IHE

Digital Accessibility in Higher Education

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>> SCOTT JASCHIK: Hello, I am Scott Jaschik, editor of Inside Higher Ed. Welcome to today's webcast on digital accessibility in higher education. Joining me today is my fellow editor, Doug Lederman. We will be walking you through a PowerPoint and then we will have lots of time for your questions and comments. First some housekeeping. We wonder questions and we will turn to them in the second half. But you can ask a question at any time. Writer question in a bubble at the bottom of your Q and A box on the screen. Sometimes it helps to know what your institution is or your position, and include any information that could include context.

We will read the questions when we answer them, and you will only see questions that you have asked. You are welcome to Tweet comments about this webinar. Our hashtag is #IHEaccessibility. We will be transcribing and recording this for those with disabilities.

I want to thank Blackboard in support of this webcast. We are ready to begin.

I'm joined by my colleague, Doug, today. Here is our contact information.

I want to talk about two key laws but this is more than the law. We have attendees here or listening from Canada and from Latin America, which are not covered by the same laws I will be discussing here in the US. Although they have their own laws. But I think a lot of the motivation here is not just legal. Sure, colleges do not want to be sued they want to stay out of controversy. But many people in higher Ed approach this as trying to do the right thing.

I feel obliged to talk about the legal issues and we will be coming back and forth to them throughout. But there is more than that at play here.

There are state, and local laws, but there are two primary federal laws that come into play when we talk about these issues. They are in many ways similar, or at least in regard to higher Ed. One is the rehabilitation act of 1973. And specifically, section 504 of that law. Which reads, "no otherwise qualified handicapped individuals shall solely by means of handicap be excluded from the participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance." This applies very specifically to higher Ed, the only possible exemption here is the very small number of colleges and universities that do not receive any federal funds. And they are so small that I don't think they have a major impact in higher Ed.

Then there's the Americans with disabilities act. This is several titles that cover different parts of the way universities and other entities in our society function. One title is about employment -- remember colleges are not just educators. They are employers. And they are often sued and challenged under ADA, to make it possible for people with disabilities to work and specific hiring practices -- we've written about cases where, for reasons that are not exactly clear, there are references and job ads to performing physical duties. We are not talking about jobs that would seem to require those tasks to be performed.

So, there is employment. Then there is public services, which is title II and public accommodations, title III. In these titles, different parts cover public and private education, but again you've got everyone essentially covered for the range of programs and services that they provide, with explicit mention of educational services.

Title IV involves telecommunications and then there is additional title. The bottom line is there are accepted longstanding precedents here that give people with disabilities the right to access higher Ed. We will now walk through how this has evolved.

In 1973, and frankly even in 1990, no one was thinking about digital issues with regard to accessibility. Today, they very much are. To understand the impact on digital, will quickly walk through some of the developing cicadas there in terms of the early issues that came up with regards to discrimination against people with disabilities. And it is worth saying that while those were the dominant issues early on, most of these are not resolved fully. And you will still see cases come up involving some of these earlier issues.

One of the key issues from the start was physical access, and I would include there physical disabilities broadly. So whether it is stairs like you see in that photo, or access to somebody to provide sign language interpretation or provide braille materials, from the very beginning I would say the most obvious issues facing higher education were those involving people with physical disabilities.

And you saw lots of complaints filed. There are various deadlines and requirements under ADA and 504, some for new facilities, some for renovated facilities. At this point, enough time has passed that it is the rare facility that has nothing happened to it in that time period.

Higher education and many colleges and universities have been around for a while and have been around for a long enough time that when they were constructing their facilities, they were not thinking of these issues. So you see lots of places with very dramatic powerful looking staircases that were not designed for this purpose, but have the effect of keeping people out.

Also, from the start emphasis on test taking. Here we are talking both about standardized tests to get into college or to get into professional schools am also taking of tests in college. What you see there is, again, and expansion from physical, purely physical issues, to things like people with learning disabilities. People have all kind of disabilities that may make it more difficult for them to complete a task under the same conditions and same time as others.

Have a series of issues over what were appropriate accommodations to offer? What kind of time, what kind of format? And also a series of legal fights over the push by some test taking companies to label anybody who got accommodations so that those looking at their scores would know. Many people pointed out this effectively stigmatized those individuals.

So these are key issues from the start and they remain issues -- just last week in fact, ACT announced changes in the rules it uses for people with disabilities taking the ACT, and seemingly small issues matters people.

In the past-- ACT has different sections of the college entrance exam -- and what they announced is instead of getting extra time overall, you would only get extra time for each section. It sounds like something may not affect a lot of students, but one lawyer recoated said there may be students for whom that is problematic. These are tricky, difficult issues.

Some evolution of a leaving aside -- before we get to digital as well -- to get a sense of the breadth of these issues and how they affect literally every part of the institution. When we shift to digital one of my themes will be that you need to constantly remind yourself how digital services are about every part of the institution.

Take athletics. It was not an original big issue but now you have people with disabilities asking about athletics opportunities for them. You people with disabilities asking about stadium access, asking about the large scoreboards and whether they are accessible to people with disabilities.

Study abroad. People may be enrolled at an American college or university covered by these laws, and which ethically believes itself to be part of this issue and were access is limited. This all matters. My point is everything in higher Ed could be a potential barrier but if designed right could be an entry point with people with disabilities.

Digital changes everything. I put a rather out of date computer because I wanted to drive home the point that even as people continue to say, I have not thought of that, it is important to remember we did not just go digital last month, we have been digital for various degrees for a while.

And people have started early on to think about it, the issues have evolved -- but sometimes I feel when I read some of those justifying not being ready, since they think we just started digital education -- when that is anything but the case. Doug, did you want to add some points?

>> DOUG LEDERMAN: I do. Welcome and thanks for joining us today everybody. The point I wanted to make that the first couple of slides -- the first couple of laws you talked about was to ensure equitable access for everyone, regardless of their physical and other traits.

The reason the shift to digital is important is because that was one of the fundamental reasons why digital was introduced. Why various, particularly digital learning and online education and other forms of technology, enabled -- were specifically designed to broaden access to education.

More at the beginning, more focus on geography, and spreading, making it possible for people who could not get to campuses for various reasons or could not give up their jobs, etc. But the whole underpinning of the move and injection of digital forms of education into our education was to expand access. So it is only logical that ensuring that it is actually happening to people with disabilities and other impediments that might keep them from it -- just like the laws were designed to make sure people had ramps if they could not climb stairs -- the equivalent is absolutely true when you talk about forms of digital education.

The point about -- the second slide, there are so many elements to how digital forms are being used in education that you have to think broadly, as Scott said.

>> SCOTT JASCHIK: We're going to be talking about a lot of the challenging areas in digital access, but I wanted to start off by noting digital access from the get go has led to tremendous gains for some with disabilities. And that is a photo thereof students having a celebration at Gallaudet University, the University of those with hearing disabilities, and I'm going to date myself, but I was write about Gallaudet. and with someone not having sign language ability, to get on the phone and in touch with people at the University prior to the digital era was much more limiting. As was those students who wanted to reach a journalist or anyone and express a view. These days, I email with the people at Gallaudet the same as I would email people at Georgetown.

People at Gallaudet are part of the discussion at the get go. And that is wonderful. When we talk about the tough issues it is important term in the digital has from the launch made things more open, more communicative with many people in higher education. But not for all. This is the start of a page that I found online just listing lawsuits and resolutions of lawsuits involving issues of disability access in higher education.

It is a long list. And it covers lots of institutions and lots of issues. I throw that out there as a cautionary tale that I fear that many institutions have approached these issues, these digital issues, with a wait until somebody complains attitude.

It is of course true that many institutions may not have yet and rolled somebody who needs a particular digital accommodation. Now, I do not think that is a particularly justified excuse, nor have the courts, because the reason a college may not have someone enrolled is because they do not have these facilities.

But going with a "we will wait until there is a critical mass approach" has not served people with disabilities well and it certainly has not served institutions well because in these cases they end up doing what they should have done before but they are now paying legal bills and other settlements.

I want to talk briefly about the change in administration this time compared to last, but also to tell you not to focus on it.

This is a variation of my point at the beginning about there is the law and there's the question of doing the right thing. It is true that under the Obama administration, we saw stepped up enforcement of laws involving disability access in higher education also in higher education. So it definitely helps a lot to have the justice or education department raising these issues for people with disabilities.

But -- and this is an important point -- at this point in time, there are law firms that specialize in this, and there are nonprofit groups that represent people with different kinds of disabilities. So the fact that we are not seeing the same level of activity from Washington, I would not take that as a sign to be less committed or engaged in this issue.

There are people who can and will fill that gap, and if need be will sue. So do not take false comfort in the current emphasis or lack thereof from the Justice Department. Doug?

>> DOUG LEDERMAN:I want to echo that a little bit. The people who I talk to about these issues basically say there is not -- there's no question this administration has probably narrowed how it is going to approach some of these issues. And probably be a little less active. But a couple of things are important. One, we have pendulum swings in our political world. And recently had one. I think you can safely bet that at some point it is going to swing back, and that has been the nature of general -- not only accessibility but all forms of discrimination enforcement, the pendulum swings one way or the other over time with more and less enforcement and more and less emphasis on it.

And the other thing, and I think this is something Scott referenced at the beginning, but while there is no question that the legal threat, the federal regulatory threat is only one element of the potential legal and prodding -- But most of us for better or worse, change your behavior in large part or often because of what we are afraid might happen. But I do think we are in a time when things are changing. And more and more people in higher education and institutions are moving past just a reactive and responsive behavior, to focusing on this because it is educationally the right thing. And finding that making sure that what they're doing educationally is available to everybody, has benefits even for those that are not disabled and do not have physical or other limitations that may impede their ability to get access to it.

So I do think the law matters, but it is not what is driving institutional and individual behavior most right now.

>> SCOTT JASCHIK: Before we move on, want to remind you that we welcome your questions. And even though we will get to them in a few minutes, we welcome questions now. So that we have them ready to go when we turn to that part of the webcast.

I want to talk here about what matters in terms of disability access outside of individual courses and course material. We will cover that too -- but I want to start with the non-course material issues. I've made a list here that is really scratching the surface. But it goes back to what I was talking about earlier about the importance of remembering that just about everything in higher education is done digitally these days.

We wrote a story about two years ago about what I thought might have been the last college to abandon the traditional system of course registration, where people showed up with index cards and get registered. Pretty much everything in higher education is done digitally, through either mobile devices, through laptops or desktops whatever. And just think about it throughout the process. Admissions materials are your college's material successful for those online as well as those you may print and distribute?

Application materials, registration, all communication with students. Think about everything a dean does the department head does, that a professor does -- registrar information, financial aid, and of course all functions of the LMS. In higher education the LMS is a tool that does so much more than just have the course material there. And it is a tool that relates to grading, communication, tracking what students are doing. Transcripts -- etc.

Every part of all of those things and everything else is covered. Now, there will still be debates about what a reasonable accommodation is. Nothing in the disability law says that colleges must do everything that a person filing the complaint asks. But we see more attention to issues such as LMS design, from the entities that produce LMS systems, from the colleges and students that use them. It is true of everything across-the-board. It all really matters.

I am not -- just as I should have said earlier -- I am not a lawyer or web designer. But there are some things that seem to come up commonly in complaints, and lawsuits, that I want to reference here.

What is interesting to me about this issue is not that colleges cannot provide materials online. It is not that they cannot have the norm to do certain things to be online -- it is how they do it. It is about how pages are designed, how the frames of different content are designed, font, color, user experience.

To share a few general guidelines I think illustrate the kinds of things that come up, there's generally a lot of advice about the need in organizing websites or other material to separate the visual content from the actual structure, so that a student or faculty member can get to what he or she needs without using the same visual cues that are the case for -- that are used by others.

It is important to remember that we're not just talking about people with complete visual disability, but a lot of issues have come up with people who have limited vision. For people with limited vision, web design can make a significant difference between accessible/not accessible.

Similarly, other text alternatives for material presented visually? There's a lot of flexibility for colleges to provide material in multiple ways. And if they believe that for some of the students a visual representation is ideal, they can do that if there is a text alternative.

Likewise, people need to be careful about how they use color, whether -- and whether the use of color makes the materials inaccessible to those with certain visual disabilities. I am just scratching the surface here, but what I am turned to do here is to make you think broadly about the kinds of things that come into play.

You will notice I did not say: do all this just if it is inexpensive. While there is a reasonable accommodation standard, it is not "you only have to do things that do not cost any money." Again, I think that is so important. We've seen a number of colleges that get into trouble, where they do not fully consider the issues and one person just as, no, we do not have the money for that. Without thinking about how they can, in fact, do so much more.

Theme of the last slide and this like, it is not just academics. But of course, it is academics and course materials. There are two key things I want to say here before getting to some of the specifics. One is the centrality of instruction. That includes things I mentioned before like registration and the LMS that gets you to instruction but also in higher education we are talking about teaching and learning. So there's nothing more central than what goes on there.

What there is also the decentralization of teaching. This gets tricky for colleges. Many people love academe and that you could have 20 sections of a course taught in 20 different ways. Some people do not like that, of course -- but what that means is you have lots of people who are making individual -- who are used to making individual decisions about their courses without necessarily thinking about issues of digital access.

And that is a great challenge for colleges and universities because to be blunt, many faculty members do not take well to being told, this is how you are going to design your course. Doug, did you want to add something here?

>> DOUG LEDERMAN: Sure. And we will probably get to this either in some of the successive slides or the Q&A, but this is an overarching point which is that one of the things that makes this issue so potentially vexing for institutions is the nature -- nature of instruction, as Scott described it.

Because you have so many people who are -- at most institutions -- this is less true at places that have really centralized curricula, particularly at it open access institutions and a good number of for-profit colleges. At many campuses, teaching and learning enterprises is a solo game, an individual activity.

As a result, trying to ensure what course materials are accessible, it is difficult -- the question of ownership, who is responsibility is it? Is it top-down, central versus not? It is one of the things that makes this tricky.

As Scott said repeatedly, none of this excuses institutions or is a defense if an institution is not doing what it needs to do but it is an important challenge to recognize, and so many questions and comments we have on accessibility comes down to, how do you go about ensuring -- and how much do you leave in the hands of individual faculty members -- versus by trying to prepare them and teach them how to make these, make their courses and materials accessible -- versus how much do you have some central body doing it? These are a handful of issues raised by the facts that Scott made about decentralization.

>> SCOTT JASCHIK: I want to talk about a key finding from the University of California at Berkeley by the Justice Department. This is from complaint of a Gallaudet professor regarding what Berkeley put on in a YouTube and iTunes platform. This is about how do students that access materials who are not Berkeley students or faculty members -- many in higher education love the fact that the digital virtual campus these days is global. And it can be used to help people from all over the world. But this also raises questions of accessibility. The justice department found wide spread problems. They found videos with no captions at all or videos where they found the captions were inaccurate.

They found documents where there were photos but no description of the document. No way for people to actually read what was going on. And this was not in just one or two cases, but in hundreds of course materials.

What the department announced was that Berkeley had to fix it, but what Berkeley did, which upset many people, is they instead took the material down. There was no obligation for Berkeley to provide the material digitally in the first place, and this was not serving Berkeley students.

The Berkeley mess illustrates a number of things. One it points to the centralization issue. Berkeley, like many colleges and universities, if not most, had been encouraging your faculty members, if you are teaching a course put the materials online. They were excited about this. But the degree to which individual faculty member said I am putting stuff online, I should think about accessibility issues, all that varied widely.

All Berkeley had good systems in place for those who sought guidance, they did not have much of a system in place for somebody who did not seek guidance and put stuff up there or ignore the issues altogether.

When Berkeley responded as it did by pulling materials down, people raised questions about who one here? And I think what this illustrates is there are a set of issues related to places that did not think this through as they were starting, and perhaps we may now see different attitudes.

Then there is online education. Most of what we have been talking about today would apply to both in person and online education. The main point I want to make here is the rights of a person with disabilities are not diminished because the person enrolls in a program in which the person may not be physically present on the University campus.

In fact, for people with some physical disabilities, or other disabilities, online education may be an ideal learning environment. So it is important to remember that even if certain issues like a staircase to the classroom building do not apply, well, they do apply but they are not relevant, everything else does apply.

Doug, did you want to say something here?

>> DOUG LEDERMAN: Sure, that sort of -- he reinforced the point I made earlier about the purpose -- and this actually relates to the Berkeley situation as well -- one of -- there's obviously a lot of discussion and debate about how central digital -- digitally enabled -- whatever term you want to use for the use of technology to spread instruction and knowledge by institutions, spread the reach of institutions-- we seen a lot of examples of this. That is one of the main -- there's lots of debate about quality and all of those other elements -- there's no question that the fundamental underpinning of online and other forms -- you can take this back to correspondence education as well -- was to spread the reach of education to people that did not have access to it.

Not only is online education in various forms of technology in the educational process no different, it is absolutely exactly the same -- again as Scott said, the issues that are raised and how we talk about accessibility may change but the institution's obligations do not, and what is tricky about a situation like with the Berkeley stuff, is that those materials were very much the reason Berkeley could essentially make the decision to stop it is they were not fundamentally at the core of the education that Berkeley was providing to its students.

It was more in the realm of public service. And much of what colleges are doing online is to sort of spread their knowledge base and their course materials more broadly, even beyond the students they are formally educating. And so -- and there is going to be more and more of that and that is why the issue will become more complex over time.

>> SCOTT JASCHIK: While the issues will indeed get more complex, I think we're going to benefit or higher education is going to benefit by new generations coming into higher education. In the same way we talk about digital natives, I think we will see accessibility natives, who understand these issues intuitively and care about them, to go back to something both Doug and I talked about, not just for legal reasons but it is because it is something they believe un.

there is an online course by young faculty member committed to these issues. This is a paragraph from her syllabus -- "I assume that all of us learn in different ways and that the organization of any course will accommodate each student differently. For example, you may prefer to process information by speaking and listening, or you might prefer to articulate ideas yet email or discussion board. Please talk to me as soon as you can about your individual learning needs and how this course can best accommodate them."

Not that long ago it felt, unfortunately to the students to insist on access, digital or otherwise. We are seeing more people coming into higher Ed were not just available to handle those questions, but they are open. They are inviting the questions, inviting the discussion.

I would bet that this professor, not only will help with course materials, but will help with everything in the student experience where she can be of assistance.

And I think as we see courses created this way, as we see academic programs designed this way, and you see this with new technology services that are not retrofitting, but that are designing for accessibility for everyone, I think we could see an exciting period of many more people having true digital axis in higher education.

To me, this is a very -- while it is a challenging time, it is an exciting time.

We will now shift to your questions. I want to again thank Blackboard for supporting this webcast, and I can tell from all these questions from participants is of interest to many people. Doug?

>> DOUG LEDERMAN: I have a question. Thank you for submitting questions but keep them coming. This is in response to the question of the ownership of accessibility responsibility within institutions. This person says, our institution seems to feel its faculty's responsibility without acknowledging the Masters degrees do not include training and develop end of accessible content. how do we get institutions to provide budget, training and support?

If Scott and I had a nickel for every question that is asked about occult see support and training for faculty for various things -- and I don't mean to make light of it, it comes up in every -- almost every topic we talk about it and there's no question that my faculty members are often -- particular when it comes to issues of technology but it relates to other things as well -- derided as being uninterested or not carrying, lots of other things.

In general, so many of these issues come down to whether -- to the support and the rewards. There's probably -- the support is probably most important in this particular context, but the person who made this comment is absolutely right. Most faculty members were not trained, most were educated -- their professional training came before, depending on the age and I think there will be shifts as the generational changes happen -- but in general, that is not part of the training.

In general, a lot of teaching issues were not embedded in the education that a lot of faculty members received. Certainly, training in various -- and technology accessibility was not there. And yet, these things are expensive, or can be. So it is absolutely incumbent on institutions if they are going to lay the responsibility on faculty members, rather than on designers or other units within their teaching and learning centers or their IT departments or whatever, to make sure there's training and education, as well as -- not just in how to do it but in the importance of it.

>> SCOTT JASCHIK: Here's an important question that came in via Twitter. Can you talk about how to make our social media accessible?

The first thing I would say is it is important to view social media in many contexts in higher education as not extra, but actually is part of the course experience. I happen to be at a program yesterday where there was discussion about student engagement, and one of the participants talked about using social media to engage students.

If social media as part of your strategy for instruction -- and it is for many -- or for student engagement in general by the administration for official communications with students you need to consider it is relevant.

I'm not an expert on this but I did a quick Google search as I saw this question come in, and there's a guidance for just about every social media platform about how to do this. So there are ways to make all of the main social media platforms more accessible. What institutions need, I think and where they have been lacking, is somebody saying, hey, this department or program is using Twitter, is using Facebook, is using Instagram -- so what are the implications of that?

I fear that too many central administrations may view social media as on "extra" and that is something that is so central that it needs to be accessible.

>> DOUG LEDERMAN: Another comment --I think there's a lot of interest in this theme -- somebody basically offers a comment which is that user design/instructional design for online courses is handicapped by not having the authority to enforce accessible design. And when I followed up and asked what they meant, she said any accessibility issues seeming in course create the -- creation is up to faculty ultimately to correct or not.

I think one of the things I would be -- the places where I have seen this handled past, and this goes beyond the accessibility issues and to various elements of digital learning in general -- is that there is collaboration and a team approach between those people responsible for course design, the professionals, the instructional designers, the UX people, and the faculty as opposed --I don't think this person is engaging in finger-pointing, I think she's describing something or pointing, but she is right that if the instructional designers do not have the -- ultimately the sort of -- at most colleges the nature of the actual course is the faculty's responsibility.

If you believe in academic freedom than that is as it should be, but it is ultimately the institutions responsibility from a legal and other standpoints I've that it is the institution that is going to get in trouble or be -- or have issues of the course materials are not accessible.

So it is a shared responsibility, and I think the institutions that have done the best on this are the ones that have made it a shared -- made it a shared responsibility in sort of a team way, and have gotten buy-in from -- again, up and down, both bottom-up and top-down, probably with leadership from the top and resources and support from the top -- but buy-in from the people who are on the front lines.

>> SCOTT JASCHIK: I totally agree. And I guess I would add that it relates to something the both Doug and I have touched on which is how much to emphasize the legal versus ethical and educational issues. Obviously, from the perspective of the universe. College, that does not want to be sued, they're going to say that you have to do this, it is the law. But I think in appealing to faculty members, some institutions may be better off also going beyond the lop ear

Another question -- were getting questions that relate to faculty attitudes -- one says that you find faculty today believed disabled students and online have an edge over face to face because they believe they have access technology that makes it all better. Kind of a misguided justification as to why they may not need to do more or make videos documents or photo successful.

They may think that. I've seen in certain discussions I've been at worst some faculty are dubious, of the need of certain kinds of accessibility. And you hear them worry about that if someone so gets extra time to take the test or extra support in various ways that is an unfair advantage.

I guess the thing I would say and I would try to talk to people with these attitudes is that it is the rare if not unknown college classroom where everyone experiences the course and the material in the same way.

There are students, if we talk about undergraduates, there are students that want to great high schools where they were challenged, and there were students that went through terrible high-schools. There are students majoring in the field they are studying and students that are not.

Their students outside the US taking courses not in their native language. There are students who are extremely interested in fulfilling a requirement. I give this is examples because it is not unprecedented that different students interact with materials in different ways. And I think that false sense that the whole world is doing everything the same way, except maybe for a student requesting an accommodation of some sort, I think that plays into the wrong kinds of attitudes. And that is why I am so moved by that syllabus reference that I read at the end of the webcast -- it is a different way -- to assume, actually, everyone will interact with the material in different ways, how can we make this meaningful?

I don't think that needs to be associated with any loss of substance or rigor. But it is an attitude adjustment that many need to make. Doug?

>> DOUG LEDERMAN: Several requests came in for information about, information to share with faculty members and others about accessibility. This would be an incomplete list, but there's a group -- they have a conference that focuses on this -- AHEAD is the name of the organization and they have a conference focusing on technology and accessibility in the digital era. That is one organization. Several of the other technology higher education technology groups -- the online learning Consortium, their meetings have a lot of sessions and things on this. So there is a -- and there's a growing amount of focus on this and growing number of organizations producing resources to help but I would probably start with AHEAD as one.

>> SCOTT JASCHIK: Some faculty want to use synchronous tools like this one, how can this meet accessibility requirements?

That's an interesting question because we are actually not covered by federal law but we care about this.so we will be sending all of you and the responses to other questions -- a recording, the slide deck, but also we will -- we do have available and we will send you the link to a transcript that is being made right now of this recording. So we want this to be accessible to people with hearing disabilities. And I think a lot of times this takes somebody to suggest a way to do something.

Honestly, eight or nine years ago when we do the first webcast we did not do that. Some very nice people at Gallaudet called us up and said there are people that will transcribe this for you. He so we will send you this with a link to the transcript so you have access to that for people with hearing disabilities as well. Doug?

>> DOUG LEDERMAN: Several questions have come in for different tools that can be used to "ensure accessibility". There's lots of tools out there and we did a story just in the inside digital learning newsletter in the last few weeks about the important role for technology coming in to help institutions understand the scope of their problems and the extent to which they are making their digital materials accessible. But the bottom line and I think Even Blackboard would agree, technology is just a tool.

It is an important tool and it is more important than some -- in some realms than others -- but in the realm like this there are question -- there's no question that there are technologies that can help you understand how you are faring. And can help you diagnostic and point you to problems and be the beginning of a solution. But these are people problems and people issues. There has to be buy-in and usually, again, there's a lot that can be done in terms of diagnosing. And particularly, if we are talking about turning this from a reactive avoidance issue to a "how do we ensure that what we are doing from the start is right and accessible", that is not a technology -- that is not a technology solution.

The solution is about belief and values and buy-in. And those are people things.

>> SCOTT JASCHIK: Here's another comment on Twitter: I think faculty are concerned and want to make their online courses accessible, but institutions often lack resources which forces us to go find our own resources. Many of us are willing to do so but not all. I certainly don't want to imply halfback there are lots of faculty that care a lot about doing this right, and as this comment on Twitter says quite accurately, unfortunately many of them do not have the support they deserve.

It is interesting to me that one of the earlier questions came from an instructional designer. I think they can be great resources for both in person and online courses for everything, not just this issue but many times because they are helping the design material -- there helping to design material for lots of courses they are commonly an excellent resource in addition to offices that exist specifically focused on students with various kinds of disabilities. I hope those who are listening here who are administrators hear this message that there are people that want to do the right thing and they need support.

I think a lot of this will spread over time as faculty members will learn from other faculty members, and those who are coming into the field are more likely to be sensitive from the start.

But the right to access to materials is not lessened by the fact you are taught by a faculty member that has not been trained. So there is a need to really push on this issue. Doug?

>> DOUG LEDERMAN: Yes, a suggestion from one of our participants which is in terms of resources -- this is a conference I've heard good things about it, it's called The Accessing Higher Ground Conference I think it is in November, in the fall. That is another conference that focuses on these issues.

There's a lot of interest -- I am heartened by this -- there's a lot seeking help here. I think we have a responsibility and we will see if we can pull something together in the coming weeks, some sort of list of resources where people can go to get help on this. I appreciate your suggestions on that. Scott?

>> SCOTT JASCHIK: And so here is an important question. Might want to touch on ways to include students in the process of making digital material accessible. What technologies they use, their feedback and so forth. This is a great intro to a point I wanted to make, which is that for many students -- and particularly for low income students -- the device of choice is a mobile device. Many low income students in higher education today only have a mobile device. And it is important to remember that when you read stories about more affluent students coming to campus with eight devices and of highly specialized needs.

This is not true for everyone but it points out all of these issues do not just apply to a desktop or laptop, but to mobile. And the reality is, different students for different reasons will choose to interact in different ways. I think any campus seeking advice from students will hear about the importance of mobile. But they will also hear other things. Just as colleges sometimes frankly blow it when they create materials thinking they will be somehow usable for students on issues having nothing to do with disability, testing these things out is so important.

I also think just the act of inviting students with disabilities to look at various services -- talk about what is well-designed and what is not -- I think there is no substitute for that kind of feedback even for the most well-meaning of officials.

We are running out of time, but I want to against thank Blackboard for sponsoring this. Are really impressive amount of interest from our audience and so I appreciate all of the questions and comments. I want to thank all of you for your questions today and for your interest. These are important issues and I am glad to see so many of you caring about them so much. Thank you and have a good day.