

## An Introduction to LMS Accessibility – Transcript

Nicolas Steenhout (00:00):

Hi. My name is Nic Steenhout, and we're going to talk about Learning Management Systems and Accessibility. I've been working in digital accessibility for a number of years now. I've consulted with large companies, small organizations, government departments, and education providers over the years. Recently, I've been looking for a LMS that is accessible, that it works for students with disabilities and for administrators and teachers with disabilities as well. So, that's, what we're talking about today.

Nicolas Steenhout (00:39):

But first, I'd like to tell you a story. A few years ago, I was going down the street in my wheelchair and my service dog was pulling me. And we got to a patio, and two people were talking on the patio, just loud enough that I could hear it. One person said to the other, "Oh, isn't it sad? He's blind and in a wheelchair." So I stopped, turned around, and I said, "Yeah, yeah. But I'm not deaf."

Nicolas Steenhout (01:09):

The thing is, most people don't know that service dogs are not just guide dogs for blind people. There's a whole range of different service dogs, whether it's mobility assistance dogs, like my dog, or a hearing dog or a seizure dog or there's a large number of types of dogs that help disabled people in their day-to-day lives. The thing is, you don't know what you don't know. If you don't know about accessibility, or you just know that, it's something that's out there and it's important, we're going to demystify that to you today.

Nicolas Steenhout (01:59):

So there's many definition of accessibility. But at the very basic, we're talking about making websites, or platforms, or learning management systems work for disabled people, regardless of ability or disability. And I think that's important. We're really wanting to focus on making things universally accessible, rather than focus on one disability, or another disability, or specific students, because that's just a never-ending battle.

Nicolas Steenhout (02:36):

The bonus about accessibility is that, in many ways, what we improve for disabled students, disabled teachers, actually end up benefiting everybody. For example, having good color contrast on your website means that you can actually easily read the site, when you're on your mobile device in full sun. If you use gray text on gray background, that's going to be more difficult. According to a recent CDC report, 26% of Americans have a significant disability, that's one in four people. Granted, not all disabilities are significant and not all conditions will impair your ability to function digitally. But we still are talking about a significant number of people. Ensuring that the LMS we use is accessible is especially important since COVID started, and so much of the teaching has moved online.

Nicolas Steenhout (03:40):

So there's four main group of users that benefits from digital accessibility. We're talking about people with vision impairments, whether they're blind or low vision, people with hearing impairments: deaf, hard of hearing, people with mobility impairments, whether they're paralyzed or having tremors, or have developed repetitive stress injuries. Talking about people with cognitive disabilities: dyslexia or traumatic brain injury. Maybe somebody played a little bit too much football and got hit on the head a few times. Or we can even talk about what we're seeing more and more, which is post-COVID brain fog.

Nicolas Steenhout (04:19):

There's also large groups of users with temporary impairments. For instance, someone who breaks their good arm and can't use a mouse. Or people with situational impairments, maybe they're in a distracting environment, such as an open-plan office. So, there's a whole lot of situation where accessibility benefits everyone.

Nicolas Steenhout (04:41):

The most obvious clientele is students, and those should be your primary concerns. Some areas for students that you need to consider: login, can all interactive elements be reached and interacted with the keyboard, and there's an easy way for you to test that. Use your keyboard, don't use your mouse or your track pad, and use your Tab key to go through all the interactive elements. Use Shift and Tab to go backwards. Can you reach all elements? And can you see the focus everywhere? Because if you don't see where the keyboard is at, that's going to be a little bit more difficult. Is there good color contrast between the foreground and the background? And are all your quizzes and online tests accessible?

Nicolas Steenhout (05:32):

The other group you need to consider are your teachers and your administrators. If you don't provide an accessible platform, chances are you've limited their ability to work for you. Because they may have a disability, whether you know or not, whether their disability is visible or not.

Nicolas Steenhout (05:48):

One of the assistive technologies that blind students, blind staff, will use are called Screen Readers. Basically, it's a software that, as the name says, reads the screen. But it also allows people to navigate the computer, the browser, et cetera. I'm going to show you a short video segment of Michael Ausbun. Michael is blind. He's been relying on a screen reader for nearly 20 years. And in this video, he interacts a bit with a page in a learning management system. After his recorded interactions, he talks a bit about what the problems he experienced were.

Screen Reader (06:30):

Title, main menu, list as, search, edit, search, this course, lift, lift, resume work next, colon, [inaudible 00:06:35] biology. Next, resume work, and 350. Next colon in biology. Colon, the science of life, for only biology, colon the science of life schedule. Five Schedule, six schedule, continue, eighth schedule, continue text, schedule, continue, expand module, collapse module, schedule, continue, expand, schedule, next, resume working, table of contents, vertical bar introduction to biology dash Google Chrome. HTTPS colon slash, slash dot com slash link. List of one Title, main menu, next colon,

colon basic link, and previous is calling scientific get where you call in summary on personal practice.

Screen Reader (07:16):

List of three link list with three items. Previous ... colon ... scientific inquiry, apply with double heading level two. Summary clickable understandings of the process of visited link next. And you know that some are link previous colon application, spotlight, colon science of, and sources though. Science visited go to page seven and current answer key button reset my answer.

Screen Reader (07:37):

Not at all yet the radio, button the plot table with evaluating your ability before you may also highlight any concepts that are still unclear to you or that you would like to explore further, listen, before you continue, evaluate your ability to perform each of the following tasks. In other words, how well can you do each task. Table with table of multiple choice questions, clickable column header. Apply the process of scientific inquiry to questions about the natural world. Start not at all yet radio, button not checked with a lot of support radio with some support radio, with minimal support, the radio button not checked four or five on my own radio button, not checked button five of on my own radio button checked five of five relate experimental design to the process of scientific inquiry.

Screen Reader (08:11):

Start clickable, relate experimental design to the process of scientific inquiry. Start radio, but not checked one to five related experimental designs to the process of scientific inquiry. Start radio with a lot of support. Call for your related experiment related table star required questions. What concept or topic is the least clear to you at this point? Edit. What other edit? What concept or topic is the least clear you at this point? Edit.

(08:30):

(Silence).

Screen Reader (08:42):

What other questions do you have? Edit. Virtual links submit. Remember that reflecting on your ability to perform certain tasks and self evaluating will help me with a continued of developing [inaudible 00:08:52]. What other questions? Do you... What concept, what concept.

Nicolas Steenhout (08:59):

Can you talk about the couple of things that were a problem for you? I noticed when you were looking at a list of links, you had a lot of links that were not unique. So hard to find. I noticed that there was an error message on the form that you just submitted that didn't get to translated it to you, but can you talk to me really briefly about whatever issues you encountered that was not working nicely?

Michael Ausbun (09:30):

Yeah. I think that there were four things that I noticed right off the bat. First, when I was trying to navigate to different portions of the LMS or the text, as you noted, the links did not have descriptive link text. And, so, I wasn't quite sure whether or not

those links were unique or if they all went to the same place, there was a lot that was click here, click here and schedule, schedule, schedule.

Michael Ausbun (10:00):

The second thing was, there was no quick way to navigate to the questions that it wanted me to answer. And in the same note, the questions indicated that they were interactive. It sounded like there's an on click handler attached to it. But if you click on them, they don't actually do anything. So that, was a little bit confusing. Then the error message not popping up or, or not being notified to me, I know that the submission form or that the form was not submitted, but I don't know why. And in order to determine one that there was actually some sort of validation I'll have to go hunting for it, but to sentence it didn't notify me. I could just presume that it did successfully submit, and I might just leave the page or, I could go looking for it and be very frustrated, because there's no indication to where, where it might be. So that, was a couple of the things that I noticed right off the bat.

Nicolas Steenhout (11:18):

Thank you.

Nicolas Steenhout (11:20):

There are many legislative requirements to ensure that the platform you use is accessible. These will vary around the world, but let's talk a little bit about the United States at the federal level. You have section 508, of the vocational rehabilitation act that applies to you. If you receive federal funding, there is perhaps obviously the American with Disabilities Act and then there's state by state requirement, Canada. It's the process of setting up requirements for the Canadians with disabilities act, but Ontario passed the accessibility for Ontarians with disabilities Acts many years ago. Europe has similar requirement. Obviously, we're not going to explore each possibility here, but you should be aware that you are probably likely to be subject to legal requirements.

Nicolas Steenhout (12:22):

Now a legal requirement telling you that you must be accessible as one thing, but how do you accomplish that? How do you know that the LMS you choose is going to be accessible? Well, we focus on a standard and the main standard we're looking at right now is the Web Content Accessibility Guidelines. I refer to them as WCAG or W CAG.

Nicolas Steenhout (12:50):

It's created, maintained and updated by the Worldwide Web Consortium. And as with many other things in tech, it changes version. The current version is WCAG 2.1 and a version 2.2 is going to be released soon. This is important for you to know, as a... Someone looking for LMS or as an LMS provider, you need to know what version things are at. So you can implement these standards. I won't go into depth about it, but I want to give you a feel for things. A WCAG consists of a series of principles, guidelines, and success criteria that gives specific information about what needs to be done to provide accessibility.

Nicolas Steenhout (13:38):

It is broken into three levels, the easiest level to achieve as level A, and that is the bare minimum that needs to be implemented to have some accessibility level double AA is what must be met for the majority of disabled users to not have barriers on a site.

Nicolas Steenhout (13:58):

Level AAA are the things that should be implemented to provide an even better accessible experience. So the difficulty comes when you try to determine what level of accessibility your LMS provides, you're not likely to be an accessibility expert. You just know that accessibility is important. So, how do you pick the right LMS? Well, there's a few things you can do. First. You asked the provider if they have a beat VPAT. VPAT is a Voluntary Product, Accessibility Templates. Basically, a statement by the vendor. They had self-assessed their product, or had a, third-party doing a... An assessment. And in that document, they explain where they meet accessibility criteria is from the standards and where they don't. In my experience, very few LMS providers have a VPAT. And it's a good indication about, how accessible their product is or isn't. No VPAT likely means no accessibility in the product.

Nicolas Steenhout (15:03):

Run a demo through using only the keyboard that'll give you an indication. If you have no problem with keyboard navigation, it shows that the LMS has done some accessibility work, and it's a good feel. Ask for their plan to conform to the most up-to-date accessibility standard, be prepared for the vendor, the salespeople, having no idea what you're asking for. And that has been my experience. I queried about 50 LMS vendors over a period of few months. And I basically had three that came back and said, "Oh yeah, we know what it is. And we're making it happen."

Nicolas Steenhout (15:45):

I even had a vendor tell me that the information about the accessibility was confidential information. So, of course, we didn't select that particular vendor. Whether you're an educational provider in the LMS developer, a student, a teacher, an administrator accessibility is mission critical in being able to use and interact with the product.

Nicolas Steenhout (16:13):

So, a little bit of research will help you choose a platform that can work for all your students, teachers, and administrators. It may be difficult because there's few fully accessible LMSs out there, but it's possible. Feel free to reach out to me on Twitter, I'm @vavroom, V-A-V-R-O-O-M. And good luck with your search.