

How Can I Use AI to Create Multimedia Teaching Materials?

Presented by:

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Editor's Note:

This is a written transcript of an audio recording. Our policy is to edit only the occasional unintelligible phrase. Everything else appears as it was spoken.

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Hi. I'm Jeremy Caplan, director of teaching and learning at the City University of New York's Newmark Graduate School of Journalism in New York City. I'm excited to talk with you today about AI—artificial intelligence—something that is becoming more and more prevalent across our culture, across industries. And educators are increasingly realizing how central a place AI may have in our field. And I want to help you think about creative ways to make the most of AI, specifically for generating multimedia materials for teaching.

Now, AI is at issue for us in many cases in many different ways. And what I want to focus on is not so much the student side today in terms of how students are using AI, but I want to focus instead on how we as educators can use AI to create powerful imagery—slides, diagrams, presentations—how we can create multimedia materials, audio and video materials, that we use as part of our teaching, and how AI can really have benefits for us as educators in the generation of and helping us generate multimedia materials.

There are few specific benefits to using AI in our teaching practices. One, it helps us to engage this new generation of students. Visuals, whether in presentations or in other contexts really help bring out engagement in our live teaching and in our asynchronous materials. And using AI in developing some of our multimedia materials can help us save time.

Educators throughout the country and throughout the world are increasingly challenged by how many different obligations they have, and managing huge numbers of students, and significant challenges in managing all of the different responsibilities they have. AI can sometimes help us reduce the menial work we have to do, allowing us freedom to focus on the more expressive and human aspects of teaching, like meeting with students, and writing personal feedback, and providing personal coaching and guidance to students, and creating really creative, unique, human-centered lessons and classes.

So, AI can really help with some of the technical aspects of producing material for us. And in this video, I want to share with you some ways in which you can implement AI to not only generate images that are part of your teaching but also create slides and generate audio and video materials that you can share as part of your teaching practice.

You'll come away having a better understanding, I hope, of how to implement these AI tools in your teaching and specific ways that you can use AI to generate materials you use in the classroom.

One of the first ways that I think we can all use AI is in generating images. So, AI-generated images are something you can create with tools like Midjourney and DALL-E. Even Canva, the popular creation tool, has an AI component now that allows you to generate images based on text prompts.

So, if you haven't used this before, the idea is basically you give it a sentence that describes what it is you're looking for, with as much precision and specificity as you can manage. And the machine, the algorithm, interprets that human language using natural language processing, and understands what your intention is, what you're looking for, and provides you with an image, or actually a series of images you can choose from, that best, according to the algorithm, matches what you have in mind.

So if you are teaching something about medieval history and the role of classical music in that period, you can ask the AI to generate an image that shows a group of musicians playing in a medieval setting, in a particular context with particular instruments, in a particular setting, and you'll get an image that you can then use in your own teaching that draws on those elements that you've included in your prompt.

Now, when you've generated that image—and these are free to generate with a variety of platforms—you can iterate on that image. You can say, actually, could you make it a little bit closer up, or could you include a clear background? Or you can give it other guidance to correct or adjust the image, which is something fundamentally different from how other image editing tools have worked historically, where you'd have to manage the pixels yourself, like with something like Photoshop, for example.

Now, you can use your natural language. You don't have to be a visual editor, or a photo editor, or a designer to make changes in the image. You can have an iterative dialogue and ask the AI to make adjustments to the image. In addition, you can choose among multiple images that are generated, or you can try different prompts, you can try different tools. If you've used Midjourney, you can try using DALL-E, or Canva, or other image-generating tools.

Now, in terms of using these images, you can use them in a number of different ways. You can put them onscreen at the beginning of a live class, whether you're teaching online or in person. You can use them as part of a slide deck, so inserting them into a PowerPoint slide deck, or in a Google slide deck, or whatever slide tool you're using. You can also use these images in materials that you hand out. So this could be an image that helps illustrate part of your syllabus, for example, or a handout for any particular topic that you are teaching in your class.

You can even use AI to generate diagrams. There are tools like Whimsical that now allow you to use a simple prompt, describe a particular diagram you have in mind, and get a diagram that you can use to illustrate a concept, a process, a framework. You can obviously edit those. Once you generate them, you can then edit them so that they are yours, and they are correct and accurate. And yet, you don't have to do all of the initial menial work of putting the information into the diagram initially. So, you're getting a draft that you can then work with and improve.

These images that are AI-generated can add visual flair and engagement to your slides, to your material, even if you're not a designer who could design or draw those images yourself. And you can create these custom materials as often as you'd like, and they're generated very quickly. So, you put in a prompt, and less than 30 seconds later, you have a variety of images to choose from. And as you do this more and more, you get better and better at it. And you can start to incorporate these images to the extent they're useful for you and fit into something that you are teaching.

Another valuable way to use AI in your teaching is to generate slides with AI. There are a number of different tools that allow you to use AI in a few different ways, and I want to highlight three specific approaches to using AI in generating slides. First, you can use AI simply to suggest alternative layouts for slides that you've created.

So, if you're using Google Slides, for example, you can use its suggest mode to select from multiple different versions of that slide. It's not creating the slide for you in this case. It's just suggesting a cleaner or a more engaging way to lay out that particular slide. And you can do this with really any slide you've created on Google Slides now.

You can also use the AI slide design recommendation tool on a tool like Canva, for example, which has a similar capability, suggesting alternative ways to organize the visuals or words on a particular slide that you have. And you can choose from one that looks good to you, or that seems cleaner, or better conveys the message that you're trying to convey.

A second way to use AI for slide generation is to generate individual slides with a prompt. You can tell a tool like Beautiful.ai that you'd like a slide that illustrates this concept that has these three parts, and the parts of the concept are A, B, and C, and it will generate a draft of that slide for you. You can then adjust it. You can move things around if you want to. But you get a very quick slide that conveys an idea you have or a framework that you're explaining.

It can even draw on its knowledge from the internet, essentially, of a particular framework. So, if you ask it for a Business Model Canvas slide, for example—that framework is well known and well documented online—it can give you a draft version of that slide that you can then adjust, annotate, remake in your own style.

A third way to use generative AI in generating slides is to ask it in a detailed prompt to generate some initial slides for you for a presentation. So, in this case, the AI is doing even more of this initial drafting, outlining of something. And with Beautiful.ai, and Tome, Midjourney and Gamma, these are four different tools you can use to generate a whole batch of initial slides.

And in the case of some of these tools, like Tome, you can give it a document—and Canva you can use this way too. You can give it a document that lays out the key aspects of a presentation you're creating, like a Google Doc, a Word, Microsoft Word document type material, and it will take that material and turn that into visual slides. Of course, you're then going to edit the slides. You're going to reorder them. You're going to take some out. You're going to change them.

But the value of this is that it saves you that many hours, in some cases, of initial work of drafting those initial slides. In this case, you can focus more on polishing, improving, and strengthening that initial outline to make it really yours and to put it in your own style. So, the generative AI can really help make slide development, slide creation,

developing presentations a little bit easier, a little bit faster, and even more effective for you as an educator.

In addition to creating slides and generating images with AI, you can also use AI to generate audio and video. And in some cases, you may be an educator who doesn't want to appear onscreen, or you don't want to have your own voice recording an audio message. If that's the case, you can now use AI to essentially take a script and voice it, or you can even generate an avatar that will essentially read a set of instructions or give students a little update on something.

And the video avatar can essentially convey message in a visual way, in an engaging way, in a live way, that avoids you having to continually be in front of a camera recording that if that's not your comfortable place, or if you don't feel eager to continually record audio or video messages. Now, this isn't for everyone. Some people like recording their own audio and video messages, and if that's you, that's great. But for those of you who can't for whatever reason, or prefer not to be in front of the camera, or recording your own voice messages, you can now use AI avatars and AI voice recorders to essentially turn your words that you write out—so these are still your own words—but those words now can become visual or can be voiced by an avatar that sounds quite human-like. It's not like the robotic voices of the past. So this is another way to use AI.

And these can be for messages you include in your learning management system, summarizing the week's class sessions, or giving students a preview of what's ahead, or answering common questions that students have asked about a particular assessment or upcoming assignment. So, there are multiple ways to use this audio and video. It could be part of your syllabus, giving students a preview of the course that you're developing, for example, or reflecting back on key points in the course. These are all different ways to use the AI to generate audio and video material for your students.

Another important way that you can use AI is to edit audio and video that you develop for a course. So, if you're not familiar with professional video or audio editing, and don't want to use tools like Final Cut Pro or Adobe Premiere, which are relatively complicated, professional editing tools, you can simply edit the text of your material

using new AI-capable tools like [descript.com](#). And what these tools allow you to do is simply record into a mic, they turn your recording into a transcript, and then you can edit that transcript just like you'd edit a Microsoft Word document or a Google Doc.

So, all you have to do is take out the words or edit the words that you want to change, and you'll get a changed, edited video or audio recording. You don't have to mess with the actual sound waves or waveforms. You can just edit the text naturally, and the video or audio will be edited for you.

In addition, the AI tools will clean up filler words—so they'll take out the ums and ahs. They'll take out background noises. If there was a blip, or some kind of background interruption in your audio, or if the sound was muffled or unclear, the AI will help clean that up, and strengthen, and polish the sound quality, which is really helpful. And it can even remove gaps in the audio for you.

So, one of the new features, actually, is it'll give you eye contact. It'll make it seem as if your eyes were on the camera even if you were looking down at your notes occasionally. So, there are many different ways the AI can help create even more polished audio and video material, whether or not you have any experience doing professional level audio or video editing. These are tools that are really available and now increasingly easy to use for anyone who's comfortable editing a Word document or a Google Doc.

And the advantage, again, is that you can now create these audio or video materials for your students, explaining an assignment, explaining an upcoming assessment, giving them a review of the week's material, or however else you want to use audio and video in your teaching to make it more engaging, to supplement live classes, to help provide supplemental materials for students who need that additional guidance, and to make class and make learning even more engaging than it already is.

An additional way to use AI is to generate transcripts of class sessions and meetings. So AI tools like Supernormal, like [4149.ai](#), [Fathom](#), [Blocks.app](#), [Otter.ai](#), all of these tools, [Grain.com](#) is another one, all of these tools allow you to now record a live session or meetings you have with students—and obviously, there's transparency. You let them know that you're recording and why you're recording.

And in addition to giving you a transcript of the session, what these tools now do is they also give you a summary which you can provide to your students. And the summaries are quite high quality. I've tested each of these, and they are quite useful for students who have accessibility needs or who otherwise benefit from supplemental transcripts and summaries of class material. Maybe they haven't been able to attend all classes, or maybe they need to review something in a class.

This gives you a way of providing supplemental material that helps students without you having to do a lot of manual additional labor. So, these are time-saving devices. These are helpful for accessibility purposes. They're affordable, in some cases, free. And they're relatively easy to use.

So, you simply turn on the recording, much like you would turn on a Zoom recording or a recording of any other web platform. And in addition to the recording, you get a transcript and a summary. Some of the tools even let you mark highlights so that you can then refer later back to key moments in a live class, whether you're teaching in person, by the way, or online. You can make these recordings in either instance.

And these can be useful for individual meetings with students if they forget to take notes or if you want to make sure they refer back to what you talked about. They can be useful for really a variety of contexts, including meetings with colleagues, faculty meetings, as well as for live teaching sessions.

In conclusion, AI can be a great tool for us as educators in serving students and helping us create really great multimedia materials. It can help us create visuals. It can help us create diagrams, and presentations, and slides. It can also help us create audio and video materials that we share with students, and even transcripts of sessions that we lead as part of our teaching process.

So AI is a wide range of tools, encompasses so many different things that we can do for the benefit of our students. And it has several core benefits to us as educators. It's really a time-saving series of tools that help us to focus our attention on serving our students by being the creative humans that we are. We can allow the AI to do some of the more menial, technical tasks for us so we have time to meet with students, to design

creative, engaging, live lessons, and to devote ourselves to the creative aspects of teaching that brought us into this field in the first place.

So if you are someone who likes using multimedia tools, who benefits from engaging students through audio-visuals, I encourage you to explore the powerful set of tools that AI now gives us as educators. If you're interested in more on these tools, on these AI tools for generating multimedia, I encourage you to check out Wonder Tools, which is a newsletter that I write to help provide free guidance to educators and others on how we can make the most of AI tools. It's wondertools.substack.com. And I welcome your collaboration in future projects and look forward to hearing from you about how you use AI in your own teaching practice.

Thank you!

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