

[MUSIC PLAYING]

KENDRA LOMAX:

Hello, everyone. Welcome, and thank you so much for joining us today. This is the 2023 spring webinar series. Spring Forward is our theme.

And we're spending this spring thinking about what are all the ways we can come to know our students more deeply and create learning spaces where they can all thrive. And I think that theme runs strong in this presentation. We're glad to have you join us. Despite the beautiful weather outside that you could be enjoying, you're here with us, so thank you so much.

My name is Kendra Lomax. I work here of the College of Education in our connected office for professional and community learning. And it's my pleasure to welcome today's speakers.

We've got a great crew, U-Dub faculty researchers, students in conversation with practicing teachers. And I'm going to let them all introduce themselves. As you listen, please feel free to make use of that chat. You should see it in the bottom toolbar.

As there are ideas and questions that come up for you, you can use the chat to talk with your other folks in the room. And then we also have the Q&A feature that you can use if you've got questions that you want to make sure that the panel of speakers addresses. At the end, we'll save a couple of minutes for that as well.

There are also captioning available. So look for the CC in the bottom of the screen if you'd like to use that to follow along with text. And with that, I will pass it over to our amazing team of speakers. And we'll get started.

JESSICA THOMPSON:

Great. Thank you all for being here today. We're really excited to have this opportunity to share with you our research project, but also these beautiful partnerships that we have with teachers and what we've learned from everyone.

I'm Jessica Thompson. I'm faculty in science education at the University of Washington. And this is Dr. Patricia Venegas-Weber, who is a research scientist on our project and Cristina Betancourt, our fabulous doctoral student who-- those of you who've been in LTAP, you probably know us or have met us somewhere along the way. So thank you for rejoining us again today if that's part of your history as part of-- if you were students, former students, at the University of Washington.

PATRICIA VENEGAS-WEBER:

Yeah, Thank you, Jessica, for that introduction. And of course, we wanted to also learn a little bit about you. So we will appreciate if you could please put in the chat a little bit about your name, your role, and perhaps, one thing that brings you here to this webinar together. So we appreciate to learn a little bit about /

Great to have you, Ashley. So we have some grads. Excellent. Don't be shy. We'd love to know who we are in conversation with.

Welcome, Cecilia, Maxine. Thank you. Teacher educator. More grads from LTAP. Thank you. Hi, Erin.

OK, we have-- thank you for sharing what brings you here. Good afternoon, Teddy. Thank you for being here. Welcome, Patrick.

CRISTINA BETANCOURT: What a range of folks.

PATRICIA VENEGAS-WEBER: Yeah.

CRISTINA BETANCOURT: OK

JESSICA THOMPSON: So our project is a research practice partnership with-- we're working with beginning teachers who are in the first few years of teaching and are graduated from our University of Washington LTAP program and are now in local school districts. We're partnering with about 17 different school districts. And we're trying to understand what does a justice centered approach to science and literacy look like in elementary classrooms.

We're thinking very carefully about the role of race and language and how that relates to messages around ability in our project. And we think that it's important for us to focus on what science education could look like and sort of stretch the boundaries of what expansive science looks like. We know that often, typical school science and literacy can be very grounded and European and Western ways of knowing, and so we're trying to expand and challenge the ways that we know these disciplines.

And to that end, we are thinking about some different dimensions about nature cultural relations and ecological caring, about culture families, communities as rightfully belonging. And we're also thinking specifically about how do we broaden the languages of science, so that we're not in monolingual settings, that we're really thinking about multiple languages that the students have to bring as resources. And then we're also thinking about power, histories, and this idea that futures really matter. So you'll get to see these themes in the presentations that the teachers will share with us today. Cristina

CRISTINA BETANCOURT: Hi. So just to give you a little context of some of the things that we're working towards in the science methods class at the U-Dub to understand a little of the teaching background that folks have been exposed to, these are some vision board examples, actually, some of yours, some that teachers make at the end of the quarter that we have our class where they set vision statements for how they think about teaching science when they are in their full-time placements. And so as you can see here, there's a lot to look at. But I'm just going to highlight a few things.

In the bottom right, you're going to see that there's this circle with four quadrants. So the course is based off of giving teachers an opportunity to practice ambitious science teaching. So we help folks learn how to elicit student ideas, support students ongoing changing and thinking, and then pressing for evidence-based explanation all while planning. And as you can see, we interweave this ambitious science teaching cycle with a lot of how do we center diverse science, how do we center students languages, how do we-- the years that the teachers who are talking today, we started featuring this idea of two-eyed seeing, where we think about bringing westernized perspective and Indigenous perspectives into science.

And so you can see that there's actually two of the vision boards have a pyramid and a circle. And those are ways of seeing the world instead of humans at the top in a hierarchy as within part of the system of the world we live in. And so these particular drawings, I think, show you the take so takeaways that teachers have after being in our course. And so I wanted to give you a little background on that before diving in. And then I'm going to turn it over to Patricia, who's going to talk a little bit about where folks are in right now.

PATRICIA VENEGAS-WEBER:

Yeah. Thank you, Cristina. So just not only to give you a little bit of the background and the seed that we have plant in their methods course, but also where these seeds are hopefully flourishing is that we are, like Jessica mentioned, in conversations with many districts. And here, we have just a map to give you an idea of how, through a online professional learning community, we're able to come together from Mount Vernon, Yakima, and many other districts around to really come in conversation to reflect about our practices and what are some of the themes that these practices are bringing to center justice in science and literacy, so just to give you an idea of where we are in the map.

And so we really wanted to introduce our wonderful teachers. Really, it's an honor to have the three of you here. We really appreciate these teachers who are really in their first or second year of teaching and who so willingly open their classrooms and reflect in their practice in an open forum to support teacher learning and to really find ways to support multilingual students in any program, dual language or English-only model. So we're going to ask this teacher to just introduce themselves and tell us a little bit about them and their school context.

CHRISTINA KIM:

Hi, everyone. My name is Christina. I'm currently working in the Lake Washington School District in third grade in a general education classroom. I went to undergrad at the University of Washington. And then I got my master's in teaching in the wonderful LTAP program, where I met Cristina, Patricia, and Jessica, so glad to be back.

LISA OKAHATA:

Hi, everyone. I'm Lisa Okahata. I also graduated from U-Dub. I was in the LTAP program. And I'm currently teaching fifth grade in an English medium class in a Mandarin dual language school. And this is my second year teaching.

EMMA BENTSEN:

Hi, everyone. My name is Emma Bentsen. I'm currently teaching second grade also in an English medium class with about half of my class being multilingual and also graduated from LTAP last June.

JESSICA THOMPSON:

So to start off today, we're going to take a deep dive into Christina's classroom. And a little bit of context, as Christina just shared, it's a third grade classroom. And this is a unit on inheritance that the students are thinking about. And Christina, I'll let you say a little bit about this particular lesson that-- maybe the phenomenon that the kids were studying and the lesson.

CHRISTINA KIM:

Yeah, so for this lesson, it was one of the first intro lessons where we were learning about traits in animals. And the students were trying to figure out why one of the wolves in the pack was different, looked differently from the different other wolves in the pack that he grew up in, so we were examining traits and how we have physical appearances. So I kind of brought in pictures of myself to kind of show the traits that I have, and my family, and how I could kind of relate it to the wolves' perspective. And then I had some conversations with the students about how their appearances are very similar to their friends and families. So that's what the lesson was about.

JESSICA THOMPSON:

Thank you. And we're actually going to-- from each of our teachers, they're so generously are going to open up their classrooms, so that we can share some of their practices with you.

So we're actually going to see now Christina's conversation with her students. We're just showing three minutes, so it's a snippet. But just as we sort of work on these justice-centered practices in our teaching, opening up our classrooms and our own practices is so important, so I just want to really honor. And I'm just so grateful that you all are willing to share your classrooms with others, so thank you for that.

CRISTINA BETANCOURT:

OK, let me know if the video's sound doesn't work, OK?

[VIDEO PLAYBACK]

- We're going to be looking at our Elk Mountain wolf pack. So first of all, I want you to bring it back to yourselves. Can you connect wolf 44's differences to something in your family or friends?

For example, raise your hands if you look the same as your friends. Look around. Are there any hands going up? Raise your hands if you think you look different than your friends.

How about keep your hands up if you think you look different from your family members. Some of you might. Some of you might not. Yeah. Put your hands down, please.

I'm going to show you an example. This is me, and this is my nephews. They live in New Jersey. And these are another picture of my nephew, so they're family. They're family. But do they look the same as I do? What is different about me versus my nephews other than age?

- Gender?

- Well, gender is different.

Anything else? Owen? Thanks for raising your hand. Yeah, boys and girls. But how about the way we look? Our skin color. Anything different about that? Mm-hmm?

- Well, it may be a bit racist, but I think their skin's a bit blacker than yours.

- Our skin color is different? Yeah. Well, all of us have different skin colors. If you look around, there's no one in our class that have the exact same skin color.

You're either lighter or darker. And that's totally fine, right? So the reason why my family-- they're my family, blood-related family.

But we are different because my nephews are actually half Ecuadorian. And I am full Korean. So they're half Korean, half Ecuadorian. And I'm full Korean.

And I could speak full Korean. I can speak fluent Korean. And my nephews can actually speak Spanish. Yeah. So I know some of-- can you raise your hands if you speak Spanish in this classroom?

Yeah. My nephews can-- yeah, Ms. Christina can also speak Spanish. There's a lot of-- so you can communicate with my nephews. But unfortunately, I got to learn Spanish, so I can't communicate in Spanish with my nephews.

So we look different, but we're still family, right? I can speak Korean. And I could communicate with Grace because we speak the same language.

- Can we speak right now?

- How about I'll speak to you after our lesson is over, OK? This is another picture of my friends. Do I look the same as my friends? No.

We're going to be looking at our Elk Mountain wolf pack. So first of all, I want you to bring it back to yourselves. Can you connect wolf 44's differences to something in your family or friends? For example, raise your hands if you--

[END PLAYBACK]

CRISTINA BETANCOURT:

The video just restarted. I'm going to pause it. There we go. It just looped.

JESSICA THOMPSON:

Great. So we've noticed in our partnerships that there are often a lot of conversations in this particular unit around family structures and around race in particular. And so I'm wondering, Christina, if you can tell us a little bit about your decision to have these conversations with students and what you were thinking about as you were planning for the lesson.

CHRISTINA KIM:

I think one of the main reasons I ended up bringing in my own family pictures and brought up that conversation about race is I thought it was a really good place too because we were talking about traits and physical traits. And then it was also talking about family because this wolf was in the family. He just looked different from them.

So I kind of wanted to bring that in and say that I'm different from my family too, but then we still are family. And I wanted to make sure to open it up because I feel like science, sometimes it's difficult to bring in race into it. But then trying to find those pieces that you can bring it in, I try my best to.

So I just wanted to be very open with conversations about race with my students. And it was just a really good opportunity to do so. So that's one of the reasons why I brought it in.

JESSICA THOMPSON:

And what did you learn from your students?

CHRISTINA KIM:

I learned-- well, at first, I realized how uncomfortable they still were with talking about race. If you saw in the video one of my students, he was kind of careful when he was showing the differences between me and my nephew. And he was like, I'm not trying to be racist, but--

So I could see the uncomfortable how-- they're still not used to being comfortable with conversations like that, so I definitely wanted to make my classroom a safe space for them to freely speak about differences and not be shamed or feel uncomfortable about speaking about race. So that's definitely what I learned. And I also was-- I think it's also a space for me to even just be open with my students. And they can learn a little bit more about me, and then they can also learn more about them as well.

JESSICA THOMPSON:

I love that. Can you talk about other ways in which you do sort of similar practices, maybe in literacy or other subjects or one or two ideas that you use that maybe you want to share with other people?

CHRISTINA KIM:

I think-- well, one of the things I try my best is with literature, I try to bring in a lot of books that kind of represent my students, like heritage and culture, also share books that represent me. So I want to be vulnerable first and show that example of that, so my students feel more comfortable to do so as well. It wasn't in the video. But recently, I did a science project about oil spills.

And it kind of went well with one of the books that we read recently, which was *We Are the Water Protectors* because I have some Native American students in my class. And it was talking about how important it was to preserve our water. And then it was talking about this experiment about oil spills, and how to clean it up, and all the negative effects that was happening. So that kind of tied it in very, very well.

And it happened to be that the oil spill happened in Alaska. And some of my students are also from Alaska, so they just got really excited. So I tried to bring in their culture that way.

And also, I try my best in all subjects to make sure that speaking a different language is an asset versus a barrier. So if they can't communicate in English, they can communicate in their own language. And there's always ways for me to figure out what they're saying.

There's technology. It's not their job to try to communicate with me because I will find a way to make sure I understand what they're saying and make sure that they're able to express it to their peers, so making sure that's always an option, as well as multimodal ways of expressing themselves. So speaking isn't just the option, but if they need to draw it out, that's always an option that I make sure is available, also, being kind of strategic about partner work, pairing kids that's--

It's really helped that pairing students that speak the same language-- or even pairing students that don't speak the same language. And then today, I saw them sharing their home languages, which was really cute. So making sure those options are available is something that I try my best to do in all subjects.

JESSICA THOMPSON:

Thank you, Christina. Those are great words of wisdom for all of us. Let's go ahead and have Patricia-- do you want to introduce Lisa?

[INTERPOSING VOICES]

CRISTINA BETANCOURT:

So yeah, so I'll go ahead. And Lisa, we're going to be on now. So Lisa, I'll let you talk about this, but just I'll give a quick overview.

So in general, I've gotten to be working with Lisa the last two years. And it's been super cool to see how she works to integrate students' general knowledge. And so they're working in an ecosystem unit. So I'll let Lisa introduce a little bit more about this ecosystem unit and what you were doing and thinking about with this model.

LISA OKAHATA:

OK. Great. Thank you, Cristina. Can everyone hear me OK? OK, great. So this unit is about living systems. It starts out with Earth as a system and then about all the different subsystems within that.

And it focuses on ecosystems. And I just felt like that was a really big concept and kind of a big word that I didn't want kids to get lost with. So this is something that Cristina helped me with last year, and I thought that we could do it again this year and I think essentially, just giving them sort of a template to model what they think is the ecosystem around our school.

And so there's a little bit of a prompt. You can see where I'm asking them, hey, what are the living and nonliving things that are in our ecosystem? How do they interact with each other?

So there is enough of-- think about. And then I encourage them to think about what they have observed during recess when they have been out there. And so the idea just is that we want to not have them be scared of this idea of ecosystem and to be able to talk about it in a very intimate way.

So I think the video that you're going to get to see is sort of me teeing that up with everybody. And then I'll also have some examples after the video that shows what the kids were able to come up with. So I'll kind of stop there. Is that OK? OK.

CRISTINA BETANCOURT:

Yeah, that's great. Thank you, Lisa. So this is what-- we're going to watch a clip. And just a warning.

There's two spots of the video clip. One is Lisa circulating. And then another is later when Lisa's coming back into the whole group here.

[VIDEO PLAYBACK]

- What is decaying here?

- The rat.

- Oh, the rat. Yes. Yes. I found it.

Two rats.

- So yeah, we found a rat in the fourth grade. And then in fifth grade, I found another one.

- I remember you telling me about that.

- Somebody asked me-- I noticed the word, phenomenon. And what does that mean? So a few of my fifth graders last year noticed that there were hawks that would come-- or not hawks. Eagles. Was it Eagles? Eagles, right?

OK, eagles that would come. And somebody asked why. And we weren't thinking about that. And so last year, we were thinking about [INAUDIBLE] as an ecosystem and an ecosystem that had these eagles that would come and visit.

- Eagle system.

[LAUGHTER]

- Every once in a while. And we were wondering about that phenomenon. Why did that happen? What was here in that ecosystem that attracted them?

- The eagle's buddies. Eagles have friends.

- So that's why even though on the other side, it says, what does this phenomenon remind you of-- hey, Daniel-- that's kind of what we were referring to. But in your case, I don't think we've had any eagles this year.

- There's a bunch of eagles.

- Oh, still?

- Yeah.

- Oh. Great. Then make sure it's on your drawing. OK. Well then--

- Can I have your autograph?

- Then maybe you want to tell me, why do you think they come? What do you think is here that attracts them? Elizabeth?

- Food.

- Food. What kind of food?

- [INAUDIBLE]

[LAUGHTER]

- We're so attractive?

- And we smell really good too.

- We smell really good? Really?

- You have long, luscious hair.

- Any other ideas? What do you think the eagles are after? What do you think the eagles are after?
Dead rats. OK.

So I actually want to acknowledge the dead rat because-- Melina, I know. Melina, Amanda, and Katya have been telling me about dead rats for a long time, so this is finally a chance for them to tell me about them and have it count, have it count for their science grade.

[END PLAYBACK]

CRISTINA BETANCOURT:

Cool. So Lisa, so this is-- do you want to talk a little bit about these examples?

LISA OKAHATA:

OK. Yeah. So this is a couple of students that drew what they were noticing about our ecosystem. And so you can see that the dead rat made it in too. And it wasn't just these two. There were so many students that had that.

This conversation, I guess, really honed in on that idea of the eagle and the dead rat, one being the predator, one being the prey and that sort of thing. So these are like concepts-- [INAUDIBLE] later on, but because they were a bit more invested in what we were talking about. And it was something that I could refer to throughout the unit.

And so this model was just kind of a beginning to kind of get them thinking about it. And then we could come back later to write more about it or to add more to their model, to their drawing. Another thing that I thought was really interesting-- and it wasn't planned. It was just that there were some students that had noticed these things and maybe had told other kids about them during recess and were kind of told that it was gross, or why would you be noticing that, or that sort of thing.

And so for these students then to be able to revisit that idea in this setting and be able to kind of get credit or get acknowledgment for noticing that, I thought was really good for them. And that, again, is still something that folks think about and talk about in the later part of the unit. And then I know that you can tell that I've got some Chinese as well on the model.

I didn't use Chinese during that video, but I sometimes will do-- and sometimes it catches the students by surprise because I think they're just used to it being an English medium class, and they don't expect me to use Chinese. And honestly, sometimes I also feel like I'm kind of rusty. But whenever I have used Chinese or even in these models when I've put that on a sheet of paper, I can tell that there are students that are more engaged. And they are trying to figure out what they're being asked to do, and it's sparking some conversations. Yeah, so that's something that I'm not really good at yet, but I'm trying to do more and more.

CRISTINA BETANCOURT:

Well, thank you, Lisa. So I'm going to ask you just a few follow-up questions. I mean, you kind of started talking about it already, but you can feel free to talk about that or something else. But how are you working to-- in this video, how do you feel like you're working-- or in general in your practice, how do you feel you're working towards making learning spaces where all students, regardless of their language or cultural ways of being can thrive in your classroom?

LISA OKAHATA:

So I think about it in terms of language, for sure, that we're bringing in folks that may or may not be as familiar with English and kind of bringing it to a level where they can understand and engage. I also think about it in terms of abilities. So there might be students that have a hard time if I just gave them the prompt as a question and asked them to write in complete sentences.

So this way, it's sort of allowing them to draw. It's allowing them to talk to people around them, to hear different things. And I think also having something like recess that everybody can understand and-- I mean, not everybody loves recess, but at least, it's something that kind of gives them an entry into this idea and concept of ecosystem. And then I also was thinking about-- I mean, I don't want to use the word, social capital, but it kind of is like that, like, kids who don't have as much social capital in the classroom because they're not the ones that are always raising their hands, they're not the ones that always know these big words.

And so I feel like-- again, it wasn't planned, but just because of the way it turned out, in hindsight, I kind of got to realize that it was-- I was able to help a couple of kids raise their social capital in the classroom. Yeah.

CRISTINA BETANCOURT:

Yeah. Awesome. So do you have any one or two practical ideas that you've tried-- again, it doesn't have to be just in this lesson, but in general that you think can center your students' identities or expand the curriculum in ways that center justice in science.

LISA OKAHATA:

Yeah. I mean, I guess, in my mind, I always think about the things I want to do that I haven't done yet. I always feel like I haven't really involved family, so that's one thing that I felt like I could have. I could have done it where maybe I have them talk about ecosystems around their homes.

There could have been a little bit more. And again, I didn't put a lot into where this was all going to go. But I think in general, I really do want to value their languages and value their own-- whatever experiences they bring.

And so I think that's just something I try to think about. And it really sometimes takes a lot to bring it out of the kids. And so a lot of it, too, has to do with the relationships that you have with them because the student that brought up the rat, I don't think the student would have brought it up, had it not been a topic of discussion that we had over lunch a couple months prior.

And I have to admit, when the student had told me about it, I kind of dismissed it. I wasn't like, oh, show it to me. I was like, oh, that sounds cool.

But it's little things like that as you find out things and then you kind of make that connection in your head, so then at the moment, I'm like, oh, here's my opportunity. Oh, my god. This student is talking today. Yay. --and not in a shy way.

So it's something that-- I can't tell you exactly when that opportunity will come up. But when they come up, it's just really, really great to see. And then that, in turn, cements your relationship with that student even more. So I think it's kind of like that virtuous cycle that you get to have. And that's really, really precious.

CRISTINA BETANCOURT:

Thank you so much, Lisa, for sharing. And I'm going to go ahead and pass it on to Patricia, who's going to talk with Emma. So I'll put my screen back on. There we go.

PATRICIA VENEGAS-WEBER:

Yeah. Thank you, Lisa. And thank you, Cristina. So Emma, why don't you-- first of all, thank you for being here. But Cristina, can you pass a little bit the next slide? So I'm wondering if you could tell us a little bit about this lesson and how you're working towards really broadening the language of science in your classroom.

EMMA BENTSEN:

Yeah. So for anyone else in here who maybe teaches Amplify, I teach second grade. And we use Amplify curriculum. The lesson that you're going to see today was our first lesson in a new unit that is around the concept of designing a new glue for the school.

So students throughout the unit get opportunities to utilize different materials and ingredients and test their glues to get the most effective glue. But at the beginning here, we're sort of just starting to think about what does properties of material mean, and how can we describe different materials, and what we're looking like-- or what we're wanting to get out of the material that we're creating. So this is a chart that we will see me making as we go on that's talking about how materials look and how they feel.

I will also add that we, for context, had just had a conversation in literacy about adjectives, so I was trying to push them specifically to come up with adjectives, which is why I framed the sentence stems in that way. So you may also hear me reframing some of the things that they say to try to get them to an adjective instead of the material looks like another noun or the material feels like another noun.

PATRICIA VENEGAS-WEBER:

OK. Thank you. So we're going to watch now a little bit of a video. And then you can share a little bit of more how you're working towards normalizing students' home language and contributions. Cristina.

[VIDEO PLAYBACK]

- We're going to do a little bit of brainstorming because we're going to be saying sentences and writing sentences later after lunch that are about how materials look and how they feel. So I want us to brainstorm some words. I'm going to ask you a question that's going to tie into what we've talked about in reading recently.

What kind of word would it be? If we're looking for a word that will describe materials, what type of word would that be? Does anyone remember what that's called? I see that Sierra remembers. Karina remembers. Sierra, what do you remember? What is it called?

- It's called an adjective.

- An adjective. Good job. So we're thinking about adjectives or describing words, some that will talk about what something looks like and some that will talk about what the material feels like. I want you to think in your head. We're going to think first about what something looks like. That's the one with the eyes on it.

So looking at it with your eyes, what can you see about a material? If you were going to finish the sentence, the material looks-- what would you say? What's something you could say? Raise your hand nice and high if you have an idea.

- [INAUDIBLE]

- Oh, I'm looking for a quietly raised hand. Rosie, what's an idea you have?

- Like some coffee.

- Ooh. So you could say like some coffee. But is coffee a describing work?

- No.

- No, that's something it could look like. But you couldn't say the material looks coffee. Oh, you're saying brown? So yeah, color can describe that. Brown would be one way.

You can also tell me, if you want to, a word in any language. That's my challenge. I might not be able to write it up here, but you're welcome to tell me your words in any language. Let's see the material looks-- how else could we finish this? Cohen?

- Rectangular.

- Sure, rectangular. We could think about shape. Rectangu-- That's a long word. Is it going to fit on here? My R had to go on a new line because that's a long word. But yeah, rectangular. That's a good word. Dylan?

- [INAUDIBLE]

- I can't hear, Dylan.

- I speak Spanish.

- Yeah. You want to tell me a word in Spanish about how something looks?

- [SPEAKING SPANISH]

- So you're saying it's one color? Is that right? Yeah, that could be a good way to describe something. I'm going to write it in English, Dylan. But later, I will add it in Spanish too, OK?

But just because I'm going to spell it wrong if I try to write it in Spanish right now. So we'll go back and add it later. Yeah. I'll search it up later and add it. Rosie, what else?

- I'll just say it in Chinese.

- You can say it in Chinese and in English if you want.

- I'll just say it's red, the color.

- Red. Great. Can you say it a little louder?

- [SPEAKING CHINESE]

- Great. Yeah, I'll add red down here in Chinese then too later. OK.

[END PLAYBACK]

PATRICIA VENEGAS-WEBER: Yeah. So thank you, Emma. I really appreciated how you are normalizing the use of a student's home language as a tool for learning. Would you mind sharing with us a little bit of how you are working to learn more about their assets and using them to build more knowledge in your classroom?

EMMA BENTSEN: Yeah. I think that understanding as much as you can about students' linguistic identities is really important. And I really try to accomplish that from the beginning of the year when I can. I know a lot of us probably at the beginning of the year send some papers home to families, asking some information about kiddos.

And something that I put on there right from the beginning was a question about language and not just asking, do you speak another language at home, but asking more specifically, what are your student's comfort levels in that language speaking, writing, reading, and listening? Because I know that my multilingual students, some of them can read and write in their home language. Some of them mostly just listen to their parents speak their home language, but then respond back in English.

And knowing those nuances of my students' skill sets in their home language has been really important for me. A more recent example of that is that we just did a craft for Mother's Day that was, I'm going to be totally honest, very last minute thrown together by me. But they were writing on little slips of paper things that they love about their mom or another important caregiver in their life and putting it into a jar.

And in the moment, some of my students brought up that their parents don't speak English. And they were like, if I write in English, they're not going to be able to read it. And I was like, that's a great point. Let's think about what we could do.

So I ended up teaching my students how to use Google Translate because a few of my students, particularly, one of my student in that video that speaks Chinese in the video, she feels very confident writing in Chinese, so she was able to do that independently and easily. But some of my students, specifically one, was like, I know how to speak Chinese, but I don't write it. And so I was like, OK, let me show you.

And she spent, like, an hour painstakingly copying down in Chinese and was so excited to take it home to her mom. And I think just trying to leverage those strengths for students whenever I can has been important. That's something that I did recently that I felt like was good.

PATRICIA VENEGAS-WEBER: Thank you, Emma, so much for sharing how you are definitely leveraging and bringing those assets into your teaching. We really appreciate that. So I think Cristina, you're putting this slide?

CRISTINA BETANCOURT: Yeah. So are we transitioning? I'm just looking at the time because time is always real.

JESSICA THOMPSON: I'll wrap up.

CRISTINA BETANCOURT: OK. Great. I'm just confirming.

JESSICA THOMPSON: Yeah. But if you could please, as we are wrapping up, if you have any questions, please put them in the Q&A, so that we can address them as a group. But I just wanted to say thank you again to the teachers who were able to share here. Lisa, Emma, and Cristina, thank you.

I think you really helped exemplify this amorphous idea of what does justice-centered science teaching look like. It looks like many things. And it may look different on different days.

But we see ways in which you're thinking carefully about nature-culture relationships and ecological caring about the environments around the school, the rats and the eagles, and respectfully honoring the knowledge that students bring to the classrooms, as well as broadening the languages of science. So how do we not just do an English-only, but how do we broaden to really think about multiple languages and multiple ways of knowing science through language, as well as really thinking about, what's the power in understanding the integrated ways and the complicated ways in which race and science have been integrated or not integrated? And so how do we have those complicated conversations with students and do so in ways that really honor where the students are coming from and put precedence on how all students' futures really matter in your classrooms?

So again, thank you for helping us unpack this idea of justice and really look carefully at how the integration of science language and ability inside of science and literacy. And we should say this isn't just part of the work that's happening in our project. It's an ongoing work that's part of our teacher education program. It's deeply woven into the work that the teachers do starting day one in our teacher education program. So thank you, Teddy, because I know you're here too. Let's go ahead and-- yeah, Kendra, do we have time for one or two questions?

KENDRA LOMAX: Sure. Please.

JESSICA THOMPSON: OK. Super. So Ashley has a question about using translation tools and how to do that in terms of providing multilingual resources and how to do that in an environment that often stresses English only. So how do you think about that?

EMMA BENTSEN:

I can jump in and just say I personally am a largely monolingual English speaker. I have some very basic Spanish skills from taking Spanish in high school. But beyond that, I don't have a ton of skills in other languages.

So for me, I often feel like translation tools are sort of the best that I can do a lot of the time. And I have found that it can be pretty effective, depending on the language. The thing I have run into before, not this year, but last year during my student teaching, I had some students who spoke languages that Google Translate did not offer.

And so I think that that can be a downfall of that system is that I didn't use it as much last year because I wouldn't be able to provide it equitably to all of my students, so I tried to find just more simple ways to share information as much as possible. I know that my school district also has-- we use Microsoft products, and they have translation services that are built in them. So if you like share something on Microsoft Word, you there's a way to translate it through there. And we have a family liaison whose job it is to get that information out to families. But I have found that just quickly Google Translating an email gets you pretty far and is really a very appreciated gesture from a lot of the families in my class because it makes it much more accessible to them, even if it's a little choppy and not quite right.

PATRICIA VENEGAS-WEBER:

I will also like to add to what you said, Emma, is that I really appreciate what you said about being vulnerable in terms of you not necessarily knowing the language, but being a learner from your students. And I think that vulnerability and that ability to create that space that is monolingual at different levels for everybody, I think, is key and is a way towards justice.

LISA OKAHATA:

I definitely use the translation tools. In fact, there's-- I don't know if anybody else uses this. It's called DeepL. And there is something you can download that will help you translate within the app that you're on, so it's a lot faster. And so I only have-- well, in the past years, I've had other languages. But usually, it's Chinese.

And even for Chinese, going from English to Chinese is a lot harder for me, so I really rely on it. And I always say-- I'll go and tell the students that are looking at it like, hmm. This is not quite right. I'll tell them, hey, it might not be perfect, but this is the best I can do. Or do you know a better way to say that? Something like that.

And I feel like they give me a lot of grace too. And I think they just-- I can just see their eyes perk up when there is something in their language or when I try to do it in their language. So I think if you just try, I think they will appreciate it. And if you just tell them, hey, I know this is not going to be perfect, it'll be OK. Yeah.

CHRISTINA KIM:

I think in my classroom too, my students get more excited about knowing a language and being able to-- I don't know how to explain it, but they don't get embarrassed that they don't know how to express it in English. They're more excited that they know a language, and then there is a way that I could understand-- I could find a way for me to understand it. So I think that's how I use it more in the classroom where I will find a way to help my student express themselves.

And I'm very fortunate that there are a lot of resources out there that can, so that's how we've been using it in the classroom. But my students enjoy it. And I'm fortunate that I have an option as well.

JESSICA THOMPSON:

I really appreciate how you are thinking deeply about language, and identities, and who's in your classroom, and how to incorporate and draw in students. It's very purposeful, and also, I think as Patricia said, really modeling what it means to be a learner. So yeah, thank you for sharing those examples.

I'm wondering if there's one quick thing that you might want to end on, or suggest, or have an idea. Or you could talk about something you want to keep working on or something you might recommend to others that they give a try because participants today, we're going to ask you to think about what you might want to try in your classrooms next. So Lisa, Emma, Christina, any final words?

CHRISTINA KIM:

I think for me, since I am in an English medium classroom, in the future, I want to make sure that I'm thinking more about how to incorporate language on a daily basis because I am guilty of definitely not doing it as often as I should. And I am still in the learning process. And I definitely want to work on that in the future because I'm going to have students that speak multiple languages. I'm going to have more students that speak multiple languages throughout the many years that I'll be teaching. So keeping that in mind, I think that's something that I want to work on.

EMMA BENTSEN:

Oh. Also, a question just came up. English medium means-- do you want to talk about that, Jessica, that it means an English-speaking classroom? My classroom isn't a dual language classroom or anything. It's sort of a traditional classroom in a school that is expected to speak English in the classroom essentially from a systematic view, at least.

I feel like things that I'm thinking a lot about are how to continue to be vulnerable with my students around language. But I try really hard. I think it can be intimidating, especially as a person, again, who-- I mean, I think even if you're multilingual, we can't speak all the languages that our students speak. It wouldn't be possible.

And I think it can feel scary to bring that in sometimes when it doesn't feel like it's something that you know everything about. But I think being able to position yourself as learning from your students is really important and then just also knowing that how you talk about language and position it in your classroom can make such a huge difference on how students feel about their multilingualism, that I try really hard to only talk about it as an amazing, positive thing, like, how cool is it that so many people in our class speak more than one language? That's so awesome.

How can we use that? How can we bring that in as opposed to-- and opening that up to them, too, because then it brings in opportunities where they will say to me, oh, can I use Spanish for this?

And I'm like, yeah, you can. I totally didn't even think of that. Yes, you can. Great. Because I just think that there's so much that you can do in collaboration with your students, I guess, around these things and that you don't always have to carry all of that burden of thinking of everything, especially if this feels new and scary.

LISA OKAHATA:

So for me, I think the thing that I really value is the idea of trying to make science more comprehensible to my students. And because I did not have a science background myself, I'm always trying to figure out, how can I connect this concept to something they already understand and bring them into this, rather than trying to just teach it all myself or try to just inundate them with a lot of words and concepts that maybe they're just not going to receive very well? So yeah, I think for me, that's what has always worked and then the language and all the other things. Right now, I'm still just trying to learn and trying to figure different things out myself and trying different things.

JESSICA THOMPSON:

Thank you so much. Kendra, do you want to take us out?

KENDRA LOMAX:

All right. There we go. Technology. Thank you all. I got a little bit lost in the conversation because I just wanted to listen to you all, but I forgot I was supposed to be doing something at the end.

Thank you all so much for coming to have this conversation with us. Thank you Patricia, and Jessica, and Cristina for organizing us and inviting us to have this conversation. And Lisa, Christina, Emma, thank you again for opening up your classrooms.

I feel like even though I don't get to work in science as often, thinking as a math educator, I'm still taking away so many things, so I hope everybody else here across the various different roles that we heard are also taking away a lot as well and feeling challenged and inspired. We've got a couple more conversations coming up in the next week or so, as well as we'll have recordings for most of the webinars in this series. So you can look for details coming to you in your inbox. Cristina, if you'll go to the next--

We also have things coming up this summer, so there are all sorts of courses that you can take for clock hours this summer. Patricia and I are cooking up one around STEM and thinking about the role of language and math and science, so you can look for details coming for that. And those are on our ConnectEd website, which I'll put in the chat, but will also be in all the email correspondence you get from us.

And then one last slide there. If this feels interesting to you and you want to have more ongoing conversation with this team or any of the other webinars that you hear, we love to do ongoing partnerships and learn more about you. You heard that this was part of a larger project. So please be in touch with us if you want to continue the learning. And we can figure out creative ways to do that through ongoing partnerships, courses, workshops events, things like that.

And with that, we'll let everybody go enjoy their lovely evening. Go enjoy the sunshine. Thank you all. We have a couple of resources in the chat for folks to check out the ambitious science teaching.

And I'll put the [INAUDIBLE]. Stay in touch. Bye, everyone. Teddy, nice to see you. I don't know if there's a way for Teddy to say hello because all we can see is her name.

KENDRA LOMAX:

I know.