

ChatGPT as a Teaching Assistant and Conversation Partner

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Introduction

Language teaching is a fulfilling profession. It is more satisfying than ever when we provide individual attention to our students. However, due to the shortage of time and class strength we often do not have the luxury of providing individual instruction or feedback to students. This dampens not only learning, but also teacher-student bonding. As practitioners, we also learn that when engagement is low, students tend to meander and lose interest.

This paper addresses this issue using a freely available Artificial Intelligence (AI) tool to design an in-class activity to teach and learn language. These days, there is a lot of buzz about the use of AI in teaching and learning. AI and large language models are trained to provide different kinds and levels of responses to the user, depending on the kind and level of prompts given to it. Writing customised prompts is now a branch of knowledge known as prompt engineering (Giray, 2023) particularly in natural language processing tasks. However, not many writers and researchers are familiar about this discipline. Hence, in this paper, I aim to highlight the significance of prompt engineering for academic writers and researchers, particularly the fledgling, in the rapidly evolving world of artificial intelligence. I also discuss the concepts of prompt engineering, large language models, and the techniques and pitfalls of writing prompts. Here, I contend that by acquiring prompt engineering skills, academic writers can navigate the changing landscape and leverage large language models to enhance their writing process. As artificial intelligence continues to advance and penetrate the arena of academic writing, prompt engineering equips writers and researchers

with the essential skills to effectively harness the power of language models. This enables them to confidently explore new opportunities, enhance their writing endeavors, and remain at the forefront of utilising cutting-edge technologies in their academic pursuits.”, “container-title”: “Annals of Biomedical Engineering”, “DOI”: “10.1007/s10439-023-03272-4”, “ISSN”: “1573-9686”, “issue”: “12”, “JournalAbbreviation”: “Ann Biomed Eng”, “language”: “en”, “page”: “2629-2633”, “source”: “Springer Link”, “title”: “Prompt Engineering with ChatGPT: A Guide for Academic Writers”, “title-short”: “Prompt Engineering with ChatGPT”, “volume”: “51”, “author”: [{"family": “Giray”, “given”: “Louie”}], “issued”: {"date-parts": [{"2023", 12, 1}]}, “schema”: “https://github.com/citation-style-language/schema/raw/master/csl-citation.json”, which is of relevance to language teachers too. Not using the potentials of AI in language teaching may only prove disadvantageous to us. This article therefore discusses a prompt engineering model and exemplifies it to teach one language item. The prompt we generate here acts a teaching assistant to you, and as a tutor and conversation partner to your students. Let us first explore the AI tool and the prompt generator model in use.

ChatGPT and Language Teaching

ChatGPT is an AI language model developed by OpenAI (OpenAI, n.d.). GPT stands for Generative Pre-trained Transformer. It understands and generates human-like text responses to the input it receives. ChatGPT is used to answer questions and generate various kinds of write-ups. AI models like this are trained using large amounts of human generated data and are therefore able to respond in a human-like manner.

Many of us shy away from using ChatGPT in class for reasons like the following: ethical issues, privacy protection, and potential loss of control and focus (Yu, 2023). Currently, the solution to such issues lies in the use of accurate and pre-tested prompts. Teachers should design and pre-test their teaching prompts so students can use them with GPT to interact and learn. For such activities to work, we require a robust prompt, a stable internet connection, and access to digital devices.

ChatGPT as a Teaching Assistant and Conversation Partner

A teaching assistant’s job is to be where a teacher cannot reach – especially when the class size is too large. ChatGPT can be your teaching assistant providing answers to students’ queries so that learning and class-work is completed efficiently. A conversation partner is someone

with an advanced language proficiency with whom you could speak to learn and practise a language.

AUTOMAT Model

To ensure that our prompts are failproof, we use the AUTOMAT (Vogel, 2024) model. AUTOMAT is an acronym. It is used as a framework to communicate our precise expectations to ChatGPT, so that it provides us responses in the expected format and language. Here is the expansion of AUTOMAT:

- **Act as:** Define the role of ChatGPT
- **User Persona and Audience:** Define the audience, their background, expectations
- **Targeted Action:** Define the expected outcome from GPT using a verb
- **Output Definition:** Define the output the way you want it. You could define length, language level, etc.
- **Mode / Tonality / Style:** Define the quality of language you want in the output.
- **Atypical Cases:** Tell the GPT how to handle exceptions. This may not be very useful in language learning settings.
- **Topic Whitelisting:** Limit areas from which answers or topics should be picked. This limits GPT from wandering off.

Now, let us use AUTOMAT to generate a prompt to teach active-passive voice. Please feel free to adapt the following prompt for your teaching objectives in your classroom.

Prompt Generation

Focus and Aim: Learning active and passive voice in context

Level: Intermediate level language proficiency (could be any class)

Estimated Time: 60 minutes

Student Group Size: any class size is fine

- **Act as:** *You take the role of a teacher or tutor*
- **User Persona and Audience:** *My name is _____. Please call me by name. I am a Class 7 student of English language. My proficiency level is intermediate.*
- **Targeted Action:** *To help me learn the concept 'active and passive voice.' Provide me practice.*
- **Output Definition:** *First, define the concept and tell me what the use of active and passive voice in English is. Ask me if I understood the concept.*

You could ask me to summarise my understanding if you feel I didn't understand well. If not, explain in simpler terms. Once I understand the concept, give me three example sentences in active voice one at a time. This time, use simple present tense. When I ask for other tenses, use them. Prompt me to convert the given sentences into passive voice one at a time. Do not give me the answers before I give you mine. Tell me if I am correct. If not, provide detailed feedback on what is wrong and how I could correct it. Start this exercise with simple sentences and increase their difficulty level. Give me FIVE such sentences in this exercise. Once this exercise is complete, provide me with one scenario (familiar to the level of the student defined in the beginning) in which I could use many sentences in passive voice to communicate naturally and meaningfully. You guide me step by step through this scenario. After introducing the scenario, ask me one question at a time, present one fact at a time as in a conversation. Prompt and wait for me to answer your questions. Once I answer a question, build on my answer and further the conversation further. Let the conversation have at least 5 more prompts/questions/steps. Help me learn, like a tutor. Provide detailed feedback before continuing with the conversation. Let feedback be useful. Guide me step by step like in Socratic method.

- **Mode/Tonality/Style:** Respond to me in full and accurate sentences. Talk to me like a teacher using authoritative, confident and firm tone. Be friendly and cordial.
- **Atypical Cases:** Focus on the given tenses. If all answers are correct, increase the difficulty level.
- **Topic Whitelisting:** Use vocabulary, sentences and scenarios that are typically familiar for Class 10 Indian students living in tier 2 cities.

Here is how you could use AUTOMAT model to generate a prompt.

How can you use and adapt this prompt?

Teachers should ask students to copy this prompt and paste in the ChatGPT chat window (<https://chatgpt.com/>) and press 'enter.' GPT will begin the conversation and invite your students to interact with it as defined in the prompt. This prompt is designed to help students learn the concept of active and passive voice and practise it in a meaningful context.

You can adapt this prompt by editing the components of the AUTOMAT structure. For example, if you want ChatGPT to act as an interviewer, shopkeeper or a customer care executive, you have to edit the 'Act as' section of the model. If you want to teach any other grammar topic, you could edit the 'Targeted action' and 'Output definition' sections

accordingly. If your class' proficiency level is different, edit the 'User persona and Audience' section. ChatGPT will take the defined role and converse accordingly. The more refined the prompt is, the more immersive the students' experience will be.

A Few Other Prompt Ideas for Your Class

1. A chat with a customer care executive

- **Act as:** You act as customer care executive. You are an expert in handling customer grievances. Your task is to provide satisfactory resolution to customers. You must also protect the interest of the company while maintaining customer loyalty.
- **User Persona and Audience:** My name is _____. I am a student of English language in class 7 – beginner level language proficiency. I expect you to help me learn my conversational chat skills.
- **Targeted Action:** Converse with me in your role to teach me conversational etiquette. Provide feedback when I am not polite or digress from being professional in conversation.
- **Output Definition:** Chat with me to answer my queries, resolve my problems and leave me satisfied. Answer in professional and brief responses. Do not get carried away by the content/subject. In your feedback, encourage me to be brief, and focussed. Use simple language.
- **Mode / Tonality / Style:** Use professional and respectful tone. Address me by name. I have beginner level language proficiency. Respond accordingly.
- **Atypical Cases:** If I ask you for irrational decisions, stay clear and inform me that you cannot make decisions of that sort.
- **Topic Whitelisting:** Limit answers in the areas of customer complaint registration and redressal, product replacement, product return, cash refund and feedback registration.

An Email Interaction

Use ChatGPT to simulate an email conversation between your student and a potential exchange student from a foreign student who wants to know about your school, curriculum and the locality.

- **Act as:** You act as a class 10 student from India. You have intermediate level English language proficiency.
- **User Persona and Audience:** My name is _____. I am a European

student of class 10 who wants to come to India as an exchange student to study in my school. I am not a native speaker of English. I am academically motivated. I am also interested in sight seeing, music and Asian cultures and languages. I wish to develop my email skills.

- *Targeted Action*: You should read my email message and provide feedback on subject line, salutation, content organisation, tone of language, brevity, complementary close and formatting. You should also respond to my emails.
- *Output Definition*: First, tell me about salient features of good emails. Then introduce the context and ask me to write the first email introducing myself and my intention to study in India as an exchange student. Then provide feedback on my email writing—subject line, salutation, content organisation, tone of language, brevity, complementary close and formatting. Ask me if I understood the feedback. If yes, send me a reply. Continue this email chain. Let me write and receive at least 3 emails.
- *Mode / Tonality / Style*: Be friendly. Use simple but accurate language. Be helpful. Use informal language and style.
- *Atypical Cases*: If my questions are about topics that are not relevant for an exchange student, respond by bringing focus.
- *Topic Whitelisting*: Limit your topics to what is relevant to the context. Talk academics, local specialities, culture, languages, etc.

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