

- LUCY GRECO:** Hello, everybody, and welcome to the keynote session about hiring people with disabilities. I'm Lucy Greco, and I am the Accessibility Evangelist for UC Berkeley, and I lead the University of California's accessibility initiative. Today, I'm joined by Lainey Feingold. Please introduce yourself.
- LAINY FEINGOLD:** Thanks, Lucy. I'm Lainey Feingold. I'm a disability rights lawyer, and I've been working in the digital accessibility space since 1995. And I've written a book about how to use collaboration to help advance accessibility.
- LUCY GRECO:** And Ted Drake.
- TED DRAKE:** I'm Ted Drake, and I'm the Global Accessibility Leader at Intuit. Before that, I was with the accessibility lab at Yahoo, and I've been a developer evangelist and accessibility advocate for probably 20 years now. I started in the museum world.
- LUCY GRECO:** Excellent. So I brought two of my closest friends together for this presentation because we all work on different sides of the accessibility world. Lainey, of course, is on the legal side, Ted is a developer, and myself, I am a tester, as well as an evangelist and promoter of accessibility. So I wanted to start by asking if the two of you had any really great stories about working with people with disabilities. Lainey, why don't you start?
- LAINY FEINGOLD:** It was very hard to think of just one great story, because I've been very lucky, in my legal career, to practice law in collaboration so that people with disabilities are involved in all the advocacy efforts I've done. So I thought I would share two, even though you asked for one, if that's OK. And the first one is the very first one.
- So I got involved in this space back in the '90s, when we were working on ATMs that would talk for blind people. And we worked along with the California Council of the Blind, the American Council, a lot of blind individuals. We went to the major banks. We said, you have a problem here. ATMs can't be used by blind people. That's a security problem, a privacy problem. But rather than sue, let's sit down and talk about it.
- As part of those conversations, we were able to introduce blind people to the ATM developers. And it was like, literally, you could see the light bulbs go off. And that is what cemented my commitment to working in collaboration. Because in traditional litigation, there's not a lot of

opportunities for companies to get to know blind people, or any people who are disabled, as people. Instead, they're plaintiffs.

So I just have very clear memories, all over the country-- in Boston, Kim Charleston was showing what it was like to be a professional person. You can't get your own \$20 out of a machine. And the bank guy wrote me afterwards, like, oh, my god, I never knew. So it was just an amazing experience. We've gone on and done that many times.

On websites, too. We introduced Major League Baseball to blind baseball fans. It was like a match in heaven. So I've had a lot of great experiences with it, and it's been crucial to my way of being a lawyer.

LUCY GRECO: All right, Ted, so how about you? What kind of stories do you have for us?

TED DRAKE: I was thinking about stories, because there are so many examples, as Lainey said, where you've worked with people and they've made small or large changes and impacted the way products were developed. But there is one story. When I was at Yahoo, the Yahoo Maps team came to the accessibility lab, and they wondered how they could make Yahoo Maps accessible.

And if that was just coming from the viewpoint of someone that did not have a disability, we would have looked at things like headings, image alt text. We would've looked at form labels, basically thinking, well, how do we make it accessible? But in that meeting was Victor Tsaran, who is blind and uses a screen reader. And so we had a really good conversation about what does Maps actually represent? What does a person that uses a screen reader, someone that's blind, how do they use Maps?

And what that conversation led to was the re-designing of Yahoo Maps to focus on directions. Because the map itself was just a collection of images that had no substantive value. Visually, they represented streets, but at the time, they had no way of representing the street names. So what they did was they redesigned Maps, and they focused on how can people get directions as fast as possible.

Now, that simple interview with Victor wasn't just about making it available for him. How did he know what the screen looked like? But rather, changed the experience for all Yahoo Map users.

LUCY GRECO: That's fantastic. So, generally, from what both of you are saying, is it opens up developers'

eyes to what the needs of people with disabilities are and how people with disabilities work on projects. It's really critical to remember, when we're working in the world of accessibility and in the field of, say, the web or creating new products, be them an appliance, a website, an application of some sort, that a large majority of the world does not actually know a person with a disability.

There are millions of people with disabilities out there in the world. But most people don't have their sphere of influence with a person with a disability. So it's really, really critical to understand that people with disabilities are out there and what their unique needs are. And those unique needs can actually improve our products.

I want to go back to both of you again and ask, Ted, talk about what a person's reaction is when they first meet a person with a disability. And how they've reacted to that person with a disability and if it's changed them in any way. Just individuals now.

TED DRAKE:

Yeah. And I think the question is really focusing on visible disabilities versus hidden disabilities. I think when someone first meets a person with a visible disability-- for instance, they're in a wheelchair or they use a guide dog or, for some reason, it's pretty obvious that the person uses assistive technology or has a disability. So the reaction they get from that is different from someone they meet-- maybe someone they've known for decades-- and just found out that that person has a hidden disability.

So the person meeting someone with a visible disability, it's almost like they can understand the situation. They start thinking of how they're going to get around the technicalities of the meeting. How are they going to work with this or that? The processes are going through their mind. I think, a lot of times, when people meet someone with a hidden disability, they don't know what to do. They don't have that kind of preparedness. And so there might be more curiosity. Not understanding how the hidden disability actually affects someone.

The other thing is I might also say someone with a communication disability-- whether that's someone using an assistive communication device like Proloquo2Go or something, or someone that's deaf and uses American Sign Language-- a lot of times, it's, what's the protocol? How do I communicate with this person? So I think the average person that doesn't know someone, is not familiar with people with disabilities on a daily basis, I think those might be some of the questions that go through their mind.

LUCY GRECO: Excellent. And Lainey, how about you? What have you found people's reactions have been?

LAINY Well, listening to your question and listening to Ted, I think sort of the key word here is

FEINGOLD: assumptions. I think people have assumptions about, really, everyone and everything in the universe, but especially so about disabled people and their capabilities and how they use technology, what we're talking about specifically. I have a great quote in my book from Isaac Asimov that's, "Your assumptions are your windows on the world. Clean them off every now and then to make sure you're seeing what needs to be seen."

So one example of that from my work-- and again, over and over. Because I think people layer onto disabled people lots of stuff that has nothing to do with them. Like you see someone blind-- like just in everyday language. You know, the blind leading the blind is supposed to be some ridiculous thing. Well, in fact, I know, from my experience, that a lot of blind people have a hell of a better sense of direction than I do, and I have definitely been the beneficiary of blind people with a good sense of direction when I myself can't know whether to go left or right out of a hotel room, hotel entry.

So we did a negotiation with Charles Schwab on behalf of a blind investor-- Kit Lao, who lives in the Bay Area. And she's a Power Options user. Trading options is a very challenging thing, whether you're sighted or not sighted. And Kit is super fast at it. She uses a Braille display. And she uses talking software, a screen reader. And because of structured negotiation, we were able to have a meeting with the developers of Charles Schwab and Kit.

We had a big screen set up, and she was showing them, here's how I do it, and here's where the barriers are. And the company was great to work with. They really want to get it right, because we didn't create any fear and negativity from the outset. And so she was showing them. And you could just see the developers-- they had never even contemplated that someone would be doing this very hard and challenging task without any sight, just listening to what they did.

Then they said, oh, can we bring our trainers in here? It was just one of these great meetings of learning and sharing. And Kit got to some button, and she's like, see, you didn't label this, so it just says button. So I don't know what it is. And some guy in the room said, well, we should label it, and we will label it, but it's the Help button. And clearly, you don't need that much help. It was just like-- it was a great moment.

So, yeah, I think assumptions, from every sense-- from designing who's using your products

and developing them, how are they using the products. We had another thing with the post office kiosks. And I was down at the Berkeley post office-- I'll never forget this-- with Paul Schrader, probably 10, 15 years ago. We could not, for the life of us, find the audio jack. We knew they had done all this work to make those kiosks-- which I don't even know if they have anymore-- interactive. And they were using easy access that Gregg Vanderheiden had at the time, but we couldn't find where to plug in the plug.

And I couldn't see it, and Paul was feeling for the plug. And finally, Paul felt it before I saw it. I never would have seen it. And it was just-- talk about universal design. That plug, the earphone jack-- when I say plug, the earphone jack-- was in the wrong place for everybody. So the assumption of not being able to learn from disabled people and, oh, there's not enough disabled people. Do we really have to do it? When the innovation that comes from building accessibility benefits everybody.

TED DRAKE:

Can I add to that real quick? Assumptions is critical. And so at Intuit, we have an accessibility champion program, and we start that by showing a really good video of disability etiquette from the Department of Labor in Washington, DC, because we want to immediately break down those assumptions. And then, as people become accessibility champions, they further in that, they have two requirements, two tasks to assist in that.

One is that they have to do a go-home. They have to follow me home, where they meet someone that has a disability and watch them do something like file their taxes or create an invoice, so that they can understand how people use software or complete a task in a real-life situation. And we also ask them to volunteer with a non-profit organization that helps people with disabilities. Because we want people to become-- I don't want to say comfortable, but you've got to be around a diverse group of people in order to understand the needs of a diverse community.

LUCY GRECO:

Oh, fantastic. Thank you very, very much, Ted. This is exactly the point and the goal of this particular talk that I brought up. Why I brought you here is because these are the really key things that I want people to realize. If we don't interact with people with disabilities on a daily basis-- and it doesn't have to be every single day, but it needs to be as part of normal life. Something needs to happen that makes the person with a disability a person first.

I mean, we've been talking for a really long time about person-first language. But when we come to assistive technology and working on access, we forget sometimes that the person is

first. And we focus on the standards and the rules and what good HTML is and all the rest. And we forget that real people are behind these. And as soon as we bring real people back into the project, we actually get not only accessible products, but products that work for everyone.

I think, Ted, you were over here once doing one of these go-homes. You actually got my husband to sit down and show something he was having a problem with to the development team that was there. And they're like, we never even thought a person would want to do that. And it turns out a lot of people want to do that. He's not an unusual person. And it's really key for people to understand that, first of all, people with disabilities are people, and they have ways of doing things that are different, but might be more effective for everyone.

**LAINY
FEINGOLD:**

Lucy, I think this is a good place-- I totally agree with what you just said, and it's a good place to just remember about diversity and inclusion programs for employment have to include disabled people. And hiring disabled people is really an element of building your accessibility program. I did a talk with Microsoft at CSUN a couple of years ago. And we were saying, how do you build accessibility culture?

And there were all these issues, like you said-- design and development and training and testing. And I always knew, of course, you want to have diverse hiring. It's a place where the ADA has fallen short. But it wasn't until I heard Microsoft, which has such a leadership role in this space right now, say, well, yeah, inclusive hiring is part of accessibility culture. Because if the person in the next cubicle can't hear, it's a lot less likely that you're going to put out a video program that doesn't allow for high-quality captions, for example. So hiring is really a key aspect of this, hiring disabled people.

LUCY GRECO:

And not only in the roles of testers, for example. You've got to hire disabled people so that they're part of the culture and just part of the community. I have a very dear friend of mine who is a developer at Google-- not on the accessibility team, but working on just one of the teams within Google. And he has changed the culture of that team immensely, to the point where when he first joined the team, they would start sending screenshots out to show people issues. And he would just gently prod them, saying, I don't see the screenshot. Can you describe it?

And now his whole team, by default, even when they're not communicating with him, are describing their screenshots and are thinking about alt text for images and buttons and so

forth in a much more effective way. They've improved their entire way of thinking about what happens with an image, who's seeing that image, and how that image is processed for everyone. And he's just another developer on the team.

I think, in fact, as a totally blind person, he's not working on accessibility as his first project. That's just his side project. He's actually working on network optimization. And that's critical, because people can't think of us as the token blind people or the token person who's deaf or hard of hearing. They have to realize that we are just another person doing our job who needs slightly different ways of doing our job. Do you have any examples of how that has affected people at Intuit, Ted?

TED DRAKE:

Well, there's a catch-22 here. One thing is that we wouldn't go to Grace Hopper, which is a conference for women engineers, with a team of all men and try to recruit women engineers to join us by having all men show up. But that's what we're doing when we go to disability conferences and such with all able-bodied, non-disabled people, trying to recruit. So we do have to be representative.

The other thing, though, is that because of privacy, I don't know who has disability at Intuit unless they come forward to me. So it's hard for me to say, well, here's a person that has cerebral palsy, and I want them to go to this meeting. Unless that person comes to me, I don't know. So part of what's important is that companies create employee networks. And those employee networks not only provide support for individuals and their family members, but also gives a community where let's say someone joins the company and they have a child with autism. They can connect with other parents of children with autism.

We have a person that just started one of our local networks, and she's been sharing her sobriety. And she's been leading breaking down the stigma of addiction and sobriety in the workplace. These are things that an employee network provides the platform and the support for people being able to do that.

Now, if there was a conference-- like we recently had a conference that we supported for deaf entrepreneurs. We had a deaf employee, and we have a hard-of-hearing engineer who joined that conference. So it's like now that we know, people have come forward and they've told us that they have a disability, we can help them represent Intuit at specific events. Does that make sense?

LUCY GRECO:

Oh, yes. I mean, let's unpack what you've said there. I mean, you've made so many valid,

interesting points. It's really important to provide these people with disabilities the support in the workplace, because there are issues that they're going to face with one another. If they're the only person with a disability, we're back to that tokenism that I talked about. And we don't want that to be an issue. We want them to be part of the community.

But we also want them to have somewhere to go. You know, we talk about this in diversity exercises all the time-- a safe space. And that safe space is other people with disabilities, or other women. Other people who might have issues with family members at home. It's really critical to let people realize that they're not that sole, lone person.

Disability is often thought of as a lonely situation. And it's only made lonely because we're not made aware of other people around us who might have the same disability or the same challenges to get their job done. I hate the word challenges, just so you both know. But it's really important. For me, growing up as a blind person, I've always thought that I need my community of blind people, if only to find different ways of doing things.

It's really key for me to have my friends who are blind around me. But I also enjoy my friends who are not blind, and I enjoy bringing both circles together and kind of seeing how they work. Sometimes they clash. Sometimes it works. It's a lot of fun for me to have a party here, where I have a bunch of blind people and a bunch of sighted people and seeing how the two circles slowly start to meld together. It's really quite lovely.

But in the end, you need to have an option to go off into a safe place, regather, recollect, and then come back. So those communities are really important. Thank you, Ted.

TED DRAKE: Sure.

LAINY Lucy, I do need to interrupt the flow here and say, what's wrong with the word challenge?

FEINGOLD: Because as part of my quarantine exercise routine, I listen to this hip hop Tabata gal, and she's always saying, with challenge comes change. And that's her exercise motto. But I kind of think it's good, because we kind of need to challenge everyone who's hiring people and everyone who's designing something and everyone who's developing.

We need to challenge people to think-- you know, you've seen those head bubbles in the person-- the designer has a beard, and he's a hipster, and he's thinking about a guy with a beard and hipster while he's designing. So yeah, I think challenge is good.

LUCY GRECO: No, I think challenge is good, but saying somebody is challenged--

LAINY Oh, oh, oh. Yeah, that's bad.

FEINGOLD:

LUCY GRECO: You know, saying somebody--

LAINY That's bad. I agree with you. Sorry, I misunderstood.

FEINGOLD:

LUCY GRECO: I mean, when somebody says, oh, you're so challenged doing things. No, I'm not challenged. I'm just doing them differently. But I challenge people, definitely, to come and think differently and understand and walk through these particular processes.

I want to really briefly touch-- I think we're getting close to time. I forgot to time. But I want to really briefly ask, why do you guys think it's important to have a person with a disability test products and test your theories and applications? Ted, let's start with you.

TED DRAKE: OK. Engineers are not screen reader experts. So we teach our engineers how to use voiceover on a Mac. But they're able to use it enough that they can quickly detect if an object is being announced the way they want it to. But they're not going to be able to have the same kind of experience as someone that uses it every day. And they're not necessarily going to be able to use the same equipment.

We had a problem recently that we were not aware of. It happened when Chrome did an update, and they fully supported an aria-owns attribute. We still don't know exactly what happened. But essentially, we were using aria-owns incorrectly on some items. And with the recent Chrome update, it completely broke.

Now, I would open it up on voiceover on a Mac, and it worked fine, but that's because I wasn't using Jaws or NVDA. But we started getting immediate calls from our customers that use screen readers every day, and they're saying, this thing broke. And we had to figure it out.

If you don't have that communication channel where you can hear from people that use your products with different assistive technology or different methods, or if you don't have someone that's working with you that can check these things with their assistive technology and use it, you're only getting a sliver of the experience. You're not getting the full experience.

Some of it is someone that's new to accessibility wants to do so much, but what they don't realize is sometimes they're doing too much, like for instance, they're creating labels that are too verbose. And someone with a screen reader comes in and says, whoa, whoa, whoa, that's way too much information. I don't need that. Just give me the basics. Or someone that's using Dragon and they're not able to find that button, because the label's been rewritten in such a strange way.

There's a difference between theory and reality. And a lot of our engineers and a lot of our designers are still focused in theory. They know what they should do, but they don't have the reality of actually using it on a day-to-day basis.

LUCY GRECO: Excellent. And Lainey, how about you?

LAINIEY Yeah. I agree with everything we've said this whole conversation, which has been great.

FEINGOLD: Without people with disabilities in the mix, there can be a tendency to forget that accessibility is about people. It's not just some code requirement. And this is a problem, as a lawyer in the legal space, I'm always running into, when people are thinking of accessibility too much as a compliance issue.

And always, yes, compliance-- of course we want people to comply with the law. But it can't be the driver, because then you leave the people out. And when you bring in disabled people to test products, to build products, to design products, it just bakes in the fact that the whole reason we're doing this is to make the digital world more inclusive. And we can't do it without everyone we want to include. So I think it's critical.

LUCY GRECO: Oh, that's fantastic. It's really important, because developers who are told they need to work for a standard or work to comply with x or y end up resenting it in the end, I find. They end up going, this stupid accessibility requirement, or this stupid security environment, even. It's like, I can't work in this space. There's no reason for me to do that. I don't get it.

But when we finally show them that somebody with a disability is using their tool and breaks, it becomes personal for them. They want that person to be able to use their code. Engineers, designers, software coders, what have you, they all have a bit of an ego. And when they see their code break and they see somebody struggling to use something that they worked on, I find that they will own that accessibility and become more of an advocate for it themselves has been my experience.

So we've talked about people with disabilities, and we've talked about how we should include them. Where do we find these people with disabilities? What resources are you two aware of for people to go to for reaching out and finding people with disabilities?

LAINIEY

FEINGOLD:

OK, I have two answers to that. First of all, on my website- which is LF, my initials, llegal.com- there's a Resources page, and on that page, I have a category for digital accessibility consultants, and also sort of a subcategory for usability testing. And on there, I have a couple of great platforms-- one that's run by Nobility in Austin, where you can get testing done remotely. I have a lot of non-profits listed.

So I encourage people to check it out. And if anyone listening to this sees something missing, please contact me, and I'll be sure to add it in. Its llegal.com.

And then the last thing I want to say is when I wrote my book, which is called *Structured Negotiation-- A Winning Alternative to Lawsuits*, the publisher sent it out to some lawyer in the East Coast. And the main comment they got back was, where the hell did she find these people, these clients who want to work in this way? And I have been completely privileged throughout my career that blind people have come to me to work on accessibility issues, because people don't really want to file lawsuits.

One way you can find people is to have a good complaint system in your organization, and track people, and reach out to people. And don't see people who call in as complainers. See them as gifts that can improve your products and services, because that's really what it's all about.

LUCY GRECO:

Oh, that's fantastic. And Ted, how about you?

TED DRAKE:

I think, also, it depends on your product, if you have a general product versus a very specific product. For instance, we have accounting software. And it really helps us to have feedback from people that understand accounting and small business needs, rather than having a person that knows how to test but doesn't necessarily know accounting.

One of the things that we do is I worked with several banks and financial companies, and we created a set of keywords. It's available on my GitHub page, but it's the keywords that people use to describe themselves without saying they have disabilities. And we use those keywords to track our feedback mechanisms.

So, for instance, someone may not say, I'm low vision. But they may say that I can't read the

gray text. So one of the things that we do is we do a monthly review of all of our feedback channels against those keywords, and then we create a report. And then we share those reports with the teams, and then we reach out to people that have reported issues that we can work on.

I think it's important to recognize that you already have customers that are trying to give you feedback, and use your communication methods to go back to those customers and get more information. Plus, we also work with-- small business owners are the majority of our clientele-- is that with TurboTax with taxpayers. But we sponsor organizations that help small business owners, like the Randall Shepherd Vendors Act, the Yantern Summit for Deaf Entrepreneurs, as a way of also getting more contact with our customers.

LUCY GRECO: I knew I invited the right two people, because Lainey talked about the process and how important it is to engage your customer, and then Ted just demonstrated how to do that. I think that's fantastic.

So it's really important to engage those customers, engage people with disabilities, but also hire them. Bring people into your organization. Is there anything that you would like to say in closing, Lainey?

LAINNEY
FEINGOLD: Well, I just want to thank you, Lucy, for inviting us to talk about this issue. And it is so important, and please, audience out there, take it to heart. And find the resources you need to really bake accessibility into your products and services and culture with people with disabilities through every step of the process. Thank you.

LUCY GRECO: And Ted?

TED DRAKE: I think there are a lot of companies that support you bringing your whole self to work, which means that when you come to work, you don't have to hide your disability. You don't have to hide your sexuality or anything like that. If you can find a company, like Intuit, that supports this, then those are the companies that you should be working for.

And so part of that is, as a company, setting up the structures so that people don't feel like they have to hide the fact that they have anxiety or that they have a child with a disability or that they have a reading disability, they're dyslexic, or chronic pain. We need to make sure that those people feel like they have the resources and support. And at the same time, those people are also going to be your representatives as they move forward.

For instance, I mentioned we have one person who's right now trying to open up discussions about sobriety in the workplace. Now, if I was a person that's in recovery and I knew that Intuit was a company that fully supported people in recovery, I'd be more likely to apply at Intuit than another company that has a bad reputation. It's not something you do overnight, but I think that a company that supports its employees will also be a more diverse company.

LUCY GRECO: Thank you. Well, I really appreciate both of you joining me today, and I thank you very much.

LAINY Thanks, Lucy.

FEINGOLD:

TED DRAKE: Thanks.