[Auto-generated transcript. Edits may have been applied for clarity.]

at least in part about what we're talking about.

And there's going to be a lot of different terminology and concepts that are going to come into play today.

But we'll at least say this right now as we start from our point of view, deeper learning knows what it's all about.

That's fundamentally what we believe in and what we want to see occurring in our spaces across the great state of California and beyond.

And for us, deep learning really means the skills and knowledge that students must possess

to succeed in what we're going to call 21st century jobs and civic life.

Those things are going to include dispositions and skills and

learnings that allow our students to really engage in deep critical thinking, problem solving, collaboration, communication,

and fundamentally to be able to exercise what some of us call higher order thinking in new contexts

that really allow our students to transfer what they know and can do when they come out of school into new environments.

So we believe deeply in this process. And part of what we see as the assessment role in deeper learning is what we call AfDL.

That is assessment for deeper learning, which fundamentally prioritizes assessing critical thinking,

problem solving, collaboration and communication, as well as core content and basic skills.

So we think of assessment for deeper learning as a good friend and a support

for any kind of deep curriculum work that's going on in our public schools.

Today. We're going to add one other concept and just throw it out there just so that if we get to it, we can talk more about it.

But increasingly, what we're noticing is that when we talk about assessment for deeper learning,

particularly with AI-assisted interventions, we're really now looking at things like machine outputs,

to augment human-driven feedback

and that human-driven feedback can be thought of in terms of self feedback or peer feedback or teacher feedback.

Tonight we're going to, today I should say, we're going to be talking about the writing cycles themselves or writing or what it is to become a writer.

And that's why we brought this expert panel together to move us in the right direction.

It's my pleasure to introduce Hilary Walker. Hilary Walker directs the Bay Area Writing Project at UC Berkeley,

where she has successfully led professional development for educators who are

committed to deepening the role of writing instruction across various subject areas,

not just English language arts. In addition to navigating complex research and professional development projects,

Hilary continues to explore writing as a power lever for civic engagement and equity focused school reform

She's the author of celebrating 50 Years of Cultivating Growth How the Bay Area Writing Project supported my development as a teacher leader,

available at Writers Who Care.

Hilary has recently been exploring how I can assist teachers who teach writing and are working to support K-12 students who are developing as writers.

Thank you for being with us here today, Hillary.

Chris Mah. Chris Mah is a PhD student at the Stanford Graduate School of Education and a BAWP Teacher Consultant.

Chris researches connections between learning technologies, teacher education, and writing.

His most recent work explores the intersection of feedback and the effectiveness of AI writing supports in secondary schools.

Prior to graduate s2o2Wy, Chris taught highsc hool English in

That was funny. I was like, oh, okay.

Well, I mean, to me was most, uh, it was the most promising thing about it is that things are so open.

I mean, you know, right now in terms of.

I mean, we like... the scaffolding is really being created.

You have, you know, uh, you know, books like, uh, uh, what's the name?

Uh, Kahnmigo. Salman, Salman Khan, it's a brave new world.

It will revolutionize education. And, I mean, it starts with a lot of really great, you know, concepts.

And then it kind of is focus a lot more on, like, just its implementation of Khanmigo.

Uh, but it's just...

There's so many there. It's a lot of there are a lot of.

Thinking about youth, thinking about how they're so in, you know, I mean, screens around screens all the time.

And it just provides a lot of opportunity for practice, you know, with skills that we're already learning.

Now I'm dying to hear what Hillary has to say.

Well, I mean, I think I like the point that Kevin made, which is just about how students are already using tools.

And so I think there's what's promising for me is, in some ways

a more nonhierarchical form of learning that's happening between students and teachers.

So that I think broadly, I'm excited about that.

and I think that we're having so many conversations about the purposes of writing and the kinds of writing that we're doing and asking students to do.

... and I think those conversations are also starting to happen with students, which is very promising to me.

All right, Chris, you're up. Well, I'll qualify this by saying I'm not

an Al cheerleader.

I think AI probably will do some bad stuff in education and some good stuff.

And my orientation is that, you know, the degree to which it does bad versus good is is up to educators and students themselves.

So I'll qualify everything by saying that, that's said, I think some promising things that I'm thinking a lot about.

One is using AI to promote divergent thinking.

A lot of the conversation around Al is driven by this

implicit goal of building models that give the quote unquote "best response" to a prompt.

But to me, there's actually more promise in using AI to produce a lot of different ideas.

So with some, you know,

coaching around prompting AI can help students generate a range of i deas and perspectives that students might not otherwise have considered.

The second thing I'm really excited about is, I think you sort of alluded to it earlier, was expanding access to feedback.

Right now, individual feedback is one of the most high-leverage ways to improve writing.

But I've been a classroom teacher. I know what it's like trying to provide feedback for 140 students.

And it's really, really difficult--if not impossible.

So now with AI and again, some smart coaching around prompting or maybe some better tools,

students can get timely feedback at every stage of the writing process.

And not just, you know, once they've submitted a full essay.

And then the last thing which Hilary touched on is that AI is really forcing us to have really meaningful conversations about the purpose of writing.

Historically, writing has been used as like just a form of assessing knowledge.

And that's really it's very limiting.

And oftentimes what that translates into is we're teaching these formulaic five paragraph essays over and over.

My hope is that AI's ability to churn out this type of writing

forces us as educators to just rethink why we write and really lean into more creative writing and writing to think.

So definitely, but yeah.

I'm curious. So, Kevin, you talked a little bit about Khanmigo.

I'm curious if you've played around with the tool at all and what you think about it from a writing standpoint.

Oh, yeah. I mean, I've only in terms of Khanmigo used it from the educator side.

I just wanted to get an idea of, you know after, uh, forgetting that book,

like, oh, they mentioned tools or educators as well in terms of just.

Productivity and so...from that perspective, it made me,

It made me... I mean, there's the whole, like, larger, like, global implications.

I was like, we think so much about just reducing, uh, freeing time for just way more productive work, right?

So, you know, being able to out, you know, being able to quickly iterate, you know, from, you know,

from from an outline or from or from, uh, you know, previous work that we've, you know, we've we've already generated.

So that's like more the educators I haven't used it from the student

from like the student point of view, which there're different implementations.

I mean, that's more of like chat bot and help you with tutoring.

But I the thing like...

Just to expand on what you know, you were mentioning is just

like getting is like auto didactic.

The idea of, like, you know, just, you know, teaching yourself even as a part, being an active part of your own learning.

I think like that actually is probably what most excites me about it.

Now, if I can revise just because, you know, I mean, the best students, you know, of course, for, you know,

even when we're ourselves, our, you know, best selves as students is when we're actively participating in it.

And so, you know, being able to, you know, to.

To be able to quickly iterate as part of any part of the writing process,

to be able to get that instant feedback or being able to have conversations with, you know, your, you know, your teachers,

you know, about things and then maybe work through and revise even your questions and ideas and,

you know, kind of having this like, you know, kind of, you know, instant buffer.

That's, that's that's super, super exciting of having this like, you know

saying there are opportunities here for best practice or good practice that we've always sort of pointed to.

But we may have more attempts that are generated by student motivation or student engagement more than us kind of saying, hey, everybody, go revise.

So I think it's ah, it's an interesting. Hillary, did you want to say something more about this question?

important as the final product.

So I think I one of the things I'm hopeful of is that it really forces teachers to rethink what writing assessment looks like and think

more about assessing different parts of the process instead of waiting until the final product is done.

I think in fairness to our teachers, as well as to my own hat, as somebody who hung out around people who design tests for a living,

maybe we also want to shift and invite test makers into thinking of writing is more of a process and less of a final product,

because the systems have been linked in a way. So perhaps teacher inclinations are related to what they've understood as high stakes testing.

And so it'll be interesting to see if those two things converge.

We'll leave that for a fifth question for another day. In the meantime, if I can not mess this up again...

Good. I got my next question. There we go. Brent, can I actually pick up on that last thing about...

Okay. Yes you can. Of course. It's your webinar. So I think you're spot on.

Standardized writing assessments are actually not true writing assessments because they don't approximate what real writing is.

We know that real, authentic writing is social.

It's not, you know, a kid sitting in an isolated room

the promise.

And now I think this next question forces us all or I should say, invites us all into the hard question,

which is, which approaches seem to make the most sense in helping our teachers to learn about and to use these Al tools and writing?

What do we sort of feel like from the work you've all been doing is an approach that sort of makes sense to go what with what you're saying?

what you're saying directly? Chris, I mean to not go towards Blue Books, but to go to something else.

So what are those approaches? What do you all think? Well, I'd like to start this one off.

I think that one of the approaches that we find at the Writing Project works well for us is it's the idea of collegial pedagogy.

It's the idea of having conversations with other teachers to see what they're doing,

and to see what they're wondering about and to see what they're they've found in their own classroom

inquiries around writing, around writing with AI, around using different tools, more broadly speaking.

And so I think one of the approaches is really, how do we continue to put teachers in conversation with each other as the learners also?

And so, like, I think that's a structural approach rather than a toolbased approach.

I think just the structure of having, you know, engaging in those conversations

I mean, it speaks directly to the power of a bigger writing project.

And writing projects in general because I mean with generative AI

I mean, I was using it more, initially just, you know, task-based things to help and, and some other work.

I do some coding. And so it, it was, I was like doing research as part of this other like, potential project and, like, using this API.

And it wasn't until engaging in conversation with other teachers as a part of the invitational summer institute

where it came up and I was just like, "Oh, wait, here's this thing that's happening!" And I was like... And I was like, "Oh, wait, no." It's like, this is because students are trying to use this as a solution versus a tool you know, as a part of that process-based writing. And like, that's where the real issue is. It's not that Oh, Al equals bad. It's, okay How can this become a tool that students are using to aid the process? They're already, you know, engaging in. Yeah, I can start my response by... I want to share. I don't know what the right approach or right approaches are but I think the wrong approach is what one teacher I work with calls the "Abstinence Only" approach, which is let's pretend that the kids aren't using it and hope it goes away. I think that is the wrong approach. One of the reasons I think that's the wrong approach is, it really focuses on this, like policing mindset that focuses on, banning the technology and cracking down on cheating and catching kids cheat i ng. It's very punitive and very deficit-based. And, at worst, it can actually widen the digital divide. I'll give you a quick example here. A couple of months ago, I was facilitating some professional development around AI literacy and writing, in a pretty under-resourced school district. And I had to do it from a coffee shop because the school district had banned AI from their network. A couple days later, I was down in the Peninsula with a more wellresourced school district and coaching

their staff how to use the tools and how they can coach kids to use the tools. And so this is the kind of world we don't want to get into where you've got, you know, wealthier schools really investing in critical AI literacy and less-resourced schools focusing on bans and cheat i ng. One approach that I think has worked really well for the lab that I work with at Stanford is I want to echo what Hillary said, which is not tool first. We go in and if a school district asks us, you know, "Hey, can you can do some professional learning around Al?" we ask them,"Well, what are your goals besides -- put AI to the side -- what are your existing goals?" And we start from there. I said earlier, I'm not an AI fanboy, but I am a huge Bay area Writing Project fanboy, and I'm hoping you can talk a little bit more about the what the teachers actually do together. And in the BAWP model, specifically around like looking at student work and, and and doing like rehearsal demo lessons. Sure, sure. So I think, yes, thank you for making me clarify that more. In the summer institute model where we have the luxury of time. I will say that too. We have the luxury of time. Teachers are sharing one part of their practice around writing. And these are teachers from all different disciplines and all different grade levels. And in that process, they are inviting the other participants, the other teachers in the room to do the thing to write, to discuss whatever, the strategy is that they're approaching with. Then we look at what their students produced doing the same thing. And so, and then have the conversations that are really rooted in what are students doing, getting, learning, missing?

What are the questions that are still lingering for this teacher?

And it's an approach that does not suggest that we have arrived at a final answer,

but rather we're like actively trying to learn and learn with and from our students.

So that's that's part of the model. But we also have, you know, folks coming in.

So in our last summer institute Chris came back and did a presentation based on newer research that he had conducted.

So we're trying to ground teachers both in their classrooms, sharing their classroom practice,

but also in what is the new research, what is cutting edge and what do we need to know?

When we're sort of isolated in our classrooms or in our schools, in our context for a while, we can lose sight of that.

So it is I think those are two of the key components of that learning.

I feel like this question is actually less about AI and more about professional learning.

Yeah. So I think Hillary is the perfect person to answer this question.

I think bringing in sort of a research perspective, the work of Linda Darling-hammond is really,

I think, useful for anybody interested in professional learning.

Some of the things that I think, you know she and her team characterizes,

most effective and professional learning is it's practice-based,

it's disciplinary, it's discipline-specific. So, you know, teachers are kind of focused on how to use the tools for their content area.

They bring in student work. It's collaborative.

It's ongoing. So not just a one-time workshop, but these are all the different things that I think BAWP brings to the table.

And I think AI has some unique challenges but really this question is about what makes good professional l ear ni ng. And that, I think, holds true whether you're talking about AI or not. Chris and others, I think you've discerned part of the approach we're taking, which is that everything we talk about with AI can only be embedded inside of what we know about research-based practices that have been around for many, many years. And more importantly, where really are those sweet spots where can we accelerate and try and test out in professional learning communities? ... with new tools, but not to lose track? So I think we're absolutely in the same, sandbox on that one. Well, maybe this is another version of it, but we're just trying to focus it back to the students. because I think one of the challenges for research is going to be to differentiate not only what is the machine learning, quite frankly, but what is the individual human learning. And that human can be characterized as a student, could be a TOSA, could be actually a writing coach, could be a paraprofessional, could also be a teacher of record for a particular subject area. In this case. So let's just take a moment and say, so what do we think... ...this can help to move our students in the directions of, again, their identities as writers. Because one thing we've learned from Hillary, and particularly the work of the project, is this idea that it's about the identity formation as well of a student as a writer,

really strong identity as a writer.

I mean, really at at many ages, I don't think that that's unique to any particular age.

So I think as teachers of writing, we we want them to see themselves as writers.

But we sometimes are working against that in the way that we're teaching writing.

So anyway, this is meandering a little bit, but, yeah, I just wanted to definitely shout out Melissa and her and her work.

They really helped me think about how to use use ChatGPT and like, ChatGPT produced things in a way that didn't feel like.

"Gotcha. I saw that you're using this. You failed."

But like rather. "Why are you using this?" And they really asked that question.

And did it do the things that you wanted it to do?

Anyway. Passing the mic.

No, no, no, I love, I love that. And then also thinking specifically about it seems like with creative writing, yeah, this is, it got me super...

Yeah

excited about because it's something that I had not, I had not really used any kind of, generative AI for creative writing related things.

Like at that point, uh, I had thought about it...

... but I think a great thing in terms of, again, that like larger like...

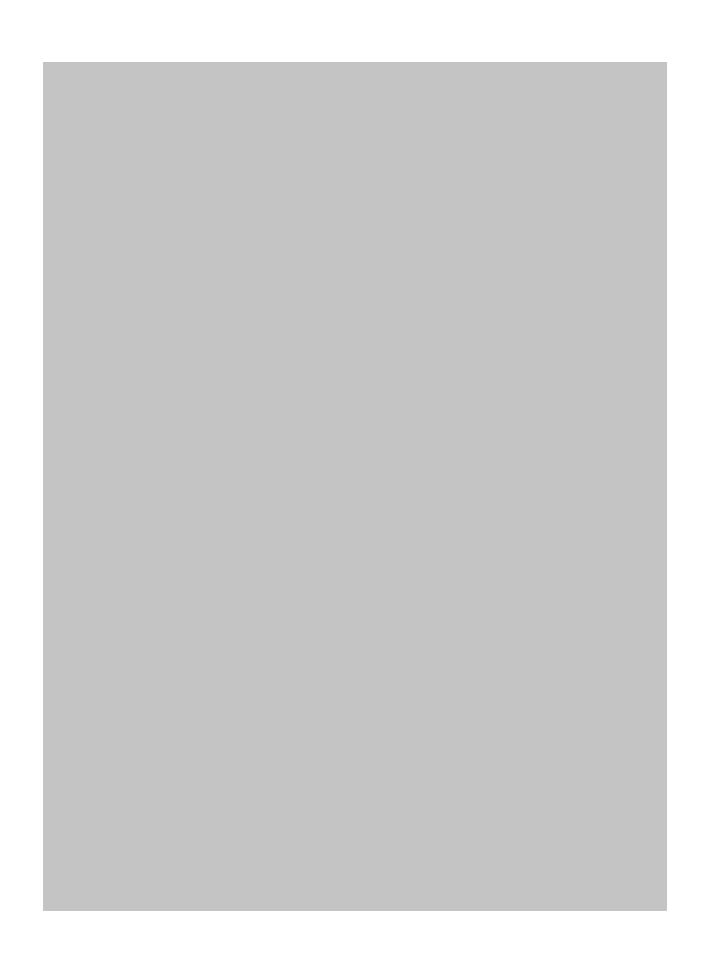
I guess, sort of like, you know, you know, meta usage of, uh, of generative AI or ChatGPT or whatever.

It's a part of it is remembering like mimesis

So much is like how I teach creative writing when I do it, it's like, "All right, we're going to look at this thing..."

"We're going to understand, you know, how it works."

And, and we can literally reduce it to what you like about it, you know, and then get to everything else later. But it helps students in terms of, like, identity, think about what tradition that they're writing as a part of. Right. So it's like, okay. You know, it could be as simple as "I like this use of refrain." And it's like, okay, well, why does it work, you know, here? How do you like it? And you can we, you know, engage these kind of conversations like in, you know, in person. But we can also think about how you might engage with that. You know, that same thing using, you know, using ChatGPT to get throwing in this, you know, comparing what you like and identify around this specific poem or piece of writing compared to, you know, you know, what it's saying, you know what techniques of saying are being used her e. being able to like the process of training as part of prompting, I think, like, you know, Chris, alluded to it in the beginning of like, okay, like affect prompting and how how that works, like prompting really becomes a part of the learning process. Right? So if you're...you know... If you just throw in a poem and go, why do you like this? That's not going to, you know, or like, "What works in this poem?" That's not going to really give you great results. But if you've been studying, like various rhetorical tropes and schemes and you're either you know, one thinking about ones that you already know, when you're typing them in there you're copying and pasting definitions that you've written... then it becomes, "Okay, now we're going to point to where that's used here, where this is used here."



The way that these, the pace at which these tools are evolving there's probably a world in which a lot of content writing, you know, how to manuals and blog post. A lot of that is going to be automated away. And hopefully what's left are forms of writing that are more tied to human experience and identity. Which is why earlier I was kind of advocating for, you know, teachers to lean into expressive writing. And maybe instead of writing an analytical paper that lays out your argument, maybe you're writing a portfolio of pieces that traces the evolution of your thought on an issue. Those are more, those are not only things that are more difficult for Al to do, but also things that are intrinsically more and motivating for students to write about. I think that if we can shift towards that world where we're using writing as less like transmitting knowledge and more of a tool for thinking and tracing the process of your thought. I think that's the more kind of durable form of writing that will be left over when AI has sort of automated away you know your typical internet blog post or whatever. So let me press on that to everybody because I think that's a tough point. Persuasive writing is one of the genres, as I understand it, of writing you're writing. Experts and coaches tell me. Am I right that I remember in eighth grade, and maybe when I observe teachers in our own program at San Jose State, work with them on lesson planning? You know, persuasive writing was something that one could teach, let's say, five years ago,

devel opi ng,

you know essentially what would be kind of like a bibliography and you're taking notes and all of those things.

But you're developing that into a, you know, a specific genre that might fit well to the audience in which you're engaging with.

Right? And that's like another thing that kind of, you know, excites me, I guess, you know, around things because

writing becomes the foundation of so many other forms of creation,

whether that's like, you know... to one degree it could be something like...

visual, like film, or it could be a sculpture, or it could even be a photo.

And thinking about like, artistic means or what might go as a part of on a gallery wall.

So that's one piece of writing that, that, you know, that might happen but it triggers something else that might

be able to make an argument in a in a way that sort of sneaks around any kind of block or that particularly fits that audience.

Well, as someone who teaches a lot of history, l've had some encounters with students using AI and it's gone very poorly.

I think I would never say moving away entirely from argumentative writing,

you need to be able to make an argument in a lot of different contexts.

And writing is one way of making arguments, but you need to be able to look at evidence.

You need to be able to see that, you know. There may be multiple interpretations of one single piece of evidence.

You may need to go through a process of figuring out which evidence best supports your.

your specific argument, but I think some of that is in some of the possibilities for perhaps like really interesting use of AI tools is

in like demystifying genre.

Like, students don't all come to my class with the same knowledge set s. They don't all come to class with an understanding of what the professor might expect when they assign an argumentative piece of writing So there's some, there's something about, there's something exciting about, having conversations about genre or demystifying genre. This is what I mean when I say, "an argumentative piece." But there's also something about helping students to see that there are many, many, many possibilities for constructing an argument. There are many, many, many possibilities for analyzing and evaluating evi dence. There are many ways in which you we have some alternative versions of history that need to be critiqued. And if we're solely relying on large language models to to produce our history, we're in trouble. We need to have some of those kind of foundational skills too. So I don't know if that's like a pro, con, somewhere in the middle, of AI tools. but I think I have a particular sensitivity around history and writing. I want not exclusively creative, not exclusively argumentative. I want a lot of different kinds of writing and a lot of different ways that students are using writing to think E Oftentimes I think her argument is something along the lines of the way that we teach argument often entrenches polarization.

And really,

what we should be thinking about is the process of developing the argument and tracing your evolution of thought, less of this kind of black and white.

"I'm taking a hard stance on this thing" and more embracing kind of a...

... embracing some some uncertainty.

I think the way this gets operationalized in schools oftentimes is that the way we teach argument writing is here's an op ed on one side,

here's an op ed on the other side. Choose your opinion and then

But I think there's, there's room for, for both. I think there's room for both. And and I think that persuasive writing can still be creative. I think it still can fall into process writing. Those are the types of things that I think need to be lifted up more. And in, in this weird, weird future of AI that we're, we're headed into. So I think what I'm hearing from the panel is that in a way, we go back to the uses of AI will only be as good as the uses we're already putting into mental models of what we consider writing. And if we see writing as this or that, or if we see it as synthesizing or merely summarizing, or that we'll put those same questions to the outputs that our students are providing to us, when we say, "Write a piece on exploring mandatory voting." I guess my question, the meta question was, "Will we get better results for our students that they will have to then curate back to the same old problem?" Will we be right back to, well, how do I know if this piece of writing is more than just a regurgitation? What would AI help me to know that and I'll leave it with one last. Just quick thought before we go to the last question. There's a lot of implied what we call metacognition in this talk. Ø7eflecting on Andfirst draft, Andsecond draft.

There's a lot of implicit, I think, social support and cultural, linguistic support that's implied.

And so part of this is there's no panacea,

because we're still going to end up with having to work through the supports for kids and validating those supports.

Right. Would you agree with that? That we're still going to have to really think about what we're telling kids is the message about their writing,

no matter what tool they're using? Whether it's a pencil as a tool, whether it's an AI chat bot.

It's a thought. Definitely. I love when it was mentioned way in the beginning about transparency.

It's like a part of the process. Like that's key. Yeah, it's super key to all of this.

Yeah. Well, what do we still not know enough about?

Hoo! We got a Pandora's box. But what do we still not know enough about?

And what do we want to know more about? And what are you all curious about?

What are you genuinely curious about?

As expert coaches working with just swaths of student teachers and teachers of service and young people, just like

what's on your mind? I think I'm very curious about, how

students...well, I mean, I think this is a student-centered question.

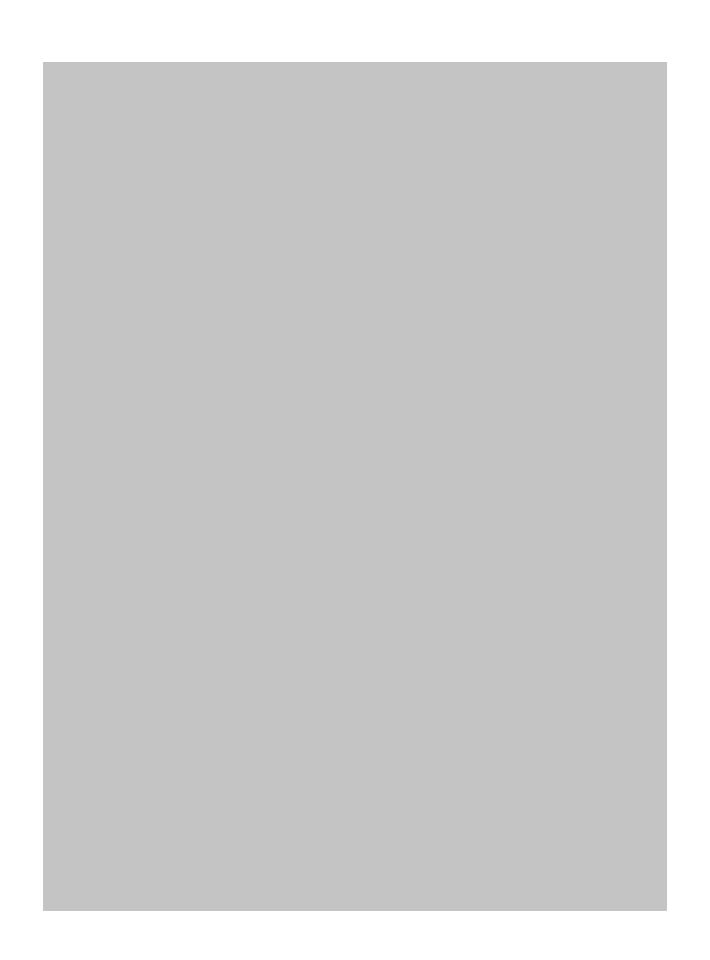
How students will continue to see writing and to see development of writing across their schooling.

Yeah I think.

So that's like a very big question. But what it brings me to is like, do students see the value in the writing that we're assigning them?

Do they see themselves as writers inside of the writing that we are assigning them?

Will a tool or series of tools help them see themselves more inside of



like talented, super just talented in that "I engage with this a lot and I love to learn." And I'm taking in all these other opportunities because I'm super excited about it. ... what... access from in terms of... ... access, it just, it's just like more people having more access. But the other flip side of that is that I'mlike, "Ooh, I don't know." Because, you know, if there is a ton more people constantly using it. I mean, like with the company, I mean, the computers, these models are like running on for... ... nothing that's unless you, uh, unless you use something like Chat GPT for all you're running it locally, like the amount of water and energy that's consumed is, you know, it's a lot, so the climate impact is a concern, ike, in connection to that, you know, that increase of use. So we don't know. You know a lot about that portion either. Just in terms of what it looks like when there is lots of regular use, but like the International Energy Agency, it's like put out some reports, just some initial things and it's like, "Wow, that's that's a lot of energy!" ... that's being consumed by this technology. Carrie, do you have any thoughts about this last question? I know you've been patiently moderating and looking at our Q&A, and it looks like we're good on the Q&A. So what are you thinking? I think it's definitely going to change the development of students as writers in the age of Al. I mean, it definitely will have an influence. It can't not. It's going to be big.

It's just not...so it's, it is a watershed moment in our history.

With the before and after.

But the "what"?

So, yes. We still do not know enough. It's more like, l'd rather, l'd prefer this question to be a yes or no, because then it'd be easier to answer.

I think it's too hard a question because of "the what"

I don't know, though the "what."

What is, yet, unfortunately, I think it remains to be seen and that we need to we need to be vigilant as teachers.

And I think we need to be braver in our own use in playing with Al ourselves

to keep exploring just so we can keep on peeling the layers of this question.

Because there is, as the AI gets because it's getting...smarter.

It keeps changing week to week. That's the nature of it.

I know it sounds like a scary movie, but it actually is true in this case.

Or at least I'm told by those who know more about it than I do.

And so yeah, I think, I think we have to keep learning more about it.

In the spirit of that, with the minute left.

We've got two questions that just popped in the chat the last minute,

