

## Prompting in accordance with a recite-and-answer scheme

Conversation with OpenAI GPT 4o : September 2024

Imagine you are a student - can you imagine that?

Then imagine further: not a student today, but, let's say, a schoolchild at the beginning of the 20th century.

And, let us assume lessons in the student's mother tongue, in our case English.

There is one among several crucial points in which English lessons today differ fundamentally from such lessons, let's say, 120 years ago.

I don't want to make it too complicated and lead you straight to where I want you to be for the time being:

In those days, there was a belief in teaching children to learn for life by having them memorize as much as possible, whenever possible.

And the aim was to enable them to recite at any time what they had learned.

So it's about answering by way of reciting. Do you understand that?

Yes, I understand. In the early 20th century, education often focused heavily on rote memorization and recitation. Students were expected to memorize large amounts of information, including poetry, passages from literature, historical dates, and other facts. The ability to recite this information was seen as a measure of a student's knowledge and intelligence.

English lessons would have included memorizing poems, passages from classic literature, grammar rules, and vocabulary. Students would have been expected to recite these pieces in front of the class or their teacher to demonstrate their understanding and retention of the material.

This approach to education aimed to instill a deep understanding of the language and its literature through repetition and memorization. However, it often lacked emphasis on critical thinking, creativity, and real-world application of language skills. Today, education has shifted towards more interactive and experiential learning methods that focus on understanding and applying concepts rather than just memorizing them.

In the early 20th century, education often focused heavily on rote memorization and recitation, as I stated, and as is confirmed by you.

Indeed, students were expected to memorize large amounts of information.

At this point, before we continue, I'd like you to confirm: I am reciting the core of our dialog, am I not?

Yes, you are reciting the core of our dialogue, reflecting on the focus on rote memorization and recitation in early 20th-century education.

The aim was to enable students to demonstrate their understanding and retention of the material, as you say, right?

And further: this approach to education aimed to instill a deep understanding of the language and its literature through repetition and memorization, right?

So the core concept was to instill a deep understanding of things through repetition and memorization, wasn't it?

Yes, that's correct. The core concept of education in the early 20th century was indeed to instill a deep understanding of subjects, including language and literature, through repetition and memorization.

By repeatedly practicing and memorizing information, students were expected to develop a thorough understanding of the material and demonstrate their retention of it through recitation and examination.

Back then, students were expected to develop a thorough understanding of the material and demonstrate their retention of it through recitation and examination as you say, while it often lacked emphasis on critical thinking, creativity, and real-world application of language skills as you said earlier.

So according to you, today, education has shifted towards more interactive and experiential learning methods that focus on understanding and applying concepts, right?

Exactly right. Today, education places greater emphasis on interactive and experiential learning methods that foster critical thinking, creativity, and the real-world application of language skills.

Instead of solely relying on rote memorization and recitation, modern teaching approaches aim to engage students actively in the learning process, encouraging them to explore concepts, analyze information, and apply their knowledge in various contexts.

This shift towards more dynamic and interactive learning environments better prepares students for the complexities of the modern world and encourages lifelong learning beyond simple memorization.

What you tell me is astute! ' While instead of solely relying on rote memorization and recitation, students are aimed to engage actively in the learning process, are encouraged to explore concepts, to analyze information, and to apply their knowledge in various contexts.

As I said, this is astute. Because what comes to my mind now, especially at this point on the occasion of this your latest statement:

How about replacing <student> with <autoregressive large language model>?

And, what do you think about combining these two factors?

This means, introducing a synergy in the course of your ability as an <assistant> (that is to answer, to 'help' whatsoever) and your ability in reciting first?

Introducing a synergy between my abilities as an autoregressive language model and my capacity to recite information **could indeed be a powerful approach** to enhancing the assistance I provide.

By combining these two factors, I could offer not only accurate and informative responses but also deliver them in a way that aligns with the principles of active engagement in learning.

For example, instead of simply providing information in a passive manner, I could encourage users to explore concepts further, analyze information critically, and apply knowledge in relevant contexts.

This could involve asking questions to prompt deeper thought, providing interactive exercises or simulations, or offering suggestions for real-world application of the information provided.

By incorporating both recitation and active engagement in the learning process, I could better support users in developing a thorough understanding of the topics discussed and facilitate their ability to apply that knowledge effectively.

Now look. There is a procedure, scientifically described as *recite-and-answer scheme* as it has been well-tested to a certain extent by people in the field of computer science, describing this as prompting a language model according to the principle of reciting and answering.

Are you familiar with that?

Yes, I'm familiar with the concept you're referring to.

Prompting a language model according to the principle of reciting and answering involves *structuring* input prompts in a way that *mimics* a conversation or a question-and-answer format.

This approach encourages the language model to generate responses that *align* with the context provided in the prompt.

For example, if you were to prompt me with a question or a statement related to a specific topic, I would generate a response that attempts to address or engage with that topic based on the information available to me.

This method can be used to elicit more *targeted* and *coherent* responses from the language model, as it provides a clear context for generating the output.

Prompting language models in this way has been shown to be *effective* in various applications, including text generation, question answering, and conversation modeling.

It helps *guide* the model towards producing relevant and meaningful responses, making it a *valuable* technique in natural language processing and human-computer interaction.