

I'm a professor of architecture. I've been at Iowa State, well actually this is my 48th year, so I've been here a long time. I've seen lots of changes, lots of improvements. And, uh, when I first arrived on campus, I had an interest in designing, uh, buildings and sites to be accessible, and I noticed that they were still putting up wood ramps to the, you know, to the back door or the service entrance, or in some times on the front entrance. But wood ramps, I thought, were not a very good solution.

So I promptly marched over to the university architect's office, who was in Beardshear Hall at that time, and uh, and I said, "Why, why are you doing this? We, you know, we need to get beyond this." And then he said, "Well, what do you have in mind?" We went over and looked at a couple situations. I pointed out how I thought things could be done differently ... For example, to have a grade level entrance. Uh, if you keep the slopes down below 5%, it's considered grade level. You can have an accessible route without having, uh, um, you know, a separate experience, uh, and, and an ugly ramp and, and so forth and so on. Well he liked the idea that he actually changed the one situation that I had pointed out and, and it's remains that way today and it really works a lot better with a simple, straightforward kind of solution.

So that's how I kinda got into this. Uh, I was a professor of architecture. I taught a number of courses. Uh, part of what I taught dealt with what I'm now calling inclusive design, okay? And we went through various terminologies, but, um, for a number of years, it was really referred to as universal design, and I want to just speak to a minute, in a minute about the differences of those two.

Um ... there was, uh, a coordinator of students with disabilities at the time, Joyce Packwood, when you remember her, who was a strong advocate. She, uh, she had quadriplegia and she used a electric wheelchair with the little joystick and it, and uh, she was lucky to get that much recovery just to do the, the joystick, you know, 'cause her injury was pretty far up, in her neck. And she became a really strong advocate for trying to make campus more accessible.

So, um, she would call, she knew I was interested, and she would call me and say, "Can you help me look through this set of plans. They're gonna be building this new building or adding on to a building and, uh, can we make some suggestions?" And this started a kinda long relationship that I have with FP&M, which is Facilities Planning and Management. (background cough) So I actually worked with them throughout the year, um, at, on a kind of on-call basis to try to advise about how we can do things better.

Uh ... when the ADA came out in 1990, they asked me to coordinate, uh, a project where we go around and survey the entire campus to identify where the problems were, because a lots of things with the existing environment don't comply with the ADA. And of course we don't have the funds to go back and change everything, as we should, um, in an ideal world. So, uh, I worked over two summers with, uh, uh, one time I think we had fourteen students, canvassing the campus. Measuring, uh, going into the restrooms, checking the doors, checking the entries, and so forth. That led to a huge report, uh, and, and it was all digitized. And, uh, I continue to advise, uh, the university even to this day. Okay? What happened then, uh, I got working with the ADA standards for, uh, buildings and sites. And the first set of standards was very poorly written, confusing, um, difficult to understand (chuckles). And, it's gradually gotten better, so if you go online now and look at it, it's a much better standard. I actually brought along some references.

So we made a little pocket guide. I went over to the university architect and I said, "Can we just make a little pocket guide to explain these standards so they are simple to understand?" Good idea, right? I thought it would be a simple little project. It took years (laughter) to do it. And we'd been through several editions. This is the current edition, if any of you are interested. It summarizes the ADA requirements for buildings and sites, okay? It refers to 'em ... But what happened with each edition of this book, um, it got more complicated. And this is kinda what I wanted to, uh, talk about.

I really started thinking about what is inclusive design. What makes things work better for people? Not just meeting the minimum standards. For example, we've had several buildings, I think the first one where we were able to do this was out at Reiman Gardens, where we'd left off the doors to the restrooms. This was very controversial. We had to fight like crazy. Joyce and I fought that battle. You know, convincing the university architect, convincing the outside architect, convincing the owners, that this was a good idea, a good concept. You know, it's been done for years in airports, places of real high use. Um, but every project that comes up, I'm advocating that. Sometimes I win, sometimes I don't, 'cause lots of factors are at play. But there's an example of something that I call inclusive design that goes beyond the standards. Okay?

We were talking about entrances. You can, you can build a ramp at an entrance, as long as the ramp, the ramp meets the slope requirements, the handle requirements, and so on. But is a ramp a good solution at an entrance? No, it's much better to have grade level entrances. You can build grand stairways, uh, going up to entrances, monumental stairways, which we used to do, historically. But does that make sense in this day and age? I don't think so, so I always advocate not having exterior stairs whenever possible.

So, uh, I guess you can say I'm an advocate, I'm kind of a radical on this. I've started thinking about how inclusive design affects all design. I pick up the remote control for my TV and I'm frustrated. Um, the phone I use, you know. This version's better than the last version and that's much better than the previous version. I go on a computer, the software programs I use ... um ... and, I really want to pick up on the point that Wendy was making, because there're a lot of people out there that have either undeclared disabilities of some form or another, or, um, temporary ones.

I mean, if I don't have my coffee in the morning (audience laughs), I feel like I have a disability. If I have a head cold, I have a disability. If I have fall allergies, and now it's better or worse from day to day, time to time, right? Uh, even, you can even be bothered by something. You didn't sleep well. Whatever it is. So these, all these different levels (throat clears) that we really need to be thinking about. And so there's, there's really a danger, I think, in having a sort of cookbook formula of solutions. This takes thought, and it takes an ongoing kind of effort to really do this well. And, really, that's what I'm advocating.

I did print out, I don't think I have enough for everybody, but if you're interested, uh, there's some good websites. I refer to 'em in the back of that book. We've reduced the, uh, price of the book down to \$39. You can get it over at Copyworks. But the good news is, we're preparing a Kindle version, which is almost ready, and I think they're gonna make us charge \$1.99 or something, but you can put it on your devices. We're having trouble getting it to flow, and all this stuff, the way it should. It concentrates on buildings and sites, but this concept, this idea we're talking about, goes way beyond that. If you're not familiar the Center for Universal Design and their website ... um ... you know, please, look that up and go (background cough) through that. Um, I was mentioning the difference between universal design and inclusive design.

Universal design is a great concept. Something that works well for everybody, right? But you take that doorway, and by the way, does that have a knob? Yeah, that's not good. It should have a lever, right? But this was built just before ADA (chuckles) came around. We knew at the time, there's a good example, that levers were better, but they weren't required. So people were still using knobs. It's the same on our building. And once they're there, they're, they're hard to get rid of, right? The knob still works just fine and we don't have money to replace all the knobs, like we should. So, there're a lot issues. But take that door, if you're going to make that a universal design door, everybody gonna have to get in and out of it. It'd have to be as wide as the widest person we have, as tall as the tallest person we have, right? And take no effort to go through and work well for, uh, people with visual impairments, et cetera, et cetera, et cetera, right? So, it's a concept. It really doesn't work in a lot of situations to have something that's universal.

But if you think of inclusive ... Inclusive means, to the greatest extent possible, without discriminating (clears throat) against people or groups of people. So it's a much broader way of thinking about it, okay? So when you think about discrimination against groups of people, that has pretty broad implications.

I used up my time, didn't I?

No, no, you're fine. (audience laughs)

No? I'm still good? Uh (laughter), so, I mean, [crosstalk] we can go through a few other, we can go through a few other examples. Yes?

if we talk about it that way, you know, you described the disability sometimes, you know, I have a headache, I cannot live without coffee, but, you know, that is really something that doesn't prevent me from still functioning the way I should be. I mean, I'll just say, "Well-

Right.

"I feel badly, but I'm gonna do my job." But then for the person who is trapped by a permanent disability, it's a very different-

Very different. [crosstalk] You, you're right.

Especially overcoming that every single day

Yes. Was everybody able to hear what she said? She speaks pretty loudly. Good. Um, no that's a really good point. And, uh, and I guess what I'm saying is, we should think of design, and, and I'm thinking of design in a broad way, right, 'cause we're talking about design of websites and information and (chuckles), uh, you know, signs, and, everything, everything imaginable, right, that, that, that is involved with this university. Um, finding your way, just all sorts of things. But when we think of it that way, uh, I'm advocating that things are as easy-to-use as possible, as intuitive as possible, as easy-to-understand as possible, um, that I shouldn't have to go have a training lesson to figure out how to use the website, and so forth, right? And things are getting better, you know, at a very, very quick pace.

But we still have a lot of people that are left out. And, some people are left out, as you might say, more permanently. Others are, are, you know, temporarily come in and out of it. And, and when you think about discrimination against groups, uh, you know, a lot of older people have a lot more trouble learning some of the new, uh, software techniques and get familiar with things. I mean, my brother doesn't use a computer. Never has, never will, and it's sort of an attitude thing, too, right? (audience affirmative) But, you know, we still have a lot of ... barriers to overcome.

And, you know, when this movement got started, it was really about eliminating barriers. Identifying the barriers, eliminate the barriers. And what happened to the book was ... You know, we kept thinking, well there's more to it than that. Talk about stairways. We want safe stairways. We want stairways that are easy to use, that are gonna be as safe as possible, right? So that means, uh, contrast of the handrail to the wall, and I noticed you have a really ugly stairway, but you got really good (audience laughs), you got really good contrast between that green handrail ... And, you know when they built that stairway, I couldn't believe this, that they're spending all this money on this marble interior and all this beautiful stuff, and then they put us in this back, ugly stairway, echoey, (audience laughs) ugly stairway. But that's a design issue, really.

Um ... but, you know, inclusive design could include stairways that are easy to use. I like open stairways. They're ... you get a lot of good exercise going up and down an open stairway, so why not make an open stairway that's easy to use, that, uh, everybody ... um, that it's easier to use that than to go back to the elevator and use that, right? So it's a design issue. I, I think that, of that as inclusive design. So inclusive design, and, of course, I'm kind of preoccupied with buildings and sites, uh, but think about it in terms of product design, in terms of, uh, digital design, in terms of, uh, use of equipment, use of tools. Scissors. Pick up a pair of scissors. Which one is really easier to use, okay? Which one works for the left-handed person, as well as the right-handed person? And so this, this issue really goes way beyond just buildings

and sites.

Well, now your-(audience laughs)

Okay, now my time's up.

Okay, I just wanted to pull-