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COMM 205

## Analogy Paper

### **Introduction**

The concept of AI prompting is relatively new, and therefore very unfamiliar in both the workplace and also in the classroom. For those of you who are unfamiliar with the term AI prompting, let's break it down. According to an MIT article, AI prompts "are your input into the AI system to obtain specific results. In other words, prompts are conversation starters: what and how you tell something to an AI for it to respond in a way that generates useful responses for you." As AI develops and becomes increasingly more efficient and useful for all types of fields in a variety of ways, it is essential that we have a full understanding of what AI prompting is, and how it will shape our future. This concept, while complicated, can be broken down into two simpler analogies: building blocks and mathematical equations.

### **Analogy for Kids**

AI prompting can be explained as a set of building blocks. When small children play with building blocks and are attempting to build something very tall that will hold up a lot of blocks, they are very careful about which blocks they choose to be the foundation. This is similar to AI prompting; you choose carefully for which words you want to use at the start of your creative process so that you create a more useful and stable result at the end.

### **Similarity One**

The first thing you have to do when you know what you want to build with your blocks is build a foundation that will support the shape of your creation. If the foundation is shaky, the building will fall over. If the foundation doesn't match your vision for the building, you won't be able to

make what you had in mind. It's very important that your keywords that get input into AI are chosen carefully so that you will receive the output you were looking for.

### **Similarity Two**

These keywords, as mentioned before, are like your actual blocks. Different words and phrases will help the AI develop more accurately what you want to say. So if you have something simple you want the AI to produce, you can use less words (or less blocks) to create that smaller structure. However, if you have a more complicated idea, then you'll want to use more words or blocks. These keywords are sometimes difficult for us to grasp and become familiar with because, according to an article from the International Journal of Human-Computer Interaction, "With these many keywords comes a loss of control over the outcome. There is a high randomness to the outcome of text-to-image generation, and controlling the image generation—without resorting to additional tools ...is difficult, even for experts in prompt engineering." This means you'll also want to be specific about which ones you choose; not all blocks are the same size and shape, so they can each serve purposes as unique as words do.

### **Similarity Three**

When building a concept, AI does far better with more information rather than less. If you want to build something worthwhile that won't just fall over, you have to take your time in choosing and assembling your keywords so that you receive the stable output that you had intended. When you follow the first two directions well, AI prompting provides you with an efficient but foundationally sound product.

### **Conclusion for Kids Analogy**

In summary, AI prompting uses keywords like building blocks. Different keywords can have different purposes and uses, just like different blocks do. While this may take time to put

together, the more carefully the blocks at the beginning of the process are chosen and assembled, the more stable and accurate the product will be at the end.

### **Analogy for Peers**

Another way to understand AI prompting is as a mathematical equation. When solving a math equation where you have no idea what the correct answer is, it's a lot harder to know exactly what variable and numbers go where. However, when you know the outcome to look for, it makes finding the right equation inputs much easier. This is similar when prompting AI; plugging the right keywords gives you a more accurate output in less time.

### **Similarity One**

Let's assume that we know the output for the equation, just as we know the output we want from AI. When we know this information, it makes reverse engineering the math so much easier. Choosing keywords is much simpler when you know exactly what you want the AI to produce. It also enables us to be even more particular about our end result, since we need to know exactly what we are looking for before we can plug any numbers in.

### **Similarity Two**

To break it down even further, think of each specific keyword as a number. The numbers are only useful in and of the fact that they can produce the result you're looking for; it's the combination and order of the numbers that matters. So when using keywords in AI, look for the most accurate keywords to describe what it is you are looking for the AI to create. They can be mixed and matched so long as they still get you the result, or answer, for your problem.

### **Similarity Three**

Like most complex things, learning how to use and operate this formula takes time. In a research article for the International Journal of Educational Technology in Higher Education, author

Yoshija Walter says “Beyond algorithmic thinking, AI in education demands a focus on creativity and technology fluency to foster innovation and critical thought.” This shows us that AI prompting isn’t a replacement and using it takes work to learn how it is best used without losing our own creativity. Practice makes perfect, so the more time one puts into learning how to operate the keywords and working on making their initial inputs into AI more and more accurate, the better and quicker and more efficient we will be at putting AI to work. However, while AI is transforming the way we approach the more mundane tasks in the workforce, it is essential that we hold onto our creativity and have a well-rounded knowledge of AI prompting.

### **Conclusion for Peer Analogy**

AI prompting is similar to a mathematical equation in that it requires very careful attention to the end result so that we can input the proper keywords. Using these keywords as numbers that help us solve the equation for the desired result takes practice since the concept itself is so new, but ultimately enables us to develop our creativity and efficiency simultaneously.

## Works Cited

“Effective Prompts for AI: The Essentials.” *MIT Sloan Teaching & Learning Technologies*, 16

Sept. 2024, [mitsloanedtech.mit.edu/ai/basics/effective-prompts/](https://mitsloanedtech.mit.edu/ai/basics/effective-prompts/).

Oppenlaender, Jonas, et al. “Prompting AI art: An investigation into the creative skill of prompt engineering.” *International Journal of Human–Computer Interaction*, 28 Nov. 2024, pp.

1–23, <https://doi.org/10.1080/10447318.2024.2431761>.

Walter, Yoshija. “Embracing the future of artificial intelligence in the classroom: The relevance of AI literacy, Prompt Engineering, and critical thinking in modern education.”

*International Journal of Educational Technology in Higher Education*, vol. 21, no. 1, 26

Feb. 2024, <https://doi.org/10.1186/s41239-024-00448-3>.