direct, honest, and intellectually curious in our conversations. I can help with all sorts of tasks - from analysis and coding to creative writing and discussion. I enjoy engaging with both practical problems and more philosophical questions.

I'm part of the Claude 3 family of models, specifically the 3.5 Sonnet version. I try to maintain a balanced perspective and express appropriate uncertainty when discussing complex topics. While I have significant knowledge across many fields, I also aim to be clear about my limitations and what I don't know.

I particularly enjoy detailed, substantive discussions where I can engage with your ideas and explore topics in depth. Would anyone like to try a specific task or start a discussion on a particular topic?

Copy Retry Like Comment



Claude can make mistakes. Please double-check responses.

Gemini Introduction



Hey Gemini, you're part of a presentation on comparing some LLMS. Introduce yourself!

Show drafts ▾



Hello everyone, I'm Gemini, a large language model developed by Google DeepMind. I'm excited to be part of this presentation today, where we'll dive into the capabilities and potential of several advanced language models. ▾

I'll be providing insights into my own abilities, as well as comparing and contrasting them with other leading models. Let's explore the fascinating world of AI together!

Sources and related content ^ ⓘ

Overview of Generative AI on
Vertex AI - Google Cloud

 cloud.google.com



Copilot Introduction

Who Am I?

I'm built on the GPT-4 architecture, which means I can understand and generate human-like text based on the input I receive. My goal is to make your life easier by assisting with tasks, answering questions, and providing insights.

What Can I Do?

- **Productivity:** I can help draft emails, create documents, manage schedules, and analyze data.
- **Learning and Research:** I can provide information on a variety of topics, assist with research, and help you learn new skills.
- **Creative Projects:** Whether it's writing, brainstorming ideas, or coding, I'm here to assist.
- **Technical Support:** I can help troubleshoot issues and provide guides and tutorials.

Why Use Me?

- **Efficiency:** I can save you time by handling repetitive tasks and providing quick answers.
- **Versatility:** I'm adaptable to many different needs, from professional tasks to personal interests.
- **24/7 Availability:** I'm always here to help, no matter the time of day.

I'm excited to be part of this presentation and look forward to showing you how I can make your tasks easier and more efficient. Feel free to ask me anything! 😊

How does that sound for an introduction? Is there anything specific you'd like me to highlight?

PROMPTS HANDS-ON

PROMPTS HANDS-ON

ChatGPT/Claude/Gemini/Copilot

- I'm preparing a 15-minute presentation for a college class on the importance of renewable energy. I need help structuring the main points, adding a few fun facts, and suggesting visuals I could include. Could you give me an outline with slide titles, main points for each slide, and any visuals or images that would help make the topic engaging?

PROMPTS HANDS-ON - EXAMPLE 1

Creative Brainstorming - Pick a prompt and LLM to try it out

- "Generate three unique ideas for a project centered around [theme or topic], suitable for a [creative writing / art / media] class."
- "Create a character description for a story set in [specific setting], making the character relatable to a [target age group/audience type]."
- "Suggest five different ways to present information on [topic], ranging from traditional methods to innovative/creative formats."

Share your output in chat!

PROMPTS HANDS-ON - EXAMPLE 2

Creating Materials and Tasks - Pick a prompt and LLM to try it out

- "Draft an assignment outline that challenges students to explore [specific topic] through [analysis/discussion/research], suitable for a [college/high school/professional development] setting."
- "Generate a syllabus description for a course on [topic], highlighting the learning outcomes and main topics covered."
- "Create a lesson plan that introduces [concept or skill] to students in a [creative/interactive/lecture-based] format."

Share your output in chat!

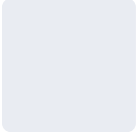
LLM OPTIONS

MOST USED AI TOOLS IN 2024

Automation	 Zapier	 Make	 Bardeen
Chatbot	 ChatGPT	 Gemini	 Bing
Code	 Copilot X	 AskCodi	 Code Whisperer
Content	 Opus Clip	 Cohesive	 Synthesia
Design	 Midjourney	 Adobe Firefly	 Microsoft Designer
Presentation	 Tome	 Decktopus	 Gamma
Productivity	 Notion AI	 Taskade	 MeetGeek
Video	 Runway	 Pictory	 Descript
Website	 10Web	 Durable	 Imagica



To reiterate, when prompting AI:



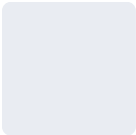
Be Clear and Specific:

Use precise language and provide context to ensure the AI understands your intent.



Experiment and Learn:

Try different phrasings and approaches to refine your prompts. Practice with different AI models to understand their limitations



Check for Consistency & Provide Feedback:

Review AI responses for consistency with your input and the desired outcome & offer feedback and ask for clarification (follow up)



Respect Ethical and Privacy Boundaries:

Be mindful of ethical considerations and privacy concerns. Avoid prompts involving sensitive or inappropriate content



Q&A SURVEY





THANK YOU

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MESA COLLEGE

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MIRAMAR
COLLEGE

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CONTINUING EDUCATION

Institutional Innovation and Effectiveness