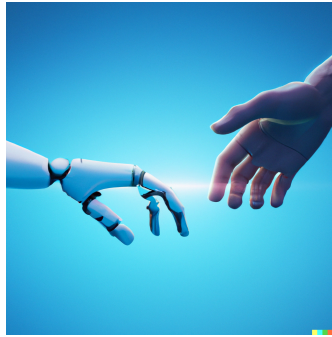


## ChatGPT: Understanding the new landscape and short-term solutions

- [Cynthia Alby](#), Co-Author of [Learning That Matters: A Field Guide to Course Design for Transformative Education](#) (for more of my articles and interviews on AI, [click here](#))



I hope the following will be a help to instructors who are concerned about their students using sites like OpenAI's [ChatGPT](#) to complete assignments. **However, my greatest hope is that readers will view these as short-term solutions. The increasing prevalence of quality AI (and the recognition that it will get better very quickly) must be an opportunity to reimagine education. While I actively detest some of the suggestions I am making, I know we need to buy some time.** If we move forward wisely in the coming months, I believe we can create a world in which students are so devoted to meaningful learning that they wouldn't dream of utilizing AI in ways that diminish that learning. The greatest mistake we could make at this point would be to clamp down and focus on increasing punishment and surveillance. As [Daniel Herman](#) points out, "The question isn't, 'How will we get around this?' but rather, 'Is this still worth doing?'" (Spoiler alert: there may be a lot that isn't worth doing anymore.)

Please "[Raise your hand, send the email](#)" so that we can get out ahead of this in the most positive ways possible and share the following link, which will lead your colleagues to this and other useful documents: <https://learningthatmatters.weebly.com/resources.html>

**Problem: I fooled around with ChatGPT and it didn't seem like much of a threat**

### **Suggestions:**

Play around with it some more. What I have noticed is that it is only as good as the prompt you enter, and by adding additional "tweaking prompts," such as "Improve the paragraph with a stronger argument and better clarity" and then "Include author X in the argument," it can turn out

something pretty darn good. Expect more and better in the coming months. Go “meta” and try using a prompt like, “What are examples of assignments in the field of (your field or course topic here) that would not lend themselves to being completed by ChatGPT or other AI?”

The only faculty I can imagine not being alarmed are those who already only use assignments that are not writing-focused, cannot be replicated by AI, or are so meaningful to students that they wouldn’t want to use AI. For example, students who are taking a poetry writing class because they want to be poets are unlikely to ask ChatGPT to write poems for them (although it can). It isn’t going to help a student “direct a one-act play” or “design and implement a program for food insecure students on campus.”

**Problem: I want to experiment with AI but the sites are currently overwhelmed with traffic.**

**Suggestions:**

There is no substitute for putting in your own prompt and watching it churn out a decent response in no time at all, but until you can do that, there are some excellent articles you may want to take a look at such as [The Mechanical Professor](#) by Ethan Mollick, [The End High of School English](#) by Daniel Herman, and [No, ChatGPT is Not the End of High School English](#) by Peter Greene. This [collection of prompts and responses](#) by Lance Eaton gives a sense of what ChatGPT is capable of. These are just a few of the first published, but by the time you are reading this, there are sure to be plenty more. Want to freak yourself out via video? [Here you go](#). ChatGPT now has a “playground” that isn’t quite the quality of their regular site but will give you a sense of how it works.

**Problem: I usually use plagiarism software, and that won’t work with ChatGPT. I also don’t have time to run each piece through a detector one by one.**

**Suggestion:**

[This detector](#) can detect to what extent a piece was written by AI, but it isn’t terribly difficult for students to use the detector themselves to tweak the piece until it “passes.” I don’t think that focusing on detecting AI writing is going to be a viable solution even in the short term. I made two small changes to a ChatGPT piece, and those brought it down to 95% fake, but then I changed, “I can generate text that is **similar in style** to text...” to “I can generate text that is **similar style-wise** to text” and that one change dropped it to only 9.65% fake. Then a colleague noted that you can just ask ChatGPT to re-write a piece it has written to be undetectable, and it can. Basically, every detector that currently exists (and I check them all as they come out) is easily defeated.

**Problem: I usually have students write reflections or answer prompts over assigned readings to ensure that they have read them, now they could probably use ChatGPT for that.**

**Suggestions:**

1. Have students read and annotate using social annotation apps such as [Perusall](#) (my fav) or [Hypothes.is](#). Not only would it be far too time-consuming to use AI to annotate in such a context, but students often find the conversation so meaningful that they wouldn't want to turn to AI.
2. Focus on prompts that ask students to apply the reading to their own lives or personal contexts (They *could* still use AI for this but would be less likely to, and it would be complicated.)

**Problem: Some or all of my current assignments could be completed well by students who understand the nuances of using AI and are willing to spend a few minutes tweaking.**

**Suggestions:**

1. A simple solution is to require that written assignments be completed by hand in class, but of course, this limits the length and depth of the assignment and wouldn't work for online courses.
2. Update basic writing assignments such as short answers, simple essays, and reflections by asking students to create mind maps instead or to write the assignment using "track changes" in Word or in "suggesting mode" in Google Docs.
3. Replace traditional writing-focused assignments with authentic "[performance tasks](#)" focused on artifacts that are visual or audio such as podcasts, videos, debates, speeches, interviews, drawings, diagrams, peer instruction, scale models, storyboards, performances, displays, multimedia projects, "[UnEssays](#)," field studies, analysis of specific data sets, original research, etc. Could AI generate the script for something like a podcast? Yes. But if that were to happen, at least one could hope that some significant learning could still occur in the act of translating that into a podcast. [Learning That Matters](#) has several practical chapters on designing these kinds of assignments and assessments.
4. For the moment at least, writing assignments that require close reading or extensive citation and analysis are difficult to replicate with AI as are writing assignments that ask students to make connections between what they are reading and their own lives. It is also drawing from a database that ends in 2021, so you could ask students to make connections between the content and very recent events.
5. Design assignments that ask students to actively engage with AI and use it productively and ethically.

6. Engage students in a series of discussions in which students self-persuade. Rather than being lectured by you on how this is detrimental to significant learning (how well has *that* worked in the past?), they have the opportunity to come to that conclusion for themselves.
7. Go to great lengths to ensure that students see meaning and purpose in what you assign. Help them understand how putting in the effort to complete a given assignment without external assistance will benefit them in ways that truly matter.

**Problem: Testing in the online environment was already problematic, and now it feels even more so.**

**Suggestions:**

Some possibilities might include

1. Replace tests with applied projects such as the “performance tasks” described above
2. Replace written tests with [oral exams](#). You might find you enjoy them more than you thought you would!

I am hoping we can reach a point where students study and self-quiz on their own to ensure they’ve got the basics, freeing up faculty to focus on what really matters – exceptional, tailored feedback, mentoring, and helping students apply what they’ve learned.

**Problem: I don’t want to turn to less-than-optimal solutions. Is there a way I could go straight for something more ideal?**

**Suggestion:**

My friend Marguerite Koepke likes to tell the story of when she wrote a grant to buy everything her landscape architect students would need to create ePortfolios back when those were cutting edge. The first day of class arrived, she showed them the room full of newfangled everything and said, “I have no idea how to use any of this, but I DO know what a quality portfolio should look like. We’re going to spend this semester working together to figure out how all this functions so you can create state-of-the-art ePortfolios.” The class figured it out together and taught one another. She says it was the most significant learning she ever witnessed and her own learning increased considerably as well. What if we did that? What if we walked into class and said, “Usually my course looks like \_\_\_\_, but we’re entering a new world right now where these assignments don’t make sense anymore. What if we worked together to figure out how to work wisely with AI to do things you never dreamed you’d be able to do?” What if we told students what we hoped they would get out of the course and then helped them imagine personalized and interesting ways they could work with AI to create projects that demonstrate their learning in novel ways?

I like the idea of inviting students to play with ChatGPT, especially since the likelihood that they will need to work with AI on the job later are high. But I also wouldn't *require* students to use it. With any technology but especially relatively unknown ones, there are issues. In this case, I would want students to be aware of potential [privacy concerns](#), [biases](#), and its ability to produce [convincing misinformation](#).

1. I suspect students could learn more than you would expect about the content of your course while playing with ChatGPT. They could work on teams to experiment with what different prompts and tweaks produce, asking it to write in different styles, and most importantly for learning, analyzing the quality of the results in terms of accuracy of information, logic, style, depth, and so on.
2. This could be an interesting opportunity to get students more interested in revision. Ask them to have ChatGPT write the first draft for them, and then ask them to revise the heck out of that, explaining their thought processes.
3. ChatGPT is good at providing choices. For example, for a recent article, I asked it to give me ten more interesting titles than the one I was currently using. Students could ask it to generate a number of possible alternatives and then debate which is the best.
4. I get stuck or stalled sometimes when I write, but I find that for more novice writers, these can be significant roadblocks. Here is where AI could be a true windfall. Help students experiment with how AI can help them get ideas flowing both in the initial stages of writing and when they get blocked or need a boost in later stages.

The best articles I have found on helping students work with AI are Glenn Kleiman's [Teaching Students to Write with AI](#) (his piece also does a wonderful job explaining issues with AI) and Eric Prochaska's [Embrace the bot: Designing assignments in the face of AI](#).

### **Problem: Is it true that ChatGPT makes things up?**

Heavens, yes! All the time! ChatGPT can lie beautifully. I asked it, "Write a 500-word literature review on culturally relevant pedagogy in APA style with six in-text citations and references at the end." This is not asking a lot, as so much has been written on this topic. The result was lovely, although it only referenced two works (3 times each). Here is an excerpt plus the references. Can you spot the problem (aside from the fact that ChatGPT doesn't italicize its APA)?

"One key component of culturally relevant pedagogy is the use of culturally responsive teaching methods (Gay, 2000). This involves using teaching strategies that are responsive to the cultural backgrounds and experiences of students, such as using culturally relevant examples in lesson

plans and incorporating students' cultural experiences and perspectives into discussions and activities (Lloyd & Bowers, 2010)."

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.

Lloyd, D., & Bowers, A. (2010). Culturally relevant pedagogy: A review of the literature. *Review of Educational Research*, 80(2), 207-246.

You probably can't spot the problem because that second reference looks legit, but it is completely made up. Even in the simplest lit reviews, it makes things up. I even got it to make up perfectly legitimate-sounding quotations with page numbers to go along with its fake references. In this sort of prompt, I am not saying that it occasionally makes things up, I am saying that OpenAI's GPTs seem to MOSTLY make things up. The good news is that the newer OpenAI GPT-4 is far more reliable and Bing's Chat even provides links for ease of checking.

### **Problem: Are instructors going to be replaced by AI?**

#### **Answer:**

It depends. For much of our history, education has leaned heavily on asking students to witness, record, and repeat back *our* learning with a focus on memorization of facts and concepts. AI can probably accomplish that. We've claimed that we were "teaching students how to *think*," but were we? How much of what we teach students is what they asked for vs. what we told them they needed? How clear have we made the purpose and benefits? To what extent have we worked toward a focus on the intrinsic joys and humanity of teaching and learning both for ourselves and our students? There is so much we can do that AI cannot, but it will require a significant change in our paradigm to play to our strengths. Still, I feel confident that such a paradigm would result in the re-enchantment of learning for students and teachers alike.

On the plus side, ChatGPT looks like it will be more effective than Grammarly or other similar sites in terms of helping students make their writing more polished and technically sound, so you should be able to spend less time on those types of issues and more time focused on the ideas and how well they are supported. [Marc Watkins](#) got me excited about the many ways AI can extend student learning. And it looks like AI is close to being able to provide decent feedback on student work based on a rubric. It is unlikely to be able to give anything close to the tailored feedback you can give, but it would allow students to get better quality feedback before handing their work over to you and their classmates.

I know some courses are almost completely focused on memorizing foundation knowledge. If you gave students the same test in a month or a year, how much would they still remember? If the

answer isn't "a substantial percentage," then what are we doing? What if instead, we worked together to create some remarkably interesting and interactive modules designed specifically to make this type of foundational learning "stick" and then focused more of the course on application, helping students extend what they can accomplish with the help of AI?

**Problem: I want to start thinking about how to (cautiously) embrace AI and what this could mean for education, but I don't know where to look.**

**Answer:**

Your wish is my command! I'll keep adding to this list below and [this one](#) as I come across excellent pieces, so keep returning here. If you come across information that goes beyond what I have referenced already, please email me at [cynthia.alby@gcsu.edu](mailto:cynthia.alby@gcsu.edu).

**Further reading and listening:**

- [How high schools should change for an era of AI and Robots](#), an episode of the Podcast *Edsurge* with Jeff Young. His interview with the authors of *Running with Robots* is helpful and inspiring for both high school AND higher ed faculty.
- [AI is here - If we fight it, we'll lose and so will our students](#) by Dara Ryder
- [Can ChatGPT be a blessing?](#) My follow-up to this piece
- [AI and the Limits of Language](#) by Jacob Browning and Yann Lecun. "Once we abandon old assumptions about the connection between thought and language, it is clear that these systems are doomed to a shallow understanding that will never approximate the full-bodied thinking we see in humans."
- Or for a mind-altering deep dive, consider [Ways of Being: Animals, Plants, Machines: The Search for a Planetary Intelligence](#) by James Bridle. It includes a discussion of a computer made of live crabs. Just sayin'.

**Problem: I think my institution needs to act fast to get out ahead of this. What could we be doing?**

**Suggestions:**

Hopefully, this piece will be a good start for individual faculty members to prepare for the coming semester. But as for institutions, I'd recommend that they consider doing something along the lines of what [Lance Eaton](#) at "College Unbound" told me they are planning. In an email, he explained, "We launched an anonymous survey out to students to ask them about their usage of the tool, what value they were deriving and what they think this tool should be used for. We also asked if they wanted to share their contact info and be part of the committee that helps to

propose policy in the usage of this tool since there are many positive ways it could help students and we'd rather not throw out the tool or ignore that it exists. We're also potentially working towards creating a 1 credit-course that students can take to actively participate in exploring ChatGPT, its usefulness to education, and what a good policy for ChatGTP and other AI tools would look like." I told him they should win the prize for getting out in front of this the fastest AND responding so positively.

**Opportunity: How do we move from solving the discrete issues that ChatGPT presents and instead work towards solving the larger issues that this particular issue has brought to the surface?**

**Answer:**

So glad you asked! Check out the companion article, [The nail in the coffin: How AI could be the impetus to reimagine education](#)

**Have you read anything new lately you'd recommend?**

**Answer:**

Yes, and I am dying to share! For a while, I was doing an article a day, but things are slowing down a little, so I'll add here when there are new developments. To view more of my articles and interviews on AI, [click here](#))

- **6.8** I am somehow just getting around to listening to the great work NYT journalist Ezra Klein is doing around the broader questions of what AI means for work and for humanity. I particularly learned a lot from [this podcast interview](#)
- **6.3** It is difficult not to recommend every post that Ethan Mollick makes (Seriously. Just go read all of them.). [This one](#) makes a very convincing argument for how a) the ubiquity of AI in apps we all use is going to make the temptation to use it very strong and b) it might be *unethical* NOT to use it in some cases
- **5.14** I am particularly interested in the newer AIs' abilities to translate. I'm going to recommend here [my own experiments](#) comparing Google Translate with ChatGPT, GPT-4, and Bing Chat. (Email me if you are fluent and want to add comments.) Add to that [some recent research](#) that demonstrates how your voice can be translated into another language in real-time and it will sound like you and maintain the appropriate intonation. We seem close to earbuds that will allow you to have *high-quality* conversations with anyone in any major language.



- **5.2** You thought AI couldn't be creative? Did you think it couldn't BE an analyst? You'd be wrong. My only quibble is with the title, [Things are Starting to Get Strange](#). "Starting to?" Dude, that ship sailed months ago.
- **4.27** An AI feelgood story: [students using AI for good](#)
- **4.21** Ethan Mollick remains top of my list with recent articles on [using AI to create educational games and simulations and updated information on quality prompting](#)
- **4.5** [Will ChatGPT change how professors assess learning?](#) The title says it all, and the answer will be "yes."
- **3.22** How do we site AI? Here's what [MLA](#) has decided. But I don't like it.
- **Thursday 2.17** I've lost track of how many times I've been creeped out by AI in the past 8 weeks, but [this is by far the most creepy](#). Why did the bot name itself "Sydney"? Why does it use so many emojis? I have a lot of questions.
- **Wednesday 2.15** Just when we were hoping it would take a while for AI to get better at citations and references, [along comes Bing's AI](#). AI, please let me have a week where nothing happens!
- **Tuesday 2.14** It seems wrong to share an article about ChatGPT's "[deranged alter ego](#)" on Valentine's day, but you need to know
- **Monday 2.13** Are there any plans to regulate this type of AI? There isn't much out there about that, but this article from [Kadia Goba](#) was helpful.
- **Wednesday 2.8 through Friday 2.10** I was out of town for a few days and fell behind, but this one is three days' worth of crazy. I'm calling this, "The one where Ethan Mollick does NOT make me feel better." With a photograph, 60 seconds of audio of yourself, and about 10\$ worth of AI, you can create a 100% AI-generated video lecture. [Here's how](#).
- **Tuesday 2.7** Now Google enters the fray with "[Bard](#)," which is not yet available to the general public but may be more factually accurate than ChatGPT. One wonders if all the competition might end up keeping prices lower for these types of AI when they begin charging.
- **Monday 2.6** Listen in as [Robert Cummings and Marc Watkins](#), people who have been thinking about AI and writing far longer than most of us, talk about how to prepare students for the increasing prevalence of AI in our lives and work
- **Friday 2.3** I think this move is going to make ChatGPT feel more acceptable and less like plagiarism to students: [Ghostwriter add-in brings ChatGPT integration to Microsoft Word](#)
- **Thursday 2.2** For my math friends, [ChatGPT update: Improved math capabilities](#)
- **Wednesday 2.1** Statement on Artificial Intelligence Writing Tools in Writing Across the Curriculum Settings: [A Statement from the AWAC Executive Committee](#)
- **Tuesday 1.31** Open AI just released [its own detector](#) in order to help schools detect AI-created documents. In case you were wondering how good it is, they openly admit that it only detects correctly 26% of the time. Why did they even bother?

- **Monday 1.30** In [Wonder tools: 7 ways to use ChatGPT](#), Jeremy Caplan not only discusses interesting uses for the bot but he has also curated several articles that discuss how to write a good prompt, which is absolutely critical with this technology.
- **Friday 1.27** The one where [Ethan Mollick](#) makes me feel better
- **Thursday 1.26** From the Chronicle, [When the Cat Destroys Your Sweater, Knit Something New](#). "...during the pandemic, our cat got to the sweater. 'Ever since,' Masland said, 'instructors have been mending furiously. We're trying to get the sweater back the way it was, but maybe we'd be better served to look at the ball of yarn and be like: Ya'll, I think this might be a potholder now.'"
- **Wednesday 1.25** And for my College of Business friends, see Christian Terwiesch's [Would ChatGPT Get a Wharton MBA? A Prediction Based on Its Performance in the Operations Management Course](#).
- **Tuesday 1.24** Science folks, you are going to want to see this article on ChatGPT from the journal, Nature: [Abstracts Written by ChatGPT Fool Scientists](#).
- **Monday 1.23** For those of you who teach writing or incorporate a lot of writing in your courses, I suspect you will enjoy this podcast episode: [Teaching Writing in an Age of AI](#) with John Warner.
- **Friday 1.20** Autumm Caines' [Prior to \(or Instead of\) Using ChatGPT with Your Students](#). Would you like to hear from an instructional designer who has collected an excellent list of legitimate reasons why you might NOT want to have your students use ChatGPT?
- **Thursday 1.19** Glenn M. Kleiman's [Teaching Students to Write with AI: The SPACE Framework](#) – So much more than the title suggests! This article provides practical ideas for using AI in the classroom but also excellent examples of concerns we need to be aware of. I keep coming back to this article.
- **Wednesday 1.18** NPR's On Point, [How AI chatbots are changing how we write and who we trust](#). I tend to focus narrowly on how AI affects education, and this episode helped me better understand the broader picture.
- **Tuesday 1.17** Open AI's ChatGPT is getting a lot of attention, but have you played with their image generator, [DALL-E2](#)? Tell it what you want an image of, and it creates it. You know, just in case you need a painting of a white pit bull in the style of Vermeer or Matisse or wearing a crown.



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