Leveraging AI in the Workforce- Resource

A resource guide produced by Dr. Lane Freeman

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OpenAl's Prompt Strategies (OpenAl, n.d.)

(OpenAI has crafted <u>six strategies for crafting effective prompts</u>, and below are the initial four, tailored for the educational context.)

#1 Write Clear Instructions - Six Tactics for Writing Clear Instructions:

1.1 Include details in your query to get more relevant answers.

- Prompts should include important details or context.
- Otherwise, the LLMs will guess what you mean.
- Example: If submitting a proposal to a conference, consider linking to the conference website or copying and pasting the purpose of the conference before drafting your prompt.

1.2 Ask the model to adopt a persona

- Act as an instructional designer
- Act as a season business professional who is adept at corporate communication

1.3 Use delimiters to clearly indicate distinct parts of the input

- Necessary for more complex prompts. Users may choose short-shot conversations.
- Delimiters are like signs or symbols that tell AI, "Hey, this is where a new part starts."
- Example: When you see triple quotation marks like """, "Pay attention, this is a new section."

1.4 Specify the steps required to complete a task

- Clearly list each step in the order they need to be completed, which helps the AI understand and follow the task sequence more effectively.
- The AI's response will closely match the user's expectations, reflecting the structured and ordered input provided.

1.5 Provide examples

- Examples guide LLMs to produce consistent and desired results.
- By providing examples, you're training the LLM to respond in your style and context.
- For instance, fine-tuning a model email response sets a standard for the AI to emulate in similar future responses.
- Consider redundant questions concerning a student assignment or upcoming conference. Keep all your responses in the same chat thread to fine-tune the LLM's training.

1.6 Specify the desired length of the output

- Summarize this article in about 50 words
- Design this lesson plan for a 60-minute lecture
- Create a presentation with 10 slides and 5 bullets per slide



#2 Provide Reference Text

2.1 Tactic: Instruct the model to answer using a reference text.

- Language models often invent answers for obscure topics; reference texts reduce fabrications.
- Providing reference texts helps language models answer more accurately, like notes aiding students in tests.
- Example: "Use the attached article to answer questions. If the answer cannot be found in the article, write 'I could not find an answer'."
- Example: I will provide a document, and I will ask questions. Your task is to answer the question using only the provided document and to cite the passage(s) of the document used to answer the question. #3 Simplify Complex Tasks

Example of writing a paper:

- Do not ask AI to write a five-page paper.
- Instead, ask AI to write an outline for a five-page paper.
- Next, ask AI to "Draft the 'Introduction' using 100 words using APA 7th Edition citations."
- Consolidate all the components of the essay into a Word Processing Document
- Proofread, revise, edit, fact check, verify references, and add your voice.
- Start a new chat thread, provide context, and upload the paper.
- Instead of uploading an entire paper, share portions at a time to ask for paper.

#4 Give LLMs Time to Think

LLMs may make reasoning errors because they may try to answer too quickly. Asking for a "chain of thought" before answering can help.

4.1 Tactic - Ask the LLM to work out the solution before rushing to a conclusion

- Less effective prompt: "Determine if the student's math solution is correct"
- Improved Approach: "First, work out your own solution to the problem. Then compare your solution to the student's solution and evaluate if the student's solution is correct or not. Don't decide if the student's solution is correct until you have done the problem yourself."

4.2 Tactic - Use inner monologue or a sequence of queries to hide the model's reasoning process (more common for supper prompts or developers)

- This may be necessary in writing tutoring prompts for students because we do not want the student to see the problem being worked out.
- The Prompt may now include: "If the student made a mistake, determine what hint you could give the student without giving away the answer and write 'Hint' followed by a hint to help the student.

4.3 Tactic – Ask the model if it missed anything on previous passes

- If you ask LLMs to reference large documents or text, it may miss key points
- Large source documents often lead to premature stopping and missing relevant excerpts.
- Prompting the model with follow-up queries can enhance performance, capturing missed excerpts
- Example Follow-up Prompt: "Are there more relevant excerpts? Take care not to repeat excerpts. Also ensure that excerpts contain all relevant context needed to interpret them - in other words don't extract small snippets that are missing important context.

RICCE Framework for Prompting

Inspired by Geeky Gadgets. <u>Harnessing the power of the RICE framework for perfect ChatGPT prompts.</u>

Component	Description
Role	Describe your Role and define a specific role for ChatGPT to align responses with the desired style and substance.
Instructions	Provide detailed instructions to guide ChatGPT comprehensively on the topics and aspects to cover.
Context	Specify the intended audience or purpose to tailor the content's language, tone, and relevance.
Constraints	Set constraints like word count, currency of information, and tone to keep the content focused and relevant.
Examples	Provide examples to influence ChatGPT's output style and substance, serving as a benchmark for quality and tone.

RICCE Framework Example: Writing an Email to Student Concerning Poor Grades

Component	Description
Role	Act as an advisor or instructor, reaching out with concern and support.
Instructions	Express concern, offer resources and assistance, encourage communication, and discuss potential solutions.
Context	A student is struggling in class, possibly feeling overwhelmed or discouraged.
Constraints	Keep the tone empathetic yet professional, maintain confidentiality, and encourage a response or meeting.
Examples	Use a tone similar to previous successful communication with students in similar situations for reference.