

AI in Hospitality and Tourism Education: Mastering the Art of Prompt Writing for Enhanced Teaching

Abstract

This Lecturers' Lounge presentation explores the transformative potential of AI prompt writing in hospitality education. Moving beyond basic AI interaction, I examine how strategic prompt design can shape course development, assessment design, and student engagement. Drawing from empirical applications in hospitality classrooms, the presentation provides educators with actionable frameworks to leverage AI as a pedagogical partner rather than merely a tool. Participants will gain hands-on experience with tested prompt structures that enhance critical thinking, foster metacognition, and create authentic learning experiences—all while maintaining academic integrity and promoting student agency in an increasingly AI-integrated educational landscape.

Key Words: AI Integration, Prompt Engineering, Hospitality Education, Digital Literacy, Student Agency, Pedagogical Innovation

Theme: Innovative didactics in teaching

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Introduction

As generative AI tools become embedded in higher education, our ability to communicate effectively with these systems—through well-designed prompts—has taken on new importance. A prompt is more than a question; it is an instructional interface that guides AI toward producing relevant, high-quality outputs. Understanding how to structure and refine prompts is now a vital skill for both educators and students.

Why Prompt Writing Matters

Effective prompt writing transcends simply asking questions; it involves providing AI with appropriate context, clear directives, and meaningful constraints to elicit outputs that enhance teaching and learning. This skill proves valuable not only for educators developing innovative instructional materials but also for students engaging with AI as a learning resource (Reeser, 2023; Mollick & Mollick, 2024). In hospitality education specifically, where practical application and industry relevance are paramount, well-crafted prompts can bridge theoretical concepts with real-world scenarios, creating more authentic learning experiences.

Prompt Writing: The Fundamentals

Several key elements contribute to the efficacy of an AI prompt:

Clarity and Specificity: A foundational feature of prompt writing is to articulate instructions with clarity and precision (Reeser, 2023). Broad prompts, such as "Discuss climate change," are likely to yield general overviews. Conversely, a specific prompt like "Summarize the primary human-induced causes of climate change and their effects on global temperatures in under 200 words" will generate a more focused and

useful response. Supplying ample detail minimizes the AI's need for interpretation and leads to more pertinent outputs (Reeser, 2023).

Context: Providing the AI tool with relevant background information and context is crucial for the tool to grasp the scope and perspective of the request. Instead of asking "Draft a marketing email," providing context such as "You are a marketing manager targeting tech professionals with a new AI product, aiming to increase workshop registrations" will significantly enhance the output. Maintaining conversational context within a session can also lead to more coherent responses as the AI retains previous turns (Reeser, 2023).

Instructions and Intent: Students and Instructors must clearly state the desired action using action verbs, such as "summarize," "analyze," "rewrite," or "generate". Explicitly stating your intent, for example, "I am assisting a middle school student with a science project; explain the water cycle in simple terms suitable for that age group," helps the AI tailor its response appropriately (Kirbyson, n.d.; Reeser, 2023).

Desired Output Format: Being specific about the preferred format of the output is essential for structuring the information effectively. You can request the response as a list, bullet points, a paragraph, an essay, a table, or even a specific document type. A well-defined format in the prompt typically results in a more structured output (Kirbyson, n.d.; Reeser, 2023).

Tone and Style: You can instruct the AI to adopt a particular tone or writing style, such as formal, informal, persuasive, or academic. You can also request the AI to emulate the style of a specific author by providing examples (Kirbyson, n.d.; Reeser, 2023).

Role-Playing (Persona): Assigning a specific role or persona to the AI can significantly enhance the relevance and quality of its responses. For instance, "Act as a seasoned academic advisor" or "You are a financial analyst with expertise in emerging markets" provides the AI with a framework and perspective to guide its output. Providing a system message at the beginning of a chat allows educators to set the AI's role enabling a tailored interaction to target the needs of their learners (Kirbyson, n.d.; Reeser, 2023)

Examples: Supplying examples of the desired output can be particularly effective for creative tasks or when a specific style is sought. This "show, don't tell" approach offers the AI a clear model to follow (Kirbyson, n.d.; Reeser, 2023).

Constraints and Limitations: Clearly define any constraints or limitations for the AI, such as a word count, exclusion of specific topics, or focus on particular aspects. For example, "Write a product description under 150 words, avoiding technical terms and highlighting key benefits" sets clear boundaries. Using words like "avoid," "only," or "focus on" can set clear boundaries (AI Master, n.d.; Kirbyson, n.d.; Reeser, 2023).

Iterative Refinement: Prompt engineering is often an iterative process involving experimentation and refinement based on the AI's output. Do not anticipate perfect results on the first attempt; instead, adjust phrasing, add or remove details, and engage in a back-and-forth with the AI. By breaking down a complicated prompt into simpler prompts, you can give ChatGPT a more comprehensive context of what it is you are asking (Kirbyson, n.d ; Reeser, 2023; Mollick & Mollick, 2024).

Basic Prompting Techniques

Several basic prompting techniques can improve the results obtained from AI models:

Zero-shot Prompting: This involves providing an instruction without any specific examples, relying on the AI's pre-trained knowledge (Mollick & Mollick, 2024). While a common starting point, it may lack nuance for complex tasks.

Few-shot Prompting: This technique involves including a small number of examples (typically 1-5) within the prompt to guide the AI toward the desired output, demonstrating the task and expected format (Huang, 2023, AI Master, n.d.).

Role Prompting: As previously discussed, explicitly instructing the AI to assume a specific role or persona can enhance the relevance of its responses (Kirbyson, n.d., AI Master, n.d.).

Chain-of-Thought (CoT) Prompting: For tasks requiring reasoning, CoT prompting encourages the AI to explain its reasoning steps before providing the final answer. Phrases like "Explain your reasoning step-by-step" can facilitate more logical outputs. This method guides LLMs through complex inference tasks by providing intermediate steps, which elevates the model's accuracy when paired with few-shot prompting (Huang, 2023, AI Master, n.d.).

Iterative Prompting: This involves breaking down complex tasks into a sequence of simpler prompts, building upon the AI's previous responses for greater control and refinement. By breaking down a complicated prompt into simpler prompts, you can give ChatGPT a more comprehensive context of what it is you are asking (Kirbyson, n.d., Reeser, 2023, AI Master, n.d.).

Input-Output Prompting (IOP): This is a direct instruction yielding a direct output. While simple, it may not suffice for tasks requiring in-depth reasoning or specific formatting (Kirbyson, n.d., Reeser, 2023, AI Master, n.d.).

Common Pitfalls to Avoid

Several common mistakes can hinder the effectiveness of AI prompts (AI Master, n.d.; Kirbyson, n.d.; Reeser, 2023; Wharton AI & Analytics Initiative, n.d.):

Vagueness: Overly general or unclear prompts often lead to unsatisfactory outputs

Lack of Context: Insufficient background information can prevent the AI from fully understanding the request's nuances.

Not Specifying Output Format: Failure to indicate the desired presentation style can result in an unsuitable format.

Overly Complex Prompts: While detail is important, excessively long or multi-faceted prompts can confuse the AI, leading to less focused responses. Breaking down complex requests is generally more effective.

Ignoring the Iterative Nature: Expecting perfection on the first attempt and not engaging in further refinement can limit the AI's potential.

AI as a Pedagogical Partner

AI can support various aspects of instruction, including:

Improving Course Design and Learning Goals: AI can help instructors revise assignments to increase student motivation by suggesting real-world relevance and clarifying task expectations. It can also assist in brainstorming and evaluating learning outcomes, offering feedback from the perspective of a first-

generation student to identify potential areas of confusion. Moreover, AI can aid in drafting lesson sequences, creating course outlines, transforming syllabi for different formats (e.g., online, asynchronous), and updating syllabi to address the integration of AI tools. Instructors can also leverage AI to develop time plans for classes, ensuring a prioritized and sequenced approach to content delivery (Bowen n.d.).

Creating and Refining Assignments: AI can generate innovative assignment ideas tailored to specific learning outcomes and student interests. It can suggest ways to make existing assignments more motivating, engaging, and relevant to students' diverse backgrounds. Instructors can input current assignments and receive revised versions incorporating feedback. AI can also assist in designing capstone projects that challenge and motivate students. A particularly useful application is creating AI prompts that instructors can give to students to provide learning support on assignments without giving away answers (Bowen, n.d.).

Designing Interactive Learning Activities: AI can help instructors design engaging class activities, role-playing scenarios, and simulations aligned with course goals. It can transform traditional lectures into interactive worksheets that require students to actively participate and make connections. AI can also aid in developing complex group tasks that necessitate collaboration and role division among students (Bowen, n.d.).

Enhancing Metacognition and Reflection: AI can function as a mentor to encourage student reflection on their learning experiences and assumptions through targeted questioning (Bowen, n.d.). It can also act as a coach by prompting students to engage in metacognitive processes, such as reflecting on past events or conducting pre-mortems for future projects to anticipate potential challenges (Mollick, & Mollick, 2023).

Facilitating Feedback and Grading: AI can be used to create prompts for AI-powered tools that offer students suggestions and tutoring to improve their work. Instructors can provide AI with rubrics and examples of student work to generate detailed and constructive feedback in their own voice. AI can also assist in identifying common mistakes in student submissions and provide draft feedback focusing on specific areas for improvement (Bowen, n.d.).

Developing Reusable Teaching Resources: AI can help instructors create reusable course profile prompts or "blueprints" that store the details and context of a class, allowing for efficient generation of various learning materials (Bowen, n.d.).

Providing Direct Instruction and Tutoring: AI can act as an AI tutor, providing direct instruction on concepts, explaining ideas, asking probing questions, and offering feedback to guide student understanding (Mollick, & Mollick, 2023). Instructors can customize AI tutor prompts to focus on specific topics and common student difficulties (Mollick, & Mollick, 2024).

Supporting Collaborative Learning: AI can function as a teammate to assist student teams in various processes, such as planning projects, making decisions, and considering different perspectives (Mollick, & Mollick, 2023).

Checking for Understanding: AI can take on the role of a novice student, prompting students to explain concepts and identify any inaccuracies or gaps in the AI's understanding, thereby reinforcing the students' own knowledge (Mollick, & Mollick, 2023; Wharton AI & Analytics Initiative, n.d.).

Creating Practice Opportunities: AI can serve as a simulator, generating various scenarios to allow students to practice skills in new and diverse contexts (Mollick, & Mollick, 2023).

Streamlining Research and Idea Generation: AI can summarize extensive source material, accelerating the research phase of writing (Kirbyson, 2024). It can also help generate analogies, metaphors, explanations, and examples to clarify complex topics. Moreover, AI can assist in brainstorming and developing outlines for writing projects (Kirbyson, 2024)

Enhancing Writing Quality: AI can act as a writing coach, offering suggestions for improvement tailored to specific audiences. It can also help instructors teach AI to write in their specific voice. By applying famous frameworks and theories, AI can help improve writing based on established principles (Kirbyson, 2024).

Supporting Assessment Design and Analysis: AI can help generate practice tests, quizzes, and short answer questions to assess student learning. It can also summarize student responses to assessment activities, identifying common themes and areas of confusion. Furthermore, AI can assist in finding connections between different course concepts to support distributed practice. AI can even aid in tasks related to departmental accreditation, such as writing reports and analyzing data (Mollick, & Mollick, 2023; Wharton AI & Analytics Initiative, n.d.).

Conclusion

The field of AI and prompt writing is continuously evolving. While some suggest that increasingly sophisticated AI models may reduce the need for highly specialized prompt engineering (Zhou et al., 2023), the ability to clearly articulate intent and ask insightful questions will likely remain important (Wallbank, 2023). The fundamental principles of providing clear instructions, context, and desired outcomes are likely to remain crucial for effective AI interaction (Reeser, 2023).

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