Hi. My name is Todd Cherner and I direct the Master of Arts in Educational Innovation, Technology, and Entrepreneurship Program, housed in UNC’s School of Education.

Over the past few months, I've been learning ways to leverage generative AI, my teaching, scholarship, and productivity, while also following many of the updates and research coming out about it. During that time, I've been experimenting with a three-step approach for prompt in generative AI that I will share in this video. The following videos in this section will each then offer more direct ways to apply this to your teaching and research along with your work responsibilities. With that said, let's get into it.

To begin, I call my approach Role-Input-Output, and I'll explain each step along with providing an example of them. However, before starting the steps, you need to take a Step 0, and that step is to make sure you select a piece of generative AI that will report the information in the way you need. In the first module and on our AI’s tool page, you're introduced to the AI ecosystem and can access a variety of tools.

When you begin prompting with AI, I highly recommend you start by ensuring that the tool you choose to use reports the information in the way you need. For example, if you want an image, you need to choose a piece of generative AI that will create images, like Midjourney or Adobe Firefly. If you want a text-based response ChatGPT is a great tool.

However, if you want links to primary sources, you may want to pick Perplexity.ai or Consensus. Remember, there are a range of AI tools, so make sure the way the tool generates content is aligned to your needs. With that said, let's get into the steps.

The first step in prompting is Role. And by this, I'm referring to the perspective you want the generative AI tool to take when using it. In your context, these roles might be researchers, student instructor, politician, athlete, customer, businessperson, chemist, anything really, and I begin my probe by telling the AI what role I want it to be, followed by a descriptor of some kind. For the roles shown in this image. Notice the role along with Step 0, which is how the content will appear and is included.

For example, I might type, “You are a student studying biology and want an image,” or, “You're an instructor preparing for an upcoming lesson on consumer habits and need a presentation on the topic,” or even, “You're a researcher analyzing the functionalities of edtech and want a review of literature.”

The important part is that you state the role that you assign AI to take and offer a short description of it, while also ensuring that the content to be generated by the AI takes the form you want.

Now that you've established AI's role, the next step is Input. And this is where you state the action you want the AI to perform. When stating the action, I highly recommend you start with a verb, and I tend to draw from the verbs listed in Bloom's Taxonomy. While I recognize there are critiques of Bloom's Taxonomy, I'm not thinking about the domains in the Taxonomy, rather I'm just pulling the verbs from it. And as you can see, there are quite a few different verbs listed in it.

Using the Taxonomy. I'd start with the role and then add the input. When I add the input, I do so by starting with the verb and using it to make a statement that provides further details about the verb and what you need the AI tool to do with it.

For an example of using AI for productivity purposes. I may use ChatGPT to help me recruit students into my graduate program.

In this example for the Role, I would prompt the AI, “You are a coordinator for a graduate program” and my Input would be “develop a marketing plan for recruiting students into a master's program.” In this example, the verb I'm using is *develop* and the additional information explains what I need the AI to develop, a marketing plan to recruit students into a master's program. While I can add further information about the type of students and the program to really customize the prompt, the Input provides the structure that will lead to those further details.

So, returning to the roles from the earlier examples, I would prompt the AI with the role, “You are a student studying biology” and then add the input, “Describe the key structures of a carbon-based molecule.”

And so on.

After writing the Role and Input, we can now focus on the Output for the prompt, which is step Three, and this is where you think about the form and structure of the AI’s response or simply what the response will look like.

Specifically, I consider the length, audience, tone, and style as well as the format. Returning to my productivity example, the three-step prompt for it would start with the Role, “You are a coordinator for a graduate program,” followed by the Input, “Develop a marketing plan for recruiting students into a master's program.”

The Output would then be, “write a 500-word marketing plan,” that is the length, “for the program director,” audience, “That formally explains,” that's the style and tone, “the steps needed to implement it,” that's the format.

When I entered this prompt into ChatGPT, it generated a plan complete with an introduction and a conclusion.

While this marketing plan is very general, it does provide an outline that I can further customize and refine with subsequent prompts.

Some ideas that come to mind for that are prompting the AI to analyze the channels I might want to use to communicate with prospective students about the master's program, the program's value, and even ways to locate our potential students. However, by using the three-point approach, it provides a structure to start thinking about the way you are prompting generative AI.

To conclude, I hope this overview of the three-step approach gave you some ideas and strategies for prompting generative AI. In the following videos, our colleagues will share more specific examples of how they prompt AI for teaching, research, and scholarly work, as well as for productivity purposes.

Thanks.