REBECCA KLEIN: Thank you all for joining us today for the presentation, How to Make Academic Departments More Inclusive of Faculty with Disabilities. My name is Rebecca Klein, and I'm from 3Play Media. I'll be moderating today. And for those of you who can't see the screen, I'm a White woman with curly brown hair pulled back in a ponytail.

And I'm joined today by Sheryl Burgstahler, Janan Bilen-Green, and Brianna Blaser. Dr. Burgstahler founded and directs Accessible Technology Services, which includes the DO-IT Center and the IT Accessibility Team at the University of Washington. She directs the AccessADVANCE Project, which serves to make STEM departments more inclusive of faculty with disabilities.

Dr. Bilen-Green is the vice provost for Faculty Affairs and Equity and professor of industrial and manufacturing engineering at North Dakota State University. Her work focuses on areas, including faculty policies, recruitment, development, leadership training, promotion and tenure, executives searches, and other issues related to faculty and their concerns.

And Dr. Blaser is the associate director of AccessADVANCE and is a part of the DO-IT Center at the University of Washington where she works to increase the participation of people with disabilities in science and engineering careers. Her work includes direct interventions for students with disabilities and working with faculty, employers, and other stakeholders to create institutional change. And with that, I'll hand it off to our presenters, who have a wonderful session prepared for you all.

SHERYL BURGSTAHLER: We are going to talk about how to make your academic departments more inclusive of faculty with disabilities. The general guidelines that we're going to be giving would apply to other administrative units as well. And so we hope you find that what we talk about is useful, whatever field of study or practice you are in.

If we take a look at our team here, a number of us are from the University of Washington. Me and Brianna and Lyla Crawford, who's our internal evaluator, come from the DO-IT Center at the University. And Cecilia Aragon, who's not with us today, but is a co-PI, and she works as faculty member within the UW Human Center Design and Engineering Department.

And then our partners in North Dakota State University and a project called ADVANCE Forward, we have Janan Bilen-Green, who is a PI. And she's vice provost at her university. And then we have Cali Anicha, a research associate, and Mike Coppin, who's a disability services director. So we have a good range of expertise and experience of different types of institutions in our leadership team, but then we also collaborate with a lot of other individuals nationwide, who consider our goal something that is their goal as well.

So our objectives in AccessADVANCE, which is the project that brings us together, funded by the National Science Foundation-- and if you're not familiar with ADVANCE as a program, it works with a lot of projects to make it more welcoming and accessible for people with all characteristics, who are women, but also pursuing STEM academic fields, and so they can be successful in those fields.

So we are just taking this as an intersectional look by working with women with disabilities, getting into academic fields and STEM through that ADVANCE project. So we implement systemic changes within STEM and departments, broadening participation of women with disabilities in academic programs to make sure that they're welcome and that they are fully included, which includes being accessible to people with disabilities. And so they can achieve on a level playing field with other people in the department.

And then for the whole entire community, developing resources regarding institutional practices that increase the successful participation of women with disabilities in academic STEM careers. And so, like I said, we're zeroing in on a small target. But much of what we're learning and our resources we're creating apply in many contexts.

So today, what we're going to talk about is experiences of STEM faculty with disabilities. What are some of the challenges they face, and so forth? And then we'll look at Access approaches. I'll be presenting two broad approaches for dealing with Access issues, accommodations and universal design.

And then we'll look at recommendations that appear in an AccessADVANCE publication for making departments more inclusive of people with disabilities and in the academic positions. And then a case study, North Dakota State University ADVANCE projects, and then another case study, which is the Universal Design of Meetings and Events, and then we'll have a last slide, which includes resources. And we'll have some times throughout the presentation to pause, so that you can maybe write some things in the Q&A area to continue to contribute to the conversation, but also, take a quick break during those times as well.

And so this slide represents how we work within the DO-IT projects, all of our DO-IT projects. We have an individual-centered model. And if you notice on this wheel in the hub, it says, "The success of women with disabilities in academic STEM careers." So that's our focus. And then we look at key stakeholders, who may erect barriers to that goal or help network in such a way to make it more possible for women with disabilities to be successful in these fields.

And so then you look around this wheel here, and you see various stakeholder groups that we're working with. The person with disability-- we have a lot of projects where we work with people with disabilities, including our ADVANCE project. And that being the target population, we get a lot of input in making materials and so forth, of making them available to a broad audience, but also relevant to the real experiences of people with disabilities.

Their family members and their peers and their peers and mentors and allies; professional organizations and broadening participation efforts around the country, to make sure that individuals with disabilities, and even more specifically women with disabilities are included, service providers plus secondary administrators, faculty staff, technology vendors, and even funding agencies, and legislators and policymakers. And so we just take a look at this big problem that we're trying to solve and see who needs to be at the table. We always know that the lives of people with disabilities should be centered, but it's important to include other stakeholders as well.

So now you can post in chat, except I think we're supposed to be doing this in Q&A today. Am I right?

REBECCA KLEIN: Yeah. Yeah.

SHERYL BURGSTAHLER: OK. So let's do this in Q&A.

REBECCA KLEIN: If possible.

SHERYL BURGSTAHLER: Yeah. Yeah, that's where we're going to put our little discussions here.

So what are some examples of challenges you think that STEM faculty with disabilities might be facing, or even things that might cause them to feel unwelcome in a department? What might there be?

We've talked to a lot of women with disabilities, and so we're going to have some ideas that they have presented on this topic. But yeah, just imagine someone unable to participate in conferences, and with no virtual options, and don't require masks.

OK, so some people with disabilities are not comfortable being in a conference room on site, and so can they have the option of participating over the internet? Will they miss something if they take that option? Or will they be fully included?

And some have expressed a concern about on-site meetings where everyone doesn't use a mask. It's not required to use a mask right now in on-site meetings on our campus. But for some people, that's a danger for them. Lack of awareness of people with disabilities, various types of disabilities-- and so what to expect, how to communicate, [INAUDIBLE] it makes people uncomfortable.

Delays and perhaps failure on timed tenure requirements-- so are there any opportunities for taking a longer time meeting than tenure requirements because of delays that might be related to a disability, for example? Inaccessible documents and materials-- PDFs have the worst reputation as far as documents that are not very accessible. We often hear from faculty members, too, that even materials that they need to evaluate. Maybe a person who's applying for a job in the department, all the materials are sent in an inaccessible format, which means that a person who's blind, using a screen reader to read all the text on the screen or in a document, doesn't have access to it.

And sometimes, we hear complaints, too, that they say, well, you just don't have to be on these committees. Lucky you. Well, maybe you want to be on these committees, have some impact, input, on the future of the department.

So yeah, so inaccessible documents. Other materials would be videos that are not captioned and those that are not accurately captioned. That would be of relevance to someone who's deaf, but certainly also someone who's an English language learners. And difficulties getting assistive software or information on how to get assistive software. We have a team on our campus, our IT Accessibility team, and they have provided assistance in that regard. But some campuses don't actually have that.

Well, let's take a look at what some people with disabilities said. These are examples of access issues presented by women faculty who have disabilities. So disability-related issues that impact productivity-- and some of that is on the part of the institution. There's so much work that needs to be devoted to just getting the accommodations that you need to be successful, that that really has an impact on the productivity. And the institution should look at that.

Challenges in attending conferences-- that's where a lot of networking appears. Now we have many more conferences that one can attend virtually, but there's nothing that meets the same goals as meeting in person and networking in a virtual world. And so that can be a challenge.

Inaccessible online tools related to HR and benefits-- we hired a person who's blind quite a few years ago now, but he had to inform us that the whole application system here at the University of Washington was not accessible to him using a screen reader. We ended up hiring him, by the way. We made accommodations, but we were sort of embarrassed by that in the process. And then it became his job, once he got the job here, to work on that those HR systems to help them be more inclusive.

Inaccessible tools used for meetings and collaboration-- one of our claims to fame here at the University is we standardized on Zoom many years ago. And it became the standard for the state. But it was at a time when Zoom was not very accessible at all. The people that created Zoom did not think about accessibility in any of their steps. They were just unaware of accessibility issues or solutions.

And we have voted against getting Zoom for that reason. But then that wasn't the decision that was made at the University. Then we made sure that we could get some wording in the contracts that we signed with them that says that they will work with my team, the IT Accessibility team, to continually make their product accessible.

And we're really glad we invested that time. Some other schools did as well. But the Zoom product is quite accessible-- not perfect, but quite accessible.

Uncaptioned videos or inaccurately captured videos, inaccessible meetings-- and sometimes, that can be because people are unwilling to wear microphones, because they think, well, my voice is loud. Well, it might not be adequate for someone who has a hearing impairment.

Inaccessible grant portals for journal articles and review processes-- and so for example, someone who has a disability is not able to submit their paper without assistance from someone else, because the portal or something about that system is not fully accessible to them.

Concerns in requesting accommodations-- some faculty members report being worried about requesting accommodations from their department. because maybe they're in a small department, they think that's going to be pretty expensive. And they might be discriminated against.

We recommend that that not occur, that wherever the accommodations are provided is not money that comes from the department, that it come from central resources, so departments with a person with disability aren't, quote, unquote, "penalized" by having a person with a disability in their department.

And then disability-related issues related to scheduling courses, like not having access to proper transportation and being scheduled to teach an evening course. So that just doesn't work for them. So those are some of the things that real people out in the real world have experienced.

Faculty with disabilities report that, also, there's a lack of community among faculty with disabilities and difficulty getting accommodations. There's time and effort involved in requesting them. And sometimes, there's much time before they can get them. And sometimes, there's pushback from institutions. And then concerns about how having a disability could affect tenure and promotion-- so there's a lot of extra overhead for people with disabilities in faculty positions, including women, of course.

So in an inclusive environment-- that's what we're all shooting for, I think-- everyone is encouraged to participate, with or without accommodations. Everyone feels welcome. Everyone is fully engaged in accessible and inclusive environments and activities. So that seems like kind of a reasonable thing, a reasonable goal for having an inclusive department.

And there are a few things that contribute to things not being very inclusive in using this description. For example, if there's a cumbersome process for getting an accommodation, then people aren't encouraged to participate in meetings or other things. Or if videos are not captioned, they're not being encouraged to participate if they need captions to access that content. And individuals with disabilities can feel unwelcome when the materials that are being distributed are not designed in accessible format for them.

And so someone at the institution might say, well, you have to talk with the Disability Services Office. They'll give you an accommodation. Well, when materials are handed out at a meeting, you might be able to get that accommodation, but it's not going to help you get through the meeting in the same way that other people can that you're working with.

Let's just take, briefly, a quick look at the legal basis for providing access. There's Section 504 of the Rehabilitation Act of 1973. But more people know about the Americans with Disabilities Act of 1990 and its 2008 amendments. And both of these laws are similar in that they're civil rights laws. ADA applies to more things-- transportation and a broader group of things. But higher education has been covered under Section 504 and the Americans with Disabilities Act all along.

So it's not just a new thing for us to be thinking about as far as access. This has been a civil rights situation since a long, long time ago on our post-secondary campuses. And then there are state and local laws. Because sometimes, the state actually might be more strict, or the local laws might be more strict, than either one of these other federal laws.

So we're required to do this. And we're required to provide accommodations for students and faculty who have disabilities. I think for most of us, if we're not working in a disability services office, that it's actually more important to look at people's abilities than their disabilities. You need to know what people can do, not so much about what they can't do. Both are important in different contexts.

But looking at this for a minute-- I have a double-edged arrow on the screen right now. It goes from Not able on the left to Able on the right. And so then there are various abilities in a long list. First one is understand English.

So everyone in this meeting today, this presentation today, could rate themselves on their ability to understand English. Some of you might rate yourself a little low on this, because English is not your first language, and so you don't feel like you're that competent. Others might have a learning disability, like dyslexia or some other that affects your reading. And it might make it more difficult for you to understand English, at least as quickly as other people might.

And so those two examples indicate that you can have a low ability. It doesn't have to be anything related to a disability. All of us here in this room have abilities in all these categories. And when ability is quite low, then someone might define that as a disability.

The second one here is social norms. And again, someone might consider them low on this rating, because they're on the autism spectrum. And they know that it's difficult for them to pick up social cues. Or it might just be because they grew up in a different culture, and so they don't the social norms in the community they live in. And so again, we all have abilities, strong or not so strong, in all these categories.

So the ability to hear, or see, or walk, or read print, write with a pen or a pencil, communicate verbally, tune out distraction, learn and manage physical and mental health-- we're going to be talking later about the accessibility of presentations. But I demonstrate a few things right now. I described everything on the screen here.

And so if there's someone in the audience who's blind, or if someone in the audience called in via telephone, and they don't have access to the screen, they should be able to follow this presentation. And so that's a universal design feature, which I'll talk about in a minute. Also, I have large print, sans serif fonts, and very high contrast between the characters and the background.

A couple other things to think about, as far as disabilities, is that most disabilities are not obvious to others. And most people with disabilities do not report them to anyone. And you might think, well, why would that be, because they might be able to get some accommodations?

Well, some of them would rather pay for their own accommodations, frankly, because they're really interested in a career. And they're worried that it's going to impact them getting tenure, if they're viewed as someone that has a lot of overhead with them, that they need a lot of assistance in some way.

And then campus disability services primarily offer accommodations to individuals after a problem is discovered. And so we create a website, or we create documents, or we create a meeting with that disability considered. And then if a person with a disability shows up, then it's quick, quick, quick, we'll make modifications or accommodations for that individual. It's not a real efficient way to do it. So we'll be talking about how a different approach can make this a little more efficient and can be sustainable.

So if we look at the accommodations model, we're basically adjusting a product or an environment for an individual person. So a few examples-- inaccessible documents, mainly PDFs. Our disability services office spends hours and hours remediating PDFs that are either just scanned in. Or a student or a faculty member would have access to the text, but they're not formatted in a way that someone who's blind and uses a screen reader would to be able to see the organization, like the headings in a document.

And arranging for a sign language interpreter-- now that's something that we probably will always have as an accommodation, because we're not going to provide a sign language interpreter in every class, for instance, just in case someone might need one at some point. And captioning videos-- this might surprise you, because we have access to captioning. If you're using YouTube, the computer makes automatic captions for us.

But look a little closer. They don't have punctuation. There are words that are often misspelled. And so the person who authored that video, posted it on YouTube, can go into the editing features in YouTube to correct those inaccuracies. And so they should do that, but they don't know to do that.

So AccessADVANCE practices embrace a social model of disability. An individual model or a medical model is where you're focusing on the individual. And you think, what is their problem? What are their functional limitations, or whatever? And let's fix things for that person.

That'd be a medical model, or an individual model, where a social model is, well, OK, this person is engaging with an environment, like our campus or a classroom or whatever, a conference room. How can we make that environment more inclusive, so we don't have to provide so many accommodations after the fact?

We also think about intersectionality, that a woman with a disability has many other identities, as well, that affect access to things, like their race, their ethnicity, their sexual preference, and so forth. And then equity inclusion is important. We apply universal design to working with DEI efforts around our campuses.

And universal design as a process-- that doesn't eliminate accommodations, but it reduces the number that we should have to provide. And it takes a look at some of the more routine things we do, like remediating PDFs. We say, well, why don't we just use accessible PDFs, and so we never have to remediate one again? Or why don't we just always have captions on videos and have them accurate? So that's not an accommodation anymore, that's just part of the environment, a universally designed campus.

So the definition that we're using today, universal design-- the design of products and environments to be usable by all people to the greatest extent possible, without the need for adaptation or specialized design. So we still might need an accommodation for some things, but we should always be shooting for the goal of not needing accommodations for anyone. It's a goal that we probably will never reach, but that's what we should be shooting for. And the more we make things accessible and inclusive, there'll be a reduction in the number of accommodations that someone might need in the future.

A quick example of that is on the screen where we went through a process in the DO-IT Center to create a universally designed name tag, back in the day when we were going to conferences in person. It's been one or two years for me. I don't know about you, but I remember those days. And so we learned from other conference organizers that people like lanyards. I'm not a big fan of lanyards, because I think the name hangs too low on the body. I think it should be closer to your face. This is those are the things you want to connect.

And so conferences often have lanyards. But some people like to have pins on the back of their plastic tag or clips. I particularly like clips. I often have a collar, and I can just clip it onto my collar. But it might change day to day, depending on what I'm wearing.

But if you notice in this image, we have a lanyard on a plastic name tag cover, which has the name tag in it, but is clipped to a ring that is at the bottom of that lanyard. That's so that a person can un-clip the name tag from the lanyard. Some lanyards have the clip on the lanyard, and it clips onto the name tag. Those, you can't take the name tag separately and have anything left to fix it yourself. OK.

And then there's a clip on that plastic name tag holder. And then there's a safety pin that goes through it. And so in this version of a name tag, there are three different ways that you can use it to fix it on your body.

And then there are a couple of things we built in, too. One of the problems with lanyards is you go to the reception, and the lanyard is often flipped over. It has blank on that side. And whenever I'm at a conference and that happens, I have to ask myself, do I know this person well enough to flip their name tag over? And if I do, I already know their name. So I don't really need to for my purposes.

But we also make the name very-- so we make sure we have the name very large on the name tag, but we also make a copy of the name tag on the back. And so even if the name tag flips over, you see the name tag with the name-- name very large. And we'll make the organizational thing of the name of the conference quite small.

Sometimes, the sponsor of the organization, of our meeting, might be a third of the name tag. And I think, when I'm at conferences, I already know where I am. I don't need to be told that. I need to know who this person is that's wearing the name tag-- so thinking thoroughly about the purpose and then designing accordingly, keeping diversity in mind.

So the scope of universal design and everything that we do and with faculty with disabilities, we think about instruction. We think about it for students. But with faculty members, we think of it in terms of the faculty member. Can that faculty member fully participate as an instructor? Does that learning management system that you have work with individuals using the screen reader or different types of keyboards, and so forth?

And then we could apply universal design-- so services, information technology, and physical spaces. And on our website, on our DO-IT website, but links from AccessADVANCE, you can look at checklists that have guidelines for doing all of these things, making these various applications on campus inclusive of people with disabilities.

So in summary, when you look at accommodations versus universal design, I think what we need is a paradigm shift from a reactive accommodation sort of approach to proactive design of products and environments, from design for the average to design for everyone, not waiting for someone to show up and then decide, well, OK, can I fix this for them? But rather, thinking of a variety of people that might be in your class, or might be in your department, in our case, and then designing for them.

But once upon a time, we already did this. If this seems hard, well, we already did it once. On this page, on the slide, we have a picture that appeared on the *UW Daily* front page in 1970. And it has a young man in a wheelchair, and he has a sign on the back. He clearly is shouting, because the sign is on all capital letters. It says, ramp the curbs. Get me off the street.

And so there was a protest of this person and many others for putting curb cuts on sidewalks at post-secondary institutions. The biggest effort was after World War II. There were a lot of people with disabilities who came to our campuses, because they had the GI Bill, and they had survived their injuries in that war.

And so there was a big effort. Now today, though, even though there's pushback at the time, because it was very expensive to do this, look around. We did make all those curb cuts on most of our campuses.

And more than that, it's become a best practice in sidewalk design. So you look at a new neighborhood, they're putting sidewalks in, they always put curb cuts. And how many people in wheelchairs use them? Well, not very many. It's mainly people pushing baby strollers or skateboarders, or whatever. It's a useful feature for just about everyone.

Same with captions on videos. When they're accurate captions, the beneficiaries include people who can't hear the audio, but also, people who are English learners; people who are in a noisy environment, like an airport, or a noiseless one, like in a baby's room, and the baby's sleeping, so you want to turn the sound off and just see the captions; those with a slow internet connection; those want to know the spelling of words, that's pretty much everyone; and if you want to find the content quickly.

We're using a product to display the videos on our DO-IT website that allows you to search through all the captions in the collection. And so it will take you right to the point where it mentions the word that you're looking for, like "blindness." And so you can go through all our whole collection and see what we have to say about that.

Technology-- you don't have to look any further than your smartphone. There are accessibility features built in. You can change the color of the background and the foreground, the size of the characters. Your phone can even talk to you, which does a little bit too much, in my mind, in that department.

But those features used to be assistive technology. They were extra add-ons for people with disabilities. But today, they're built into the product. So they're not assistive technology anymore, they're just flexibility built into a standard product.

But we also have to make sure that we make whatever we are creating technically compatible with assistive technology. So a computer, for instance, so that it's compatible with a Braille device, so a person who's blind can print their own Braille using the technology that they have.

So universal design then, we've talked about just the general definition. But there are actually principles and guidelines, quite a number of them actually, that can be used in designing something universally, universal design. And I just picked out three that can be particularly important on a post-secondary campus. So the framework that we use is to include all three.

So there are seven principles of universal design. They're commonly used for computer labs and maker spaces and stuff. But they also can be applied to educational applications and services, and so forth.

There's universal design for learning. Some may be familiar with that, with the three principles where you can design your pedagogy and your curriculum. And then there's the technology that we use. And for the technology, the guidelines come from the Web Content Accessibility Guidelines. And there are four principles that underpin those. But you don't have to memorize all those principles.

I think the key here is to think about providing multiple ways for people to learn, to demonstrate what they've learned, and to engage. And this can be faculty, as well, as far as getting access to content in multiple ways. Ensuring all technologies and facilities, services, resources, and strategies are accessible to individuals with a wide variety of disabilities-- and so we don't forget that we need to make things accessible to them as well.

And so there's a lot of background. There's a lot of best practices in these areas, as far as applying universal design, that we're not going to get into today. But the list we're going to be sharing in making your department more inclusive, but also your presentations, they're all universal design principles being applied. Because you apply these before you plan for it, before you actually offer that application, and so it's a proactive framework.

So universal design is an attitude. It's a framework. It's a goal we'll never completely reach. And it's a process, like with the name tag. It values diversity, equity, and inclusion. In fact, universal design can make a foundation for our DEI efforts. because it's not just about disability, even though that's our focus today. It's about any type of diversity. It promotes best practices. It's not about lowering standards. It's proactive, so you're thinking about ahead of time, but you can implement it in incrementally.

And so if you have a lot of videos in your department that you share with faculty and staff and perhaps even students, you don't have to caption them in one day. Just start working on get those captioned, get them accurately captioned. Benefits everyone, or close to everyone-- that's a goal-- and minimizes the need for accommodations. We'll still need some accommodations, but not quite so many.

So in the Q&A, I'd like you to ponder this a little bit. Describe an accommodation faculty with disabilities might need, but if provided as a universal design strategy for everyone, would eliminate or reduce the need for this accommodation, something you can think of that you might provide to an individual faculty member. And then if you could apply it to everyone, everybody got it, then they wouldn't have to ask for that accommodation anymore.

And then Brianna's going to pick up the ball here.

BRIANNA BLASER: I see a great one about flexibility for working from home. And I think this will be really interesting to see in the next few years and months how this works, right? Because we've all shown that we can work from home over the last couple of years. But there's an urge to go back to the office. And that will mean decreased accessibility for a lot of folks.

Somebody else said having ramps, and mobile ramps, and elevators everywhere, instead of just certain places-- absolutely. Documents with proper color contrast, adjustable height desks being provided to folks as universal design. I think those are great examples.

Something we use a lot in our meetings when we don't have a request for captioning, we still use the automatic captions within Zoom. And it's something that folks benefit from, because it helps them pay attention, or helps them miss words that they misheard.

Somebody else shared just having accessible programs and software. That's another great example. I think a place that that comes up when we're thinking about faculty, too, is that a lot of times, I think folks are thinking about whether the student facing side of a product is accessible on a campus, but are not necessarily thinking about whether the staff, or faculty, or instructor facing side is accessible as well. Excellent. Thank you for sharing those examples.

So we're going to talk a little bit more today about some recommendations that we've developed. Sheryl, can you go to the next slide, please? And you can get to these online. These were developed through talking with stakeholders that we were working with on our AccessADVANCE project about, what steps can departments do to be more accessible and inclusive of faculty with disabilities?

So several of you mentioned that you've worked with people with disabilities, or that you have a disability yourself, so some of these will be very familiar strategies to you. We can go to the next slide, Sheryl.

So some of the examples-- we want to encourage departments to think about making academic recruitment and tenure processes more welcoming and accessible, to make the process for arranging accommodations clear. And as Sheryl mentioned, thinking about where funding plays into that, because that certainly impacts the extent to which the faculty member may be concerned about looking like a burden to their department.

Thinking about activities that a department is arranging, whether those are meetings, events, classes, are welcoming, accessible, and inclusive. And then thinking about the design, both of websites and online resources, as well as facilities and whether they are accessible, right? So some of our examples that we heard from folks earlier about universal design were absolutely about physical facilities, but also those online environments.

So what kinds of things are we thinking about? Are we ensuring that things like faculty recruitment materials and application forms are accessible? So Sheryl gave a great example about that. Something that we still see in job ads these days are things like physical requirements that really aren't required, right? Must be able to lift 10 pounds. Must be able to stand for a significant amount of time.

Are those in your faculty position announcements? Can you take those out? There's really no reason those need to be in there. Are you in the recruitment process? Making sure that folks know how to request disability-related accommodations that they may need for the interview and that they feel welcome requesting those.

And then finally, something I've had a few conversations with folks recently about is negotiating about the accommodations that they might receive, were they to accept an offer when they are in that negotiation and contract writing stage. And how receptive are you to including that in a contract?

So one example I heard of this was somebody's contract had in it how often they were due to receive, for example, a new laptop. And so she negotiated that. When she was due for a new laptop, she would also receive other assistive technology that she needed. And that would be refreshed at that time as well.

Again, so thinking about policies and evaluation within a department, making sure not just that folks are made aware of the accommodation process when they're interviewing, but as they're on board, are new hires and other faculty made aware of the process? And again, that's useful to bring up over time, particularly as we think about an aging population. Folks can acquire a disability over the course of time that they are in a faculty career. So it's not just the new hires that might need to be introduced to those topics.

Making sure the process is clearly explained on faculty and public websites, perhaps providing examples of accommodations-- there are some things that are very clear-cut, like sign language interpreters. But are there other things that faculty on your campus are receiving that it might be useful for folks to hear about?

Thinking about whether policies and procedures require that accessibility be considered in design, development, and procurement-- so for example, if we think about procurement of software, are you asking about whether it's accessible before you've obtained it for your campus? Because once you've already paid, it's already on your campus and you're using it, that's a much harder nut to crack, particularly if you need the vendor to make their product accessible. And whether disability related access issues are addressed when you're evaluating-- say, the climate or other things in your department.

Again, thinking about departmental culture and the extent to which it is welcoming and accessible-- something we see a lot are diversity, equity, and inclusion efforts on campus that don't really address disability, right? They may address other aspects, but disability is left off the table.

So if you're talking about DEI, are you talking about diversity and in a holistic way that includes disability? Do you include disability issues on campus climate surveys? When you're asking folks about the climate on your campus, in your department, is disability a part of that?

And then this is something, too, that we hear from our stakeholders, that oftentimes, particularly in the disability context, when we're talking about being welcoming and inclusive of people with disabilities, institutions are thinking about compliance with those laws that Sheryl mentioned earlier. But really moving beyond this compliance mindset towards a more proactive, inclusive, universally or inclusively designed mindset, can really have a shift in the extent to which your campus, your department, your institution, feels like a place where people with disabilities are really welcome.

And then, again, thinking about the physical environment. And there's so many things you could think about. So there's some examples I will read to you on this slide. These are things like. Easy to find accessible routes of travel, doors with sensors or opening buttons. Right? I know we have a video with Sheryl where she demonstrates using one of those buttons, because her hands are full. There's a variety of reasons folks might use those. It's a great example of universal design.

High-contrast and large-print directional signs, Braille signage and accessible elevator controls, well-marked wheelchair-accessible restrooms, accessible emergency evacuation equipment or lab equipment-- if you have eyewash stations in your lab, are they ones that are accessible from a seated position rather than just standing? Adjustable-height tables and chairs-- someone mentioned that in the chat earlier-- adjustable and adequate lighting in different environments-- and there's many more things you can think about in a physical environment with regards to accessibility.

And again, thinking about whether there are policies and procedures that ensure that these sorts of accessibility issues are addressed as facilities are constructed or remodeled, or when furniture and equipment are procured-- so thinking about it as you're designing or developing something is going to be much more inexpensive, much less expensive than trying to retrofit things later that are actually inaccessible.

And support services-- so are staff members are able to respond to requests for accommodations? Particularly, how is a staff member responding if somebody requests that, say, during the interview or application process? Can staff members help folks get accessible versions of documents, if that's what they need?

Are staff members aware of issues related to communicating across races, ethnicities, ages, and abilities? And are the staff that are designing and developing websites knowledgeable about accessible website design?

And then, again, thinking about some of these things in the context of information resources and IT, so thinking about meetings, are they captioned? Are they recorded and posted online? Again, and what flexibility does that bring to eventual attendees of those meetings?

Are web pages accessible? Do publications include a statement about how to request disability-related accommodations? Is it clear how faculty can request guidance in choosing assistive technology that they might need? And are centralized funds available for this?

So I'll just give you an example. On the University of Washington campus, we have an accessible technology services lab where folks can go and try out various mice that might be more friendly to their ergonomic setup. They can try different keyboards to figure out what might work or then get guidance on how to select what they might want to have for their own personal use. I'm going to go to the next slide.

And again, thinking about accommodations, this is something that has come up a lot in talking with faculty with disabilities, is just how difficult it can be to navigate this process, how labor-intensive it is, and how it can vary from institution to institution. Right? So really making sure that there's a simple and transparent procedure to ensure a timely response to disability related accommodation requests and making sure that faculty are made aware of how to go about this.

And then-- I'm not sure. This next bullet appears to have a typo-- but really considering-- this is something we heard a lot from faculty with disabilities that, it's not apparent that non-apparent disability, invisible disabilities can benefit from some of these accommodation processes, as well, and so making sure folks can. And again, the importance of centralized funding-- we heard a lot from faculty about how they didn't want to appear to be a burden to their department and really could benefit from their department supporting them in negotiating for central funding of these accommodations.

So great. So as we think about these sorts of things, I'd love to hear-- you can again share in the chat-- what are examples of strategies that institutions can use to be more accessible and inclusive of faculty with disabilities? These may be things that you are already doing on your campus. They may be things that you wish you were doing or hope to implement in the future.

In the next part of our presentation, too, we'll be hearing examples of things that North Dakota State has done on their campus. They've done some really great work, thinking proactively about this. And then we'll talk about some really low-level stuff we can do in the context of everyday meetings and events to make our department more accessible.

And I see somebody says, I wish we were doing more. And I think that a lot of us feel that way. And so one of the things we talk about in the context of our projects is how to identify the things you can start doing now, and then how to figure out what you can implement down the road. Excellent. So I'll turn it over to Janan now.

JANAN BILEN-GREEN: Thanks, Brianna. Next slide, please, Sheryl? OK, a reminder that one of the objectives of AccessADVANCE is to help institutions and organizations implement systemic changes, so that women faculty with disabilities are welcome and fully included and achieve success. So what we'll share now is how an academic institution initiated and implemented systemic changes for supporting and advancing women faculty with disabilities. Next slide, please.

North Dakota State University [INAUDIBLE], is a land grant research university in the upper Great Plains, with about 12,500 students and about 700 faculty. Our institution received an Advanced Institution Transformation award from National Science Foundation over a decade ago, focusing on faculty development and advancement.

Most recently, through AccessADVANCE program, we partnered with University of Washington DO-IT Center to further our efforts on supporting women faculty with disabilities. To implement systemic changes on our campus, we provided professional development opportunities for our faculty, staff, and administrators. We develop policies and faculty evaluation and accommodations and make creative structures to help facilitate the systemic change. Next slide, please.

As we initiated our institutional and transformation work, we had a number of assumptions. These included that there was much that we did not know. And then we also lacked institutional data from our campus on faculty with disabilities. To recruit, retain, and advance women faculty with disabilities, we needed to increase our understanding of disability, in general, and then also, learn about disability in academic workplaces, how those disabilities impact the work that faculty do, their promotion, their tenure, their recruitment.

We knew that we needed to identify barriers experienced by woman faculty with disability on our own campus, and that we needed to work towards addressing those barriers. We also knew, that, at least on our campus, to make any meaningful change, we need to work through various committees and shared governance bodies on our campus. That meant working with the Faculty Senate, Staff Senate, and our student government.

We needed to gain support and help from our allies, as well as our administrators. We needed to institutionalize needed changes through new at revised faculty-related policies, so that those changes remain and not lost, because we have a new dean, a new provost, a new president. While we had several ad hoc committees and standing committees, this work way back in 2008 was so new and critical, we decided that we needed to create a visible and effective committee, such as a task force, to achieve the kind of change that we needed. Next slide, please.

So the actions that we took as we initiated this change to meet our goals of supporting women faculty with disabilities, we started with an extensive study of what other higher education institutions were doing. University of Washington was one of the institutions that we looked very deeply into. Following that extensive study, we established a task force, a task force called the Women Faculty with Disabilities Task Force. That was chaired by a senior academic dean, who was our dean of health professions.

And the task force included our director of disability services for students, the director of HR, and other faculty and staff allies. One of the first things that the task force does, that was to commission a faculty survey on status of disability awareness and policy and practices on our own campus, as well as satisfaction with those policies and practices. Once that survey was conducted, we held several faculty forums to discuss the results and gather additional input.

And since then, we have added questions on disability to our climate work life survey, which is conducted every two to three years on our campus. We hosted visiting scholars. We offer disability awareness programming. We held a number of universal design workshops. The visiting scholars helped engage our faculty and campus leaders.

We developed and implemented policy changes for faculty evaluations and accommodations. For instance, one of the policy changes that we had was about tenure clock extensions, which included language that allows for tenure clock flexibility, as well as ensured privacy around tenure clock extension requests. So that means that on our campus, faculty directly send their extension requests to the Office of the Provost. If it's approved, departments are notified of the extension, but the reason of the extension is not disclosed. And this applies for any reason, not just disability.

We also changed the procedures for requesting accommodations. We moved it from the department chair, where the faculty member would have to work with their department chair to directly to the HR, to ensure consistency ir the way those requests are processed. These policies our shared with faculty during our new faculty orientation. Next slide, please.

Some of the other things that we continue to do is heavy focus on professional development. We offer opportunities for our faculty and staff. For instance, this past academic year, as part of our including new events on our campus, we offered a panel discussion on hidden disabilities. And then we had another panel discussion on abilities and access in May. This allows our faculty and staff share their experiences, talk about resources that we have, and that also help us think about, what else do we need on our campus.

Last fall, Brianna and Sheryl from UW DO-IT Center, they actually gave a talk on our campus, making our campus welcome accessible to faculty with disabilities. And then we had another presentation in the spring. Next slide, please.

We also have, this past year-- this is something newer to our campus-- is that we established several learning communities to help for more in-depth discussions and learning opportunities. So one of them was the Intersections of Disability and Academic Faculty learning committee, which had about 60 participants. They met monthly during the academic year. The group read and discussed an open access book, *Ableism in Academia Theorizing experiences of disabilities and chronic illnesses in higher education.*

And more recently, two of our faculty facilitated the Disability Equity and Advocacy series. This learning community had about 40 participants. This was a four-part learning series with structured conversations. It was all held in the month of April. This particular learning community was funded through UW AccessADVANCE Minigrant program.

So what are some of the-- next slide, please-- some of the lessons that we've learned? Through these efforts, we gained broader understanding of disability. We learned from our faculty survey and faculty forums that physical and cognitive emotional disabilities are seen as fundamentally different. One comment that has resonated with us that we remember is that, in academia, your mind is your primary tool. So there is this additional taboo related to cognitive emotional disabilities, which partially explains why faculty are hesitant to request accommodations.

We learned that the essential functions of faculty positions are often department and discipline-dependent. It is time-consuming and challenging to identify and document essential functions of faculty, because you have to do that for every individual, every position. We also now realize that changing the accommodation policy from the department chair to the HR calls for additional changes and support for the HR department.

Outside of the academic colleges, some staff and administrators are not fully aware of the kind of work that faculty do. They assume that faculty only do teaching. But faculty have various roles that range from teaching, to research, to student advising, mentoring, to institutional and professional service. So those who are involved in faculty accommodations need to understand faculty work to be able to facilitate accommodations. So while a centralized office for handling faculty accommodations is desirable, expertise of the staff of such an office should include understanding of faculty work.

We are also reminded that thoughtful policy change, which is necessary for meaningful systemic structural change, takes time and must be addressed iteratively. We also learned that it's crucial to form a committee with membership representative of people who will be impacted by those changes, by those systemic changes. Next slide, please.

So what is next on our campus is that AccessADVANCE project, led by University of Washington DO-IT Center, has brought new energy and ideas to our campus, reminding that we have to continuously work to engage our faculty, leaders, and continue to improve our policies and practices. Our faculty accommodations committee, is a newer committee, is reviewing our policies and procedures to identify further areas of improvement, while looking into structural modifications, such as changing the name of our Office of Disability Services.

This office primarily serves students, but we're exploring other populations that could be served by this office, such as graduate assistance. We're looking at ways to include accessibility in our DEI activities to help our campus members recognize disability as a form of diversity. And then our [INAUDIBLE] accessibility committee continues to monitor facilities, programs, activities, to prevent and eliminate barriers that may interfere with access to and benefits from our programs, facilities, and resources.

And finally, we're encouraging our campus to participate and engage in the AccessADVANCE program, led by University of Washington, including their Capacity Building Institute, Community of Practice, and then the Minigrant programs.

OK. I don't know if we have time, but one question that we have. What can administrators that work on faculty retention and success do to support women faculty members with disabilities?

BRIANNA BLASER: You know, I think taking a deep dive, look at policies, like Janan has just described, is a really great way to do that and considering what you can do that way. If folks have other ideas, I invite you to put them in the chat or the Q&A.

SHERYL BURGSTAHLER: Yeah, I'll pick up on that, Brianna. That's so true. Some units will say-- a number of projects that we have will say, well, where do we get started? What can we do?

Well, I know what I did in our IT organization on getting started on some of this stuff is, I just went through every policy, every procedure. It took a long, long time, but it was easy to do, to go through and see where there were things missing. Like in IT, a document that talked about what things you consider, when you buy IT for your department or for the University, included to be sure to consider security issues. And well, I just put security and accessibility. And so that was easy.

Some things that we came up with today, and some of it, you have a faculty guide or resource materials on a website. Do you say in there how to request an accommodation? Where do you go? Who do you talk to?

And if that's separate from your department that you're talking to, you also can be much more open about your conversation than if you're talking to your chair or someone else in the department, that you might want to ask something that you wouldn't ask them. Because you don't want them to think less of you, or whatever.

And so a lot of things like that can be done behind the scenes. You're not going to see changes immediately, but it's part of the whole process in becoming more inclusively designed.

BRIANNA BLASER: Yeah, and I saw a couple of things in the chat that I think are worth-- or in the Q&A that I think are worth mentioning. One is prioritizing these issues and making sure that they're factored into budgetary and staffing decisions. I think that's a great point.

Some of this, if you have any sort of required trainings on DEI issues, which we recently have a new one here within the UW IT, are you talking about disability in that context, too, right? The other thing somebody brought up is having some sort of grievance process and making sure that there's an anonymous way to raise these issues, so that folks don't fear penalization. Great.

So we'll walk through another case study. And as I said earlier, the work at NDSU is really focused on these high-level policies. But what other levels can we think about this on?

And I spend a lot of time on a day-to-day basis talking to folks about literally, strategies to make meetings and events accessible, either because they have a particular attendee coming with a disability, or because they're trying to think proactively about what they can do to make a meeting, or an event, or a conference, more accessible to folks with disabilities. So we'll talk a little bit about some strategies.

So what do we need to know? We need to think about maybe the physical environment, the online environment. You might think about the communication that you have with attendees, registration, evaluation. So go to the next slide, Sheryl.

So the first thing that might be useful to do is to think a little bit about who might have barriers to participating in a meeting or an event. And again, some of this will depend on whether your meeting or event is online, or if it's in-person, as we transition to whatever this new normal is. So you might think about the things that might affect somebody who's blind or visually impaired, whether that's, again, accessing an online environment or needing some guidance for navigating an in-person environment, captioning or sign language for folks who are deaf or hard of hearing.

Could somebody with attention or learning-related disabilities benefit from having things like slides in advance of the meeting? We know, actually, that providing slides benefits a wide range of folks, and not just folks with disabilities as well. You might think about mobility-related disabilities. I've been at conferences where there's a presenter using a wheelchair, and there is no ramp to get up on the stage. And not a fun situation to be in, right? So thinking about those sorts of things-- navigating the space for wheelchair users.

You might think, again, about non-native speakers of English. Again, as we've said, there's research that folks who are not native speakers of English benefit from using captioning. And in the online environment, we also think about virtual or phone attendees. Right? So again, if you're not seeing a presentation, if you can't see the faces of other folks in the room, are you still able to participate?

So in person, we have to think about event space. So some of the things you might think about are wheelchair-accessible space with wide and clear aisles. Another thing that you'll see a lot in events is those high tables for the reception site or for buffets. Having low tables is important, if you have somebody who is a wheelchair user, so that they can access it.

Again, making sure that a lectern or a stage is accessible to somebody who's presenting. And again, making sure it's adequately well-lit-- so we have had an event in a hotel, where we had to adjust the lighting. Because some of the folks that were using sign language interpreter said, I can't see the interpreter well enough. I'm getting really fatigued trying to watch them all day.

We really, really stress the use of microphones. Right? I think we often hear folks say, oh, no, I have a loud voice. I'm OK. That doesn't fly at our events. Everybody uses a microphone, and it's just part of the culture.

And yeah, I've seen some conferences really shift in the last few years to really requiring folks to use the microphone. And if we all agree that this is something that we are doing, I think it helps to make that cultural shift. And it makes people comfortable calling folks out when they're not using the microphone, right? So that really, everybody can hear what's going on better.

And then the other thing that I'd like to mention about in-person events is food restrictions and making sure that you're accommodating those. Sometimes, it may be a preference. But for many folks who may have chronic or health-related disabilities, it's a very real issue. And they need to have things clearly labeled, so that they can know what they can and cannot eat. It's just important to address, because who can participate in a meeting if you haven't eaten all day, right?

Online, not all meeting software is accessible. Sheryl mentioned this earlier. We really think it's important that you become familiar with accessibility features of your software. And I saw that there was a question in the Q&A about whether the chat within Zoom is accessible.

And so some people-- I believe if you use the web client in Zoom, then a screen reader can access the chat, but not necessarily in the desktop version. I believe that is correct, but don't quote me on that.

A few things to think about, if you are using the chat-- and there's a resource I will share in the chat momentarily-- is to just read what folks are sharing in the chat. It's something I do by default out of our meetings, to make sure that folks who are not reading the chat either, because they're screen reader doesn't access it or because they can't split their attention in multiple ways, that we all have access to that information, right?

So there are some low-tech strategies you can use if you're aware of the fact that folks aren't going to be able to read the chat. Right? It's kind of the same as reading the stuff that's on the screen. It benefits folks who may not be able to see it as well as folks that just need to hear it verbally as well.

And then the other thing is to share that relevant accessibility information with your attendees, so making sure that you share that. And I will put this best practices document from the University of Colorado in the chat.

OK, so ahead of an event, it really is helpful to think about accessibility as part of your preparation. This is part of that universal design strategy that Sheryl was talking about. So think about developing and sharing accessibility guidelines with presenters.

So this could be things like reading all of the content on your slides, describing images that are important for folks to understand, using good color contrast. Non-serif fonts, Sheryl mentioned. So we write a lot of that out and share it with presenters ahead of time.

We talk about how to make a poster accessible; having a QR code that folks can scan, if they need to see the online version. Making it clear how folks can request accommodations, and then knowing how to respond to requests and actually responding to them, which seems like a no-brainer. But I hear so often from people with disabilities, that in going to events, it's not clear to them that they're going to get there and have their needs met.

So some of the most common requests that we see are things like having accessible versions of the presentations. So consider by default sharing slides with everybody ahead of time. I know that that seems like one more thing to do. But when we do that, we do hear overwhelming positive responses from folks.

And then sign language and captioning are common requests that come up. A lot of times, folks can get worried about, oh no, I have to find somebody. There are agencies in most major cities that you can work with to request sign language or captioning.

And then it's worth, too, mentioning that automatic captioning tools are great for the sake of universal design. We use them a lot when we don't have somebody who has requested captioning. But they aren't always as accurate as a person who is captioning and may have the jargon, may better understand the jargon, maybe better able to understand speech patterns from folks. I will also point out, when you have sign language interpreters or captioners, they benefit from having agendas and slides ahead of time, so they can prepare and know what to expect as they walk into the meeting.

If you're having an online meeting, a couple of things that are worth mentioning-- consider recording it, again, so the folks can benefit who are not in the room. Ensuring presenters are well lit, so folks who might be, say, looking at the speaker and lip reading can see what that person is saying. And then virtual backgrounds-- folks love to use them. Encourage folks to use non-moving backgrounds, which can be a distraction or an issue for folks with disabilities.

And again, presentation materials, we talked a little bit about some of this, so I'm not going to dwell on it too long. But again, using high-contrast color schemes, large fonts, keeping the text brief and graphics simple. One thing you will notice, again, is that we read what is on our slides, because we're not assuming that anybody can see that.

If you put a ton of content on your slides and then say, just read this, that's really difficult. Right? And somebody's trying to read and listen to you at the same time, and people miss out on information, right?

Considering using more than just color coding to communicate information. There may be folks who are colorblind in the audience. If you're going to show a video-- this should be common sense, based on some of the other things we've talked about today-- using captioned versions of that video. And again, sharing accessible versions of agenda and presentations and especially, with those interpreters and captioners.

Again, as we're thinking about delivery, using microphones, if you're in person. If you're online, thinking about using a headset, because the microphones are often better than what's incorporated into your laptop. Thinking about using a variety of instructional methods-- so using polls, or the chat, or time for discussion in the context of a presentation.

Giving participants instructions for how they can engage-- so how can people best ask questions? Do you want them to use the Raise Hand function? Use the chat? Do you want them to wait to be called on? How do you want folks to engage?

Speaking all the content on the slides, describing images and graphics-- we've talked about that already. Here's one that I am guilty of not always remembering to do, but pausing when you change the slides, so that folks can take in the content that is on them, and using understandable terms, avoiding jargon where it's not necessary.

We always recommend following up after meetings and events, too, right? So if there's a whole bunch of URLs or resources that are shared or action items that you discussed, can you put that in email afterwards to make sure folks follow up? Gathering feedback about accessibility-- so if you have an evaluation for an event, are you asking whether folks accommodation needs were met? That's how you're going to know how to do better in the future, right? So gathering that data and then making adjustments to future meetings based on what you learn is important.

Again-- and I'll stress this-- one other thing that we talk a lot about in the context of our work is how little data is available on the participation of people with disabilities in STEM education and careers. Part of this is, so often, when we're doing surveys and we are asking for demographic information, we don't ask about disability. Occasionally, it's asked about and then not analyzed.

So I'd like to mention this in our presentation. So if you're asking, on an evaluation or other survey about demographic information of your participants, are you asking about disability? And these are a couple of questions that come from a paper I wrote with my colleague, Richard Ladner, about why data on disability is hard to collect and understand. And we talk a little bit about different ways that folks pose these questions.

What we recommend asking is, do you identify as having a disability or other chronic condition? Yes, no, or prefer not to disclose. And then, if yes, how would you describe your disability or chronic condition? And there's a variety of options there-- attention deficits, autism, blind or low vision, deaf or hard of hearing, health-related disability, learning disability, mental health condition, mobility-related disability, speech-related disability, or other. Excellent.

Oh, there's an old URL, I think, from a previous presentation. So you can ignore that link there. But we'd really love to hear from all of you about what you wish DEI experts knew that work on faculty issues.

There's a lot of folks that are working on DEI within the faculty context in STEM. What should they know about disability inclusion? Are there things that you think folks should know and don't know? So we'd love to hear comments in the chat or in the Q&A about that.

Sheryl, I see you're talking, but you're muted.

SHERYL BURGSTAHLER: OK. All right. One thing that I've encountered is, in our own UW IT, the parent organization I'm part of, they undertook a DEI effort. And because we're pretty visible within our organization, I was asked to provide someone from our team to be in that group. So I volunteered myself.

And really, what I did is just made sure disability was always on the table. They were talking about going through wording on our UW IT websites and talk about words that we should no longer use and other words it might be better to use. And there was plenty of expertise as far as racial ethnic minorities, and gender issues, and so forth.

And I just followed along and came up with some ideas for disability-related things-- things like having a book club. A lot of departments are in book clubs now in DEI. And find something on disability, and just propose it to that group.

So I think, really, to make a big change in our DEI efforts to include disability and accessibility-related issues, we need to volunteer to be on the DEI committee in order to make that happen.

BRIANNA BLASER: I see a couple of great things in the chat that I want to call attention to. I think one-- this is important-- I think they should know that academics think this is a non-issue. In my experience, many academics don't realize how many people around them even have disabilities. I think this is really common.

A large percentage of disabilities are non-apparent. You can't tell if somebody has a mental health condition, a learning disability, attention deficit, by looking at them, right? So remembering that we don't know who is around us and that it is an issue. I think many people with disabilities notice how often it is left out of conversations on DEI.

Rosie also mentioned, not every person needs the same accommodation. I think this is so important. And that accommodations really have to make sense for that particular person with a disability, right? If you talk to disability services providers, they talk a lot about how the accommodation process is an individualized process. And absolutely.

I get questions from folks sometimes that are like, I have a blind person coming. What do they need? And sometimes, I have to say, well, did you ask the blind person? They are really a much better expert on their needs than I am. Because every person is different, depending on their preferences and their particular abilities.

So yeah, not everybody needs the same thing. And oftentimes, just asking that person, hey, what do you need, goes a long way in terms of finding out what their actual needs are. But I think it also communicates a lot to that particular person that you value their participation, and you want to make sure that they can participate.

And another comment, academia is so competitive that the focus is on performance, and maybe less on mutual support or care of others. Which, again, I think is really important in the sort of work that we do. Particularly in the last couple of years, I think there has been some extending of grace to folks over the course of the pandemic. And I've been really interested in how we continue that as we move forward.

SHERYL BURGSTAHLER: And one thing to think about, too, is not to think of a disability as being a deficit, that a person with a disability is bringing a unique perspective and expertise to your group, to your department, or whatever. Even in the case of disability, a simple thing like having a faculty member who has a disability is a real plus in thinking about potential accommodations students might need and realizing that students with disabilities can have a great deal of competence, enough to be a faculty member and do research and teaching, and so forth, with a disability. And so that's important as well.

In our grant proposals, we usually end them with something like, "The ultimate impact of our project will be"-- let's say it's on STEM-- "will be increasing the number of people with disabilities successful in STEM." But we will always have an "and" on there, "and improving the STEM fields with the expertise and the knowledge of this important group."

BRIANNA BLASER: Yeah, and just a couple of other comments, before we move to the next slide. Somebody else mentioned seeing difficulties arise from fundamental differences among individuals, based on speed of thought, whether that might be related to something like an attention deficit, or being on the spectrum, and the way folks learn best, whether that's verbal, visual, kinesthetic.

So again, thinking about this, that's one of the things Sheryl often talks about in the context of universal design of learning, that giving folks multiple ways to participate in things and multiple ways to learn information really benefits a wide variety of folks. I mean, if we just talk about captions-- for example, I will share I do not have a hearing-related disability, but I turn the captions on in every meeting that I'm in, because it helps me pay attention. It helps me when I miss what somebody said, and I scroll back to it. Right? There's a variety of ways folks can use things like that, that we should be mindful of.

And I'll just say one more comment. In the chat, somebody said, yeah, we're highly complex individuals with equally complex interactions. So we need to approach inaccessibility through the lens of creative problem solving. I couldn't have said that better.

SHERYL BURGSTAHLER: And one other comment related to this. There's multiple ways of doing things. When we host meetings, sometimes just on the campus, but sometimes in hotels with people from around the country, we'll often have small group discussions. But most of the time, we'll also give everyone a sheet of paper with the question being discussed. And they can turn those papers in with their, perhaps, minority opinion, or whatever.

Because we know in groups, some people will dominate. And some people will be a little shy and maybe not want to share what they want to say. So we might have people writing on flip charts, making a list. But every individual in the room also has this separate sheet where they can give their opinion, and just write it out. And I think that's important, as well, and a good example of multiple ways of engaging.

BRIANNA BLASER: Excellent. Well, should we go to the next slide? So if you're looking to think more about these topics, we'd love to have you continue to engage with us. As part of this project, we are organizing Capacity Building Institutes. We held the first one online last spring. We're hoping, fingers crossed, to do one of this fall.

And then we are hosting webinars through our project. Applying for minigrants, you can get funding from us to support efforts on your campus to be more welcoming and inclusive of faculty with disabilities in STEM. And we are always seeking advice.

So if you read the handout that Sheryl shared earlier, and it is just in the chat right now, and you think there's something we're missing, let us know. We also have an online Community of Practice, where we share resources and engage in discussion related to these topics. If you are interested in joining that, we'd love to have you. You can email us at doit@uw.edu.

And I think from there-- oh, and here's a couple additional URLs, the URL for AccessADVANCE and our Center for Universal Design. And there's some great resources related to accessible technology, as well, on the UW site, at uw.edu/accessibility. And our email addresses are on the slide and in the chat, if you'd like to contact us. Excellent.

So I know we have a few minutes for questions and answers. And I see one in the chat. Maybe Sheryl or Janan, you'd like to comment on this, about how what we've talked about is really related to STEM, versus faculty and more generally.

SHERYL BURGSTAHLER: Now, that's a great question. Everything we've talked about today, pretty much, can apply in a lot of different spaces, and departments, and so forth. But there are things unique to STEM. And that gets into more of the details.

For example, when we talk about making your equipment accessible to people with disabilities, well, there's far more equipment out in an engineering department than, probably, in social work. And so you have more work that needs to be done in the area of making technology accessible.

People in biology are going to need a lot more work than, say, someone in the English department, on describing images, how to take complicated images and describe them in such a way that a person who's blind can access those. And so those are the things that come into play. And they're very specific things where you find the differences.

One thing that we have on our website, you'll fine-- go to the AccessADVANCE website-- is a button that goes to Knowledge base. And there, we have hundreds of articles that are Q&As, promising practices, case studies, that are relevant to women faculty members in STEM. And you'll find there are some things like, how do you write extended descriptions of images, of complicated images? How do you take a table and make it into several tables so that a screen reader can make some sense out of it, and those details like that?

But you'll find, just in terms of the images that scientists use and the equipment and labs, and so forth, that will get you into [INAUDIBLE], the specific things about STEM. And we've talked a lot about technology, actually, the T in there just about throughout this whole presentation, making things accessible, like Zoom, from the get go, and teaching that in your classes.

REBECCA KLEIN: And I think we have one more question in the chat. If you were going to prioritize three things to do first, what would they be? And then is that even possible to answer?

SHERYL BURGSTAHLER: Yeah. I'll provide one, and my co-presenters can provide [INAUDIBLE]. The one that I would be is to start by getting a team together and read through all of your policies, procedures, guidelines for faculty, descriptions of job descriptions, all the application procedures, just start going through those and making them more welcoming and inclusive of people with disabilities and accessible as well.

But when you say in your job description to request accommodations in your interview process, or something along those lines, please contact so-and-so, you have just put out a welcome sign to a person with a disability to apply for that. It's very uncommon that you see those statements in there. But I would do that first.

REBECCA KLEIN: OK, great. Well, I think that that's about all that we have time for today. I want to thank all three of you for a wonderful presentation and for this great discussion. And thank you all so much for coming, and have a great rest of your day.