

Episode 163: Emily B. DeJeu

Pedagogue podcast

Transcript

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

In this episode, Emily B. DeJeu talks about teaching business management communication, mixed methods research, professional writing, research proposals, and generative AI.

Emily B. DeJeu is an assistant teaching professor at Carnegie Mellon's Tepper School of Business where she teaches undergraduate and graduate courses in business management communication. Her research interests include argument theory, rhetorical genre theory, professional writing pedagogy, and recently generative AI. Her research has appeared in the *Journal of Business and Technical Communication*, *Written Communication* and *Business and Professional Communication Quarterly*.

Emily, thanks so much for joining us.

SW: You teach in the Tepper School of Business at Carnegie Mellon University. Can you talk more about your position and the classes you teach in business management communication?

EBD: Yeah, sure. Yeah, so my faculty position I think is a little bit unique. I was an English student as an undergrad, and then I did all of my graduate work at Carnegie Mellon University in their English program, specifically their rhetoric program. So very much trained up in a humanities style English setting, but then have migrated over into the Business School for my faculty position.

So, my faculty position gives me a chance to leverage everything I learned during all of my graduate work about professional technical writing and communication for students who don't see themselves as humanities students at all. Maybe they have a passing interest in humanities, but they're very professionally-minded, very vocational in their orientation, and I really enjoyed that. There are some challenges to that, of course. Carnegie Mellon students, Tepper students included, they're very STEM-oriented students. So the Tepper students, they're business administration students, but the programs that they tend to pursue are data analytics, very data heavy kinds of programs, and so those students I think come in with what I would call a healthy skepticism of communication. It sounds sort of mushy and vague and soft. I think a lot of them think there's not really content there like there is in my math classes, in my stats classes, in my finance classes. So, I imagine that could for some faculty members be a real problem.

For me, I see that as a really cool challenge, because I think before I can get any buy-in, I have to sell students on the idea that there is content there, that it is discreet, I can name it, I can show it to them, they can practice and improve, and then it becomes like a usable tool. I have to sell them on that idea before I can teach them any of those tools. So it's been a challenge, but I'm kind of honing that over at Tepper and it's been really exciting. So, I very much see myself as taking all of this humanities training I got from my bachelor's, master's and PhD and showing students who might not have any appreciation for the humanities, how it can benefit them professionally. Then

once they buy-in, how it could even maybe grow them intellectually a little bit, help them think more about what does it mean to be a person trying to make change, or persuade others or make important human connections. Of course, the dream is that by the end these STEM-minded students who come in a little skeptical will leave the class much less skeptical and embracing the value that a humanities style course could offer them.

SW: Emily, I'm interested in how teachers train in the humanities adapt their teaching philosophies and practices to other classroom environments and disciplines to meet the needs of their students. You received your PhD in rhetoric, which is in the Department of English in the College of Humanities and Social Sciences at Carnegie Mellon. Now you teach in the School of Business, one of the top ranked business programs in the nation. What approach to teaching and or what practices have been most effective for your business and STEM students?

EBD: Right, right. Yeah, definitely. So, I connected early in my graduate work with Dr. Joanna Wolfe. She's in the English department at Carnegie Mellon. She's a real expert in STEM communication, engineering communication. She does a lot with data-driven communication, and she has really kind of shaped how I think about instruction. One of the things I learned from her, and I learned this a little bit ... when I was an undergraduate, I was an English major, a literature major, but then I quickly was like, "I should probably think about a job," and so I added education to my major.

So, I graduated with my bachelor's degree in English and also a secondary teaching license. So I worked as a middle school language arts teacher for a couple years, so I kind of learned this then, and then it was sort of codified and solidified working with Dr. Wolfe, and that's the value of really explicit teaching. I think that idea of the curse of knowledge, as you become more expert in something, ideas that are abstracted become more and more attractive to you and interesting to you and challenging, because the foundational layer under that abstraction, all of the concrete ideas you're just expert in, and so it becomes really interesting to layer on abstracted philosophical questions and discussions.

I think the challenge is when that's your orientation and then you're facing students for whom that concrete layer is not there, if you enter in at that abstracted philosophical layer, you just lose them and there's no hooks for them to grab onto. It's easy for them to immediately reject it wholesale and say, "Well, there's nothing here for me. This is useless, it's all intangible." So I really believe in the value of explicit teaching, that is taking concepts and making them highly accessible. So, in some courses that would be maybe tangible demonstrations or tangible things. In rhetoric and writing instruction, what I've learned is the value of really, really clear examples. So one of the things I do in my course is anytime we talk about let's say the idea of bottom line upfront communication, that's the idea that busy readers are looking for main ideas at the beginnings of things, beginnings of paragraphs, beginnings of sections, subject line of email. So, how do we put that bottom line key idea upfront?

I could talk a lot about cognitive science of reading, and we do a little bit, but I always start my students off with a bad email and we analyze it and say, "What's wrong here? If you were getting this email, what complaints would you have?" We parse it together, and then we get around to,

"Okay, well, what about this version?" We do a revised version with the bottom line upfront, and they say, "Oh, yeah, that's way easier," and we cut out all this unnecessary information. The value of those tangible examples that are examples they might actually encounter or the kinds of messages they would write, I think immediately ground what could feel like sort of mushy vague ideas in a real context or real communication. Then it helps students see, I could actually underline for you or color code for you this abstracted strategy in action, and then you could see and feel the difference as a reader that it makes.

A danger of explicit instruction, of course, is that it oversimplifies or it gets reductive. I've heard other colleagues push back on that commitment to explicit teaching and say, "Well, doesn't that just dumb it down a little bit?" I get that, but in my experience again and again is that once you teach it explicitly, you make it really plain, really actionable, and students, it gets them excited, and it also I think is enabling. It helps students see, "I could do that." I could, in my own writing, I underline and identify and say, here's the problem, here's the fix.

Once they feel secure and that concrete foundation is built, then you can layer on, well, when might a strategy like bottom line upfront not serve you well? When might a particular cultural context mean this isn't the best approach? Or are there times when you want to sort of ease in with polite small talk or context to set a scene before you deliver a piece of bad news? So, you kind of trouble the really simple concrete idea after they feel really secure in that simple concrete idea.

I'd say that pedagogical approach has served me really well, and I think that ultimately has been the thing that by the end of the course helps students say, "Okay, yeah, there's content here, it's actionable. I can name it and I could use it again and again later."

SW: Your research uses mixed methods from corpus analysis to qualitative coding, to experimental classroom practices to analyze genres and processes of professional writing. Do you mind sharing more about your research methods and what you're currently focused on?

EBD: Yeah, sure, sure. So, I think my research methods kind of align with everything I just said about my commitment to really saying, could we make this concrete and visible and plain and really accessible for students who are writing a verse, or students who would say, I am not a communicator? The whole reason I'm at Carnegie Mellon and I'm pursuing a math major or a math-oriented kind of discipline is because I don't see myself as a communicator. So, when I got to Carnegie Mellon ... I like to say Carnegie Mellon can turn anything into math, even words. So when I got on in the English department, I was introduced really early to this tool called DocuScope. This is a tool that it's a couple decades in the making. Dr. David Kaufer, he's now an emeritus professor from the English department, he built this tool with Dr. Suguru Ishizaki.

The whole point of DocuScope was it's a rhetorical approach to corpus analysis. So if there are linguists who listen to your podcast, corpus analysis is real familiar in applied linguistics. You just essentially take parts of speech and it allows you to extrapolate out from language some themes. DocuScope does something similar, but it takes this rhetorical approach. So, it uses a

dictionary method and it essentially takes words and phrases and it connects them to their hypothesized rhetorical effects.

So when you parse a huge corpus with DocuScope, you're not getting counts of nouns and prepositions, you're getting frequencies of facilitative language, or language that signals doubt and uncertainty. Then it gives you an entry into a huge body of text that would be impossible if you sat and tried to read those texts one at a time. I got really interested in that tool, because I thought, "Well, what better way for skeptical students who think language is mysterious, what better way to say, actually no, look, I have some beautiful figures and some statistical analysis that can tell you what this kind of text, this genre is like based on the fact that this tool analyzed 400 of this kind of writing." Then the value of it, I think, is it gives you a sense of what are some big broad patterns.

So as an example, a lot of my dissertation research looked at proposal writing, so I had these corpora of different kinds of proposals, like nonprofit grant proposals, business proposals, civic advocacy proposals. You have all these texts, my first pass was always with DocuScope, and it would tell me, okay, here's what these proposals are like rhetorically, here's the patterns that we're going to see. It's a really nice bird's eye distant view.

Then what it lets you do is when I would go in and start reading samples, I'm not going in blind. I know what to look for, because DocuScope has told me these are the rhetorical characteristics and features of the texts in this corpus. So, that close reading then becomes really qualitative. If that DocuScope reading's quantitative, the close reading gets really qualitative, and that's where I'm creating coding schemas and I'm trying to myself add my own human interpretative level. That I think has served me really well. It lets me make a case that my findings are statistically significant, right? I can actually demonstrate that, because DocuScope lets me do that, but then it also lets me get in the text and show here are passages where this statistically significant rhetorical feature is happening in the text. As you read it, human reader, here's what it does for you, right? Here's how it makes you feel, here's what it makes you think about.

Then in my dissertation research, I was also able to layer onto that some targeted discourse-based interviews. So I was able to say, okay, I know what business plans are like from a DocuScope kind of distant level. I've read them now, I think these are the kinds of arguments that are characterizing the genre, now let me talk to business lenders and entrepreneurs who write these, and then they're able to sketch out context. The methods I'm describing are great for understanding discourse, they don't tell you anything really about why, why that stretch of discourse. You would have to talk to someone who writes or reads those kinds of documents, and they fill in all these contextual details.

I think that kind of mixed method approach, I've really enjoyed it. It's a challenging kind of research to do, but it's interesting. I think it's served me really well in teaching, because I do think when we're talking to students about genre, my students are going to write recommendation reports in a couple weeks, it's a new genre for them. I could talk, again, at a vague abstract level about that genre and what it does and who it's for, but that research, it lets me show them with statistical certainty, here are the kinds of moves and arguments this type of writing uses predictably. Here are some examples of those in the wild, I can actually pull them out and show

you. Then I've talked to people who write this kind of genre and here's what they say about why these arguments are valuable, why these particular moves serve them really well, or why particular moves should probably be avoided in certain contexts. So it just lets me, again, make really explicit and demystify a genre that without that kind of research, I think, would just have to remain sort of abstracted for them.

SW: Emily, you mentioned DocuScope and teaching research proposals. Are you asking students in your professional communication classes to use DocuScope and explore these nuances of genres?

EBD: Yeah, that's a great question. So I have it in my classes, but I will say, this is I guess a plug for CMU's English department, in the last couple of years especially, they have an increasingly user-friendly accessible version of DocuScope. So the English department I know uses DocuScope, the version that you can load onto your machine and is very straightforward. For instance, they have a class called Writing for the Professions, I believe students use it in there, so they do some work with their own proposals and sample proposals.

Other courses I know ask students to feed their own work in addition to other samples into DocuScope to get a sense of what are choices that other writers have made? How are my choices aligning with or departing from those choices that others have made? But I think what you're pointing to is something to be mindful of, so anytime you're doing explicit instruction where you say, let me demystify and make really accessible a genre that you don't know anything about, that is so great, because it gives students a way into that genre, right?

I think it's powerfully enabling. It helps students, again, who are writing a verse, writing seems scary, it helps them enter into a genre that they need to know with some degree of confidence. But I think then once they're there, what we don't want to do of course is give them a script, like a template, because that serves nothing, that nothing about a template-based approach is then transferable to future contexts. So, I think there's this balance between ... so when these students write these recommendation reports, one of the things we talk about right away is a problem solution macrostructure. We talk about how the thesis-driven macrostructure they grew up with or the IMRAD, the introduction, methods, results, discussion, macrostructure that they might get in some of their empirical science classes, that's excellent for academic writing, not highly relevant for professional writing. Problem solution is the name of the game for professionals. But then we talk about, well, problem solution is kind of a big super structure, but how do you adapt that? So, we actually look at four or five different recommendation reports that are real that I've amassed over time. What they see is, "Oh, so here's a variation. This report opens actually not with a problem, but with something different, or this report, it's five different problems and corresponding solutions stitched together." So we kind of trouble that real simple problem solution structure, and we think about why is this writer making this choice and this writer's making this choice?

I think that's productive, because then, again, it gives them an entry point. They have this problem solution framework in mind that's new, they feel confident about using it, but then they know, okay, there's not a template that everybody follows that I'm going to follow. I've got to think about what I'm putting where and why within this familiar stable structure. We do that

again and again. Even with arguments, when you talk about a problem, students often come in right away with, it's pretty negative, it's pretty grim, right? Undergrad students are often real quick to jump onto, this is bad, you're wrong. That's fine, but then we talk about, well, could this alienate a reader? Do you want to come in guns firing, or is there another way to talk about the problem?

We talk about what if you framed it as an opportunity for some kind of future good, or what if you framed it as a need? Or what if you were able to say, "Here are your values, they're my values too. Together we would agree that this is wrong."? So we talk about different strategies for framing a problem in terms that would motivate a powerful stakeholder instead of alienating, but we look at there are variations, there are different ways to do that, and the way you choose could be different depending on your goals and depending on your audience.

SW: Emily, your current research focuses on ethical applications for generative artificial intelligence and professional communication. Can you talk more about this work?

EBD: Yeah, yeah, so this is new. Every listener who listens to your podcast, in late 2022, I like everybody else who teaches writing thought, "Oh my gosh, what's happening?" So I think if I'm honest, out of fear, fear that there is a new technology that seems like it's going to be really disruptive from what I teach, perhaps even my job, I think out of fear, I was like, "I got to learn everything I can about this and get ahead of, so that I can frame myself as knowledgeable about this and won't be caught off guard by it." Fortunately, Carnegie Mellon, of course, is deeply interested in this. It's the home of AI in some ways, and so Tepper is also really kind of at the bleeding edge of how are we going to use this in our courses and sort of train up our business professionals to use this? So, I've gotten a lot of great support from my institution. I have a couple of fellowships that are supporting my research, both in the classroom and outside the classroom.

So, what I'm interested in primarily is my classes are very applied. They're very much teaching students how to engage with the kind of workplace communication tasks they're going to face when they go to their internships and their jobs. So I've been practicing now for a couple of semesters, how do I teach students to use these tools as a kind of writing assistant or a communication assistant? I've had a couple of different iterations. Last semester I did a lot of work, I did a lot of scaffolding, like AI for revision, for ideation, for drafting, for generating metaphors. We did a lot of little practice activities to scaffold students' work, and then I would invite them to use the tools in these ways and ask them to document their process and stuff. This semester I'm taking a little more, I'm actually doing an A/B test with our teaching and learning center, the Eberly Center at Carnegie Mellon. I'm sort of testing to what extent do students need and benefit from a lot of scaffolded instruction and using artificial intelligence to help them write and communicate, or to what extent, if you set them loose, will they figure it out without all that support?

So, I'm excited about that study. It should give me a better sense of how much time in the classroom do I need to spend on this. I have totally let go of the idea that I can police and manage this for students. We can't detect it, students are using it, so I'm taking a much more use

it in any way that you want, be ready at the end of the semester to document for me, I'm doing a pre-post survey, document how you used it and your thoughts on that use.

Because of that, I am changing some of my assignments, so I'm testing out this semester too, I have an assignment, instead of making the end deliverable, the message they would compose, instead of making that the focus, it's more of a portfolio assignment. I'm asking them to walk me through their use of AI and the iterative drafts they create, because I figure if they're using it and the focus is just this end product message, what am I evaluating?

But I'm hoping that process portfolio approach will ... even if students are really relying a lot on AI to draft and revise and help them communicate, at least the process of documenting those revisions and thinking about them and reflecting on them I think could be a really useful process for students and produce some learning gains. So, that's a little bit about what I'm doing. I am also helping students ... we're kind of grappling with some of the ethical questions. So I don't have a background in ethics, but I am interested in this. I had a research article in the Journal of Business and Tech Communication about the ethics of negative messaging. So I'm kind of interested in this, like helping students think about more or less ethical communication. So one of the things I'm leaning into this semester with them, we're talking about this uninterrogated value of efficiency. AI makes everything faster, so there's an expert out of Wharton. He was on LinkedIn the other day saying, "Look, you can prompt, with one prompt ..." I think it was like, "Write me a report about ... update me about Tesla in the last year, Tesla's changes to the business model." It generated this little report really fast, and then in 47 seconds it turned that report into a PowerPoint presentation. This expert was saying, "Wow, isn't this amazing? One prompt, a couple minutes, two deliverables that would take someone a long time to write."

But the problem is when you watch this video he created, the PowerPoint, the deck is terrible, it's awful. It's just tiny little phrasal headings covered in bullet points. But an even bigger question is if you were to say in three minutes, "All my writing is done," you haven't just outsourced labor, you've outsourced all of your thinking, because thinking is writing and writing is thinking, these things are inextricably linked. I'm really trying to put in front of my students this semester, when you are writing, yes, it's laborious, yes, it can be hard. Things are happening in your brain, your thinking is being refined, you are actually generating ideas and conclusions that are more useful as you grapple with how to communicate it to an audience. So if you were to outsource all of that to a tool, it's not just that you're saving time, it's that you are not doing this recursive critical thinking work, and really that's the value-add of people, right?

If we just look at employees and say, "My employee is the writer of reports and the deliverer of presentations," it's like, well, sure. Then if that's all that we see ourselves as is employees, of course we could outsource that. But if we say, no, my employees are critical thinkers who using human judgment and human experience generate conclusions through a process of critical thinking, that's valuable and we don't want to shortcut that.

So it's funny, the more time I spend with AI, the more skeptical I become about some of the claims about it, which I think is probably healthy. So yeah, I think the ethical question remains, and I think those kind of questions are only getting more pressing and pointed as we see lawsuits

emerge about copyright, or questions emerge about widespread disruption to the job market as we understand it. I think those are going to be things that are interesting to keep talking about with students. I'm actually finding, even though my students ... again, Carnegie Mellon, I mean, this is where the robots live. My students are very much embracers, early adopters of technology. I've been quite surprised and encouraged at how skeptical my own students are about the efficacy of AI, the value of AI, its disruptive potential, and the healthy skepticism they apply in their own use. So I'm taking a great heart from that, and I see that as promising for students.

SW: Emily, I've been really curious about your last statement thinking about what do students actually do and what do they believe about artificial intelligence, and do they feel like these conversations are necessary and important to their learning and future successes? I'm interested in that contextualization of the institution and the student. I'm a lot more interested in how students use and perceive AI, how they feel about it, how they interact with emerging technologies. I think it's too easy to make assumptions and it takes a lot less time to make assumptions. So, I'm interested in the nuances of the conversation, because I think that this conversation on AI and students is really dependent upon that institutional context, where we teach, who we teach, and what we teach. You're at a cutting edge innovative private university teaching in the School of Business. How are your students using and responding to AI in your institutional context and your classes?

EBD: Yeah, I've got two semesters now under my belt of inviting students to use these tools, and then I'm documenting, I'll survey them anonymously. Both semesters it was 50/50. I was so surprised, I thought, "Everyone's going to use this. It's Carnegie Mellon, they're all going to lean into this and be so excited they can try it out." 50/50. 50% did it and said, "Yeah." Generally those 50% were pretty happy. They were like, "I liked the opportunity, I do want to understand this. I liked having the option to use these tools in new ways."

The 50% who didn't were largely satisfied. Some said, "Man, maybe I should have, but I just didn't." Some of them said, "I don't understand what these tools are, I don't trust them." A number of them though ... but this was interesting. Carnegie Mellon, a lot of international students, English is their second, third, fourth language, so in our communication classes often they're like, "This is my one class where I can really double down on improving my English communication." So many of those students were like, "I am not using this, 'cause I am so nervous that this is going to impair my own skill building," which I was so impressed by. I just thought this was so encouraging to see students saying, "I know I could shortcut myself, I'm not going to."

But I was also surprised, I had a computer science student in the winter of 2023, so this is all brand new, a computer science student in my class, and he said, he was like, "I'm not using this." He was like, "These tools hallucinate, they lie, you can't trust them." So, it was like his computer science background was why he was deeply skeptical of these tools' abilities to fulfill all the promises that media outlets were making to the larger public. I do, I was surprised at the pushback I got, and that's remained true. I had students last semester who said, "Oh no, you can't trust these tools. If you ask it to do a math problem three times, it'll give you three different answers, you can't trust it. You have to know everything yourself so that you can fact check, backtrack with. You have to ask the tool to show its work so you can check it yourself."

I think they very much see the tool as limited, but I also think there does seem to be this acceptance, like this is the way the world is moving, and so I'm going to have to know this. Even that, the extent to which that's true, I don't know. I did an interview with a media outlet and the example I used was, if you remember when self-checkout was going to revolutionize retail. There will be no human checkout people, it's just all going to be self-check.

What has happened, we're ripping self-checks out of Walmarts now, because it leads to all this loss, right? People steal stuff, and so it's like whoever said self-check is the way of the future, it's going to save us a fortune, they just failed to contend with human nature. If people think you're not looking, they sometimes steal, there's no way to hack that. So, now this strong prediction is just being proven false.

I do kind of wonder to what extent some of our predictions about the future of AI are like that, because human nature is human nature, you can't hack that to the point that you can fundamentally alter it. One of the things I've been pushing my students is I sometimes say, "Think about the kind of world you want to live in. You could live in a world where you did not interact with another person in the course of your professional life. Do you want to live in a world like that?" To some extent, we have control over that, right?

I don't know, I'm even skeptical about claims that this is the way the world's going. Everyone's going to have to learn this, it's going to change everything. I think it's healthy to be a little skeptical about that, but I also then acknowledge and respect we do need to, as best we can, prepare students for what we think is coming. So yeah, your question about to what extent do they want to use this, this study I'm doing this semester, I'm hoping I can really see to what extent do we have to make AI a topic of the course and an ongoing practice exercise discussion feature? Or to what extent can we say it's here, it's pretty user-friendly, you're a digital native, engage with it and you will iteratively figure out how to use this if you want to?

To me, that is a really interesting question and kind of an open question, but yeah, I'm hoping this study sort of helps me see that too. If it turns out students don't need a lot of support to use this, they can figure it out themselves pretty well, then that lets me shift my class time more towards things that I think this is only really going to be learnable by them in a class like mine. This does need a lot of real targeted specific instruction and we don't have to spend a lot of time surfacing these tools.

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