BAHLS:

I think the students tend to be impressed by how quickly they warm to writing in the discipline if it's put to them in the right way, if it's made a less painful transition. And there are ways that we do to mitigate that and make it more accessible to them.

A lot of the exercises I do, particularly early in the semester, are exercises that are designed to focus their attention on their own authority and their own-- to get them to see that they really do understand writing conventions, and that a lot of those conventions, maybe not all of them, but a lot of them carry over into mathematical realm.

So getting them to focus on what makes—this is one of the first day exercises that I give them—getting them to understand what makes writing solid. What is it that makes a good argument in say, an essay. And I'll ask them to dissect two or three responses to a fictitious prompt in a more traditionally writing-intensive area like history, and it's very heartening how quickly they take to this and how easily they recognize the convention. So it should be clear and the argument should be well-structured and organized. And there should be good transitions, and the language should be this and that.

And they recognize all these conventions, and then I just the next day in class I turn it on its head and say well, here are three different versions of this proof that we did in class together yesterday. So you all know the theorem that we're trying to prove, just some little mathematical result, so you all know what a solid proof should look like. Well here are three, again, fictitious responses at various levels of development. What is it that you recognize in these? What conventions do you see at work here? And they readily apply their previous knowledge of writing conventions to this new setting.

And it's just a great exercise to get them to see, yeah, they really do know how to do this. They've got a lot of good skills already that they're bringing to the table. They might need to learn how to adapt them to a new setting, but they're not starting with a blank slate. And so that they can actually be the authorities.

And there are various other exercises they'll do throughout the semester that sort of coax that authority out of them and build their confidence as writers in the discipline, helping them realize that they have the skills to do this. Maybe they need a little coaching, but the work that they've done in previous classes, and the work that they do as mathematicians works together

to make them strong writers.