Hi, I'm Mark McNeilly, a professor in the business school and co-chair of the UNC Generative A.I. committee. In this video, I want to talk about utilizing Generative A.I. in your classroom.

Professor Ethan Mollick from the University of Pennsylvania's Wharton School of Business, a thought leader in the higher ed space, believes generative AI will be ubiquitous, undetectable and transformative in academia and beyond.

And I think he's correct. As you know, generative AI can be used to create text, sound music and video and other content. Those that want to get ahead will be using it to be more productive, knowledgeable and creative, and will distance themselves from those who do not. As the saying goes, you will not be replaced by AI. You'll be replaced by someone who knows AI.

It will also be integrated into many existing applications, such as Office and Outlook, as well as lead to the creation of many new applications. As such, it will be ubiquitous. Although software tools have come out that purport to be able to detect generative AI they are not yet reliable. They often let AI generated content go unnoticed, yet falsely accuse others who have produced original content of using AI.

And AI is just going to be getting better and faster. As such, it's often undetectable. Lastly, people, including faculty and students, are finding many new ways to tap the power of generative AI. In many cases, it is profoundly changing how they work and what they produce. Our students are already using generative AI, outline papers, brainstorm ideas, perform research, improve their writing, and create images, videos and music.

And they can do so very quickly. We've had some glimpses of how our world may be different due to generative AI, but its full potential and impact will create both new opportunities and challenges we can only imagine at this point. Thus, generally, I will be transformative.

Let me give you an example. In the business school, we often have students develop new product ideas. This can be a very time consuming process, with lots of effort spent researching, brainstorming, discussing and developing potential concepts. This process can take a substantial part of a semester.

But by using generative AI, in this case Bing chat and creative mode, students can shorten the process significantly while improving their output.

You can see here that using Bing Chat, a student can research trends in men's shoes getting not only a summary of the research results, but also sites that provide further information. Generative A.I. can also create prototype images of the product as well.

And then provide brand names as well as positioning statements, which is what makes the product distinctive for these products. Here, for example, the brand names that it came up with, Sway Lush and Zest. Not bad. Here are some examples of what the logos might look like.

Note that took about 15 minutes to complete. Not days, not weeks, not months.

The power of generative AI and the speed at which it delivers content means that we as instructors need to raise our expectations of students significantly. What are they? Used to be too hard or too long Now is easily within reach. So we must substantially raise the bar on projects that can use generative AI to allow students to reach their potential, learn these tools and be engaged.

Of course, this means that we need to provide our students with generative AI skills and show them how they can be applied in our respective disciplines. For example, in marketing, my discipline professionals are using generative AI to rapidly produce ads, copy website content videos and more. And I need to know how my discipline is using generative AI ensure my students have those skills and can use them in the context of their future roles.

Instructors can also tap into the power of generative A.I. generative AI can provide a starting point for developing course ideas, giving us very comprehensive and detailed responses to our prompts, thus enabling us to build content, rapidly communicate ideas in a more compelling manner. For example, I'm planning on teaching a new course built around generative AI with the concept in mind.

It was fast and simple to generate the course description, the learning outcomes and an outline for the 14 sessions. Of course, final development will require significant editing and I plan to do so. But it made the task of developing a draft of a new course quick and fairly easy. Here is the prompt for the course description. I told ChatGPT I wanted an exciting course description, told who the course was for, what the course is about, and what I want students to know by the end of it.

And here is what ChatGPT provided back. It's not perfect, but it's a good start for something. I can then edit and improve, then put in the syllabus and provide to students so they can determine if this course is something they're interested in taking. The potential of generative AI also provides us as instructors the ability to adapt how we teach.

We know from experience that some students may not keep up with the material, while others learn faster. We realize that different students learn differently. We know that examples, analogies. Many quizzes and roleplaying are powerful ways to enhance learning. However, as instructors, we're very limited by time and reach, and so we cannot provide individual help to each student. And that is where generative AI can help.

To help students who haven't mastered a concept.

ChatGPT can provide an explanation and examples at the end of each class, so we could have a list of key concepts they must understand and tell them that if they don't, they should use generative AI to gain a better grasp of the idea. For example, here is ChatGPT explaining supply and demand and providing two examples. You can see that the AI provides a good description of supply and demand and then offers two examples to the students They can relate to coffee and housing.

If a student doesn't understand something in a description, for example, equilibrium, they could just ask ChatGPT to explain the meaning of it. This is something students might be embarrassed to ask in class, but will happily do privately on their computer. Ethan Mollick we mentioned earlier, offers seven ways for instructors to think about how to use generative AI in teaching.

I'll discuss a few of them.

The mentor role uses A.I. to provide students feedback on their work. Students can generate a draft and then have AI analyze it to improve the logic, flow, style, etc..

The tutor approach has the AI provide instruction directly to the student, and this works especially well if there are topics in class you only cover lightly or not at all, but are useful for the student to understand.

With a proper prompt, you can ensure the A.I. does not just blurt out the answers, but draws out the answers from the student in 1 to 1 interactions.

For example, assume you have a student struggling with a concept of supply and demand. You could encourage them to use ChatGPT and provide the following prompt for them to try. As you can see, we are asking ChatGPT to provide a famous example from 2015 to illustrate the concept. And here is the response. You can see that ChatGPT provided an interesting and enlightening example for the student, and then the student can keep experimenting with additional prompts to dig deeper into the concept.

In simulator mode. The AI enables role playing, which is great for teaching skills that require conversations between individuals, even if one of the individuals is the AI. For example, role plays could cover skills such as negotiation, conflict management or constructive dialog.

A.I. can be excellent here because it is very patient and non-emotional. This type of experiential learning is especially powerful.

Malik's prompts are much more detailed than what you might be used to, so you have to play around with them to ensure they work for your assignments. For example, this graphic illustrates a simulator prompt, but they're definitely worth trying.

The changes generative A.I. has introduced in the classroom not only impact how we teach, but also may alter what we teach in our discipline. Columnist David Brooks in The New York Times had an article, the title of which was In the Age of AI Major in Being Human.

In order to stimulate our thinking, allow me to be a bit provocative as AI impacts many human abilities, such as writing. We need to think about how that might change. What knowledge and skills will be critical for students to have going forward. The printing press moved us from the oral tradition to the written word.

Perhaps AI, with this writing capabilities, will mean that humans return to more oral skills to differentiate themselves. Perhaps rhetoric is back.

If that is true, we do need to think about spending more time ensuring our students have excellent speaking and constructive dialog, conflict management and presentation skills. Of course, students will still need domain specific skills to be effective, but perhaps human traits such as imagination, initiative and charisma become even more important.

Generative AI is powerful, but it cannot mobilize resources to get things done. So our students must learn how to navigate large organizations, gain the ability to influence others, and develop the capacity to build strong relationships and broad networks. In the coming age of more deepfakes enabled by AI and increasingly complex problems. Perhaps students will need epistemic humility to learn not to jump to conclusions too quickly and realize the problems we face are themselves complex, requiring them not to jump to simple conclusions or assume those that disagree with them are bad people.

With A.I. moving faster. The environment will become even more dynamic than it has been recently. Meaning, we need to help our students become more adaptable, resilient, and able to cope with uncertainty.

They must become what Nassim Taleb calls antifragile or able to not only weather the storms of life, but to grow stronger from them.

And certainly as AI becomes more and more part of our lives, our students must be AI literate and AI fluent understanding how to use air appropriately and ethically.

In terms of the role of the instructor, we may consider from being the sage on the stage and instead think of ourselves as team teaching with A.I. and shifting from having students focus on giving the right answers to ensuring students are asking the right questions. Using those questions have us and the AI help them learn better and faster.

The implication of this change, of course, is that we as faculty must have generative AI skills as well. While the idea of learning this new technology may be daunting once you experiment with it and learn how to use it well, generative AI will open new possibilities for both your teaching and your research. It will make you more productive, more knowledgeable, more creative.

Obviously, as students gain skills and generative AI this creates challenges in our assessments. In the next video we will discuss how we can ensure academic integrity in our assignments and exams.