## **Episode 126: Anna Mills**

**Transcript** 

Welcome to Pedagogue, a podcast about teachers talking writing. I'm your host, Shane Wood.

In this episode, Anna Mills talks about teaching at a two-year college digital tools for annotation, artificial intelligence, and writing, and open educational resources.

Anna Mills teaches English at the College of Marin and previously taught at City College of San Francisco for 17 years. She's the author of an open educational resource textbook, *How Arguments Work: A Guide to Writing and Analyzing Texts in College*, which has been praised on OER review sites and used at over 35 colleges. She's a recipient of an Open Education Research fellowship and currently serves as the English discipline lead for the Academic Senate of the California Community College's OER Initiative. Anna earned a master's degree from Beddington College in writing and literature with a focus on non-fiction writing. Her essays have appeared in journals such as *The Writer's Chronicle* and *The Sun*. Recently, she has focused on exploring how writing instructors can respond to the accessibility of large language models and taken to tweeting about AI text generators. You can follow her on Twitter @englishoer.

Anna, thanks so much for joining us.

SW: Let's start with teaching at a two-year college—you taught at City College of San Francisco for 17 years. What was it like to teach at CCSF and what classroom practices, strategies, approaches to teaching did you find worked most effectively in your institutional context?

AM: Well, I really fell in love with City College when I started working there in 2001. It's an amazing place. It's incredibly diverse: our demographics are about a third Asian, a quarter Latinx, a fifth white, lots of immigrants, children of immigrants, Generation 1.5, probably a plurality working class, but also middle class and privileged students in significant numbers, lots of queer students. We have a big age range, people looking for themselves, mid-career, coming back to school, lots of students with different kinds of disabilities, just an incredible range. I think what that means in the classroom—especially now that we've transitioned away from offering a lot of remedial developmental courses, now we've got everybody in our introductory composition course together—we have such a range of skills, and we really want to serve everybody in an equity minded way.

That's the context. We have to have a lot of flexibility but use a lot of different strategies. We want to do it well at all levels. I think we do a lot of teaching writing as process, of course, scaffolding, bringing in social dynamics into each stage of the writing process with attention to affective engagement and close reading. We have a huge department with a lot of approaches, but these are just a few things that stand out as very common. We tend to have a social justice orientation, and we like to use driving questions or class themes for composition to have something to focus the conversation around in the course of the semester. I think that's the snapshot of the college that I'm coming from.

It's very eclectic and hybrid. I want it to be organic and meaningful to students in a personal way. I want to develop relationships and teach through relationships, and I have a background as a creative writer. At the same time, I was really influenced by this idea of cultural capital. Here's what the language of power looks like and here's what people do to make moves within the power structure, right? If we don't do that, then we're allowing inequity to increase, right? I really have gravitated toward learning how can I help students in really concrete ways with concrete strategies for writing essays and reading and sort of speaking a language of power when they choose to, right? For allowing the possibility, all the possibilities for code meshing, right?

Students can make those choices, and that's kind of led to this approach in my textbook that I'll talk about later that involves using templates. I also teach hybrids, so, you know, critical digital pedagogy, looking at how can we use these tools and not hype them up. I've been using a lot of social annotation especially and kind of leading workshops in my department about that. I'm very jazzed about seeing students support each other and engage in the margins of the text right alongside it as they read. Those are just a few things that I'm into lately.

*SW:* What digital tools do you use for annotation?

AM: I currently use Perusal. Before that, I used Hypothes.is. My institution didn't go for doing the institutional subscription, so we went to what we could do for free, which was Perusal. I see real strengths and weaknesses in both platforms, but I've loved working with both platforms overall. I've also seen teachers using Google Docs and making that work. But I really love that anytime I assign reading, it's in Perusal it has kind of a social media feel. They're responding to each other's posts and liking each other's posts. I've had a lot of positive feedback about that from students at the end of the semester.

SW: Anna, your teaching and research interests focus on studying artificial intelligence. What got you interested in this work and what do you find most concerning about artificial intelligence in terms of its influence on the teaching and learning of writing?

AM: Well, this is kind of a recent intensive focus of mine. As I learned about AI text generators and what they could do, I couldn't believe it. I had to stop drinking black tea because I was just so worked up. I couldn't believe this was possible. It happened because a friend of mine who's a sociologist was giving a talk on AI and medicine and how it might lead to health disparities or greater health disparities. She encouraged me to say, "How does this relate to your field?" There's a couple of introductory New Yorker articles and New York Times articles about the current state of large language models, artificial intelligence, text generation. I was pretty amazed.

I think most people are familiar with email auto complete features that are on most platforms now. The idea that you feed a few words and it tries to guess how you're likely to continue that. That happens with searches as well; with Google, search a couple words and it guesses what's the rest of the search string going to be. I think one way to think about what the AI text generators do is just to think, well, what if you could feed it a couple of paragraphs and it would give you a couple of paragraphs of its own back? It would guess how would you continue from where you started? That's essentially what these tools can do, and they are freely available.

They're not free except in trial versions, but they're fairly cheap. I started to experiment with the main model that's widely available, which is called GPT3. It's from a company called Open AI, and they just allow you to make an account, and it's non-technical. You're not coding, you are writing what you want it to give you. Then you're sort of tweaking the settings and trying it, getting different multi-paragraph responses. The thing that's bizarre is that even though it's trained on much of the internet, it's not feeding you text that's plagiarized. It's not feeding you paragraphs from Wikipedia; it's actually generating original sentences and paragraphs. If you give it the same prompt three times, it can give you three different paragraphs, and it's pretty much grammatically correct.

It has problems. Sometimes it will get things wrong; sometimes it will contradict itself. It has no connection to reality. It's not testing anything it says against any other sources. All it's doing is using its statistical knowledge of this huge volume of text that includes Reddit and Wikipedia and much of the internet. It's just using those statistics on that data to predict which words might come next. It can do quite a bit more than I imagined. I thought, "Oh, that's in the future, right?" This is a tool that is now available to students. If you get on TikTok or on YouTube, there're definitely quite a few videos of students saying, "Hey, you know, if you need to write your essay quickly, just use GPT3. It's like ten minutes, there's your essay. And it's free." They're promoting it. You also have a lot of anecdotal discussions on Twitter from academics who have been trying prompts on it and saying, "It's spitting out a C paper or a B paper, and I wouldn't be able to detect that this is AI writing and not student writing."

You have plenty of anecdotal evidence. I haven't seen a peer reviewed study, but I have seen a non-peer reviewed study that showed maybe it's getting Cs, but clearly we don't have a set way to handle this as teachers. Is it plagiarism? It can't be detected using plagiarism detectors. It's not going to show up on Turn It In. Institutions don't have policy set around it. Should we be concerned? I'm going to make the case that we should make a big effort to learn about it and have some major discussions in which we try to come up with guidelines for teaching students about this and for making it really clear how and whether they're allowed to use these tools.

SW: What do you feel like can be done about this, and how do you navigate this conversation with students? I imagine conversations with students about AI and writing generators is a good place to start. Then, what's next? What else can teachers and programs and the field do in terms of research and response to this work?

AM: There's so many possibilities, and I've started to see so many ideas thrown around on Twitter for different approaches. One approach is to say, maybe we don't need to worry about it because we need to focus on say, ungrading and intrinsic motivation and showing students we just need to educate them on why they don't need that tool and help them see the value in the writing process itself without such tools. I think that's one approach. I think the danger to that is that you're going to have some students using it and you could see increasing inequity because you have privileged students who are aware of it and who are using it, and less privileged students maybe who are not. I think that some form of critical AI literacy is going to become part of the digital literacy that we're all needing to teach because this is just going to be a bigger part of society and of everything we do.

But as far as how do we respond in terms of assessment, I've seen definitely there are various defensive postures. People saying this can become part of an honor system. We could ask them to affirm that they have not used these tools as many institutions ask them to affirm they haven't plagiarized, and develop stronger norms around that. That's one option. Another option would be to try to design prompts that GPT3 or other language models are very bad at. There's a range of performance, and depending on what kind of prompt you give it, it does better or worse. I know a teacher who says, "Well, if I ask students to refer to class discussion, and if I ask them to draw on or compare, that's harder for the model to do because you can only feed it a prompt of a certain length."

You have to start kind of playing with it in a way that's more like coding in order to get it to do longer pieces. People have gotten it to write novels and stuff, but there's a lot of steps along the way. We can design and test our writing prompts to evade it or make it harder for students to use it, or they could only use it for a paragraph of that, or they'd have to write part of the paragraph and let it continue. It's not good at finding sources that are real. It makes up sources; it makes up pretty credible sounding sources. If we had a tool where we could check those for reality, that would be nice. And, and my first instinct was to say, well, I don't want to be defensive.

I want to know how could we use this as part of our pedagogy? If this is going to be part of the world of tools that are available to students, it's going to be part of the working world. Marketing writers, web content writers are using this extensively already. We should be accepting maybe that students are going to be doing this working collaboratively with AI in kind of an intelligence augmentation model, not letting it take over, but working with it. Maybe our role will be to help them learn to do that dance where they prompt it and then they assess its response and revise it and prompt it again and sort of tweak the prompt. There's a lot of critical thinking involved in trying to use these tools, so one way we could go would be that.

SW: As a teacher, you're also dedicated to open educational resources. Can you talk more about your interest and investment in OER? I want to give you space and time to talk about your textbook, How Arguments Work. What's this OER text about and how does it help teachers and students better understand argumentation?

AM: I discovered OER three years ago. It's just tremendously exciting that there is this way that it has so many affordances on so many levels. One, you're making the textbooks free. Studies have shown that you have increased retention of students and disproportionately increased for low-income students and students of color, and you have increased achievement. In part, that's just based on removing the barrier of cost, right? So that's the simple level. But on another level, as far as the power relationship between student and teacher and between teachers and publishers, it really changes the dynamics. As a teacher, I was able to make a textbook, write a good part of it and publish it, continually update it, and ask my students for feedback on it and change it in response. I was able also to adapt chapters from other composition textbooks that I liked.

I was able to get in and actually edit what those other writers had done and put the new version into my textbook. It's this incredible collaborative model, where the textbook is this living thing and you're working with all these colleagues and what you're creating is open to others to adapt and remix. And it's open to student involvement, so I can talk to students about my process with

the textbook. They're reading it, I'm saying, "I'm hoping this is helpful, but let me know what doesn't make sense and what else you need." I talk to them about my struggles as a writer in creating the textbook that they're reading. It's very equalizing.

I find myself referring students so much to this extremely popular tiny textbook that is kind of an easy reference. *The Moves We Make in Academic Writing* by Graff and Birkenstein. I think what I liked about that was there's this sense of, "Oh, I could do that. I know that phrase; I've seen that before. I could start something that way." I get that a lot from students at the margins, like, "Yeah, oh, I could use this." I think people fear that templates are kind of a cookie cutter thing that's part of standardizing education. I see it mostly in the opposite way that it's a generative offering because it's expanding the sense that students have of what moves they could make in the chapters on critical assessment and responding to an argument. The sense is there are several sort of bread and butter ways that we can critique an argument and here are phrases we might use to do that, right?

It's a very non-technical approach to logos and fallacies really sorted out according to what kind of move is it that we're making here in relation to a text that we might commonly make doing common college writing tasks. For each page where there's kind of a logos concept or a fallacy concept described in everyday language. There are also a set of phrases that the student could use to make that move. Pointing these things out explicitly, I think increases the range of options that students feel they have for making something that's their own contribution that takes the conversation forward, that's not just reading the text and doing what the teacher said, but making something that's their own. I do feel like it has that potential to lead to more originality even though we're providing templates as a way to familiarize students with those moves.

SW: Thanks, Anna. And thank you, Pedagogue listeners and followers. Until next time.