The eLearning Coach Podcast #61

Getting Started with Inclusive Design

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Connie: Hello, learning people. It's good to be back with you. Accessible design and inclusive design are one of those things that once you learn about them and you learn how easy and beneficial they are to implement, you basically can't turn back.

Today I'm speaking with Brian Dusablon from Learning Ninjas. Brian works in many roles, helping clients apply existing and emerging technologies to support process and business improvement. But also as an advocate, he creates and teaches about inclusive, accessible user experiences and improving the lives of others. He's the person many turn to, to get answers to their accessibility questions. You can find the show notes, a transcript and great resources at: http://theelearningcoach.com/podcasts/61/. Here's our conversation.

Hey Brian, welcome to the eLearning coach podcast.

Brian: Hey Connie. Thanks for having me.

Connie: Today we're going to talk about inclusive design and you have been an advocate for accessibility for quite a while now. You're the person that I go to when I have questions about inclusive design. **To start out, can you talk a little bit about the difference between accessibility and inclusivity?**

Brian: Sure. I think the big thing that stands out to me is accessibility is specific to a problem, or disability, so the accessibility guidelines, they define it as ensuring access to content for specific disabilities. So, screen readers and audio transcripts and things like that. Whereas, inclusive design goes beyond that. It goes into a broader viewpoint and looks at including as many people, as many humans as possible in your design practice. That's how I approach it, that's how I define it. It's looking more into inclusive elements of culture and language and diversity and representation, things like that. So, it's not just this kind of standard accessibility things that we commonly think about.

Connie: I think it's important to make that distinction because inclusive design gives you so much more. I know that in a lot of companies, they have compliance

checklists. **Why is it important to go beyond those accessibility checklists, and how are they limited?**

Brian: The most common one, especially in our space with eLearning is the 508 guidelines from the government, and they have some checklists and some guidelines that they bring in. I started looking at it beyond that when I started doing more research into this and learning about different populations and not just disabilities, but just different people.

The checklists don't cover anything around inclusive design. They're not talking about writing for different cultures, or inclusive language pronouns, things like that. They're really pretty limited to the, again, the government guidelines that are for legal purposes and they're a decent start. It's sort of a, "yes, and" approach, but the way I'm looking at it now, and encouraging people to look at it in inclusive design practice is that by having an inclusive design process and practice, then you will meet all of those compliance guidelines by default.

You won't have to worry about them because you're factoring those in. But in my opinion, they're not enough, they don't go far enough to include as many people as possible.

Connie: That's a great perspective. I know you recommend that inclusive design should start at the very beginning of the learning design and development process. **How can people bring an inclusive mindset to their design process from the start?**

Brian: I think it is a commitment to shifting and making it part of the early design process. A lot of times we do an accessibility check at the end, or we go back through and add all text, and most people don't even do that. It's part of a development cycle, or even QA. By moving and committing to putting it into the design process, we have tools available to us that help us look and review our content and review our designs to ensure that they are going to be relevant and accessible by as broad of an audience as possible, by as many people as possible. I think that's really important, even if it's not something that your organization is pushing, or that it's not compliance driven. It's more, how many people do you want to be able to learn from your content? It's that simple.

So, talking to people helps. Just being an open mic for creating forms, things like that, that people can give you feedback and give you input within your

organization, or within your potential audiences. The tools that we can put into our design process, like empathy maps, which allow us to look at it beyond just a standard persona, and dive into what people are thinking, and hearing, and feeling, and doing when they are engaged with our content, or before they're engaged with our content. What kind of devices might they be on?

Then, I think that commitment goes another step into creating some standards, creating some documentation, and some guidelines. Like, here are the five things that we're going to make sure that we do right now, then continuing to build that in. You can start small, start simple. There's some really basic accessibility tips and things that you can incorporate today. And committing to that is what it's going to take, because nobody's going to tell you to do it. Very few people are going to tell you to do it, but it will cover you from a legal perspective, but also I help you design for all of the users.

Connie: I love the idea of people creating their own standards in their organization because they can modify them to what will work for their audiences and they can continue to improve and grow.

Brian: Yeah, certainly.

Connie: **We always recommend to people to start small and that would be a great way to get going.**

Brian: It's starting small and then iterating, right? We talk about design being a cycle anyway, and you're constantly looking at your content and how you can improve it. Learn from your learners, and learn from people, and adapt it, and adjust it, improve it, right? It's a continuous look at it. That goes the same way for how we design and how we document our process.

Connie: I would like to talk about some of your tips for being able to implement the low hanging fruit, but before that, let's talk a little bit about the 12 lenses of accessibility. There's an article that you sent me the link to, and it's just really excellent. **Can you talk a little bit about what a lens of accessibility is, and what some of these most relevant lenses are to our field?**

Brian: Definitely. This article, when it came out a couple of years ago, really helped me frame it for other people. It gave me another framing to provide when I'm doing

presentations, when I'm talking to different folks about it. The best line that he has in the beginning of the article is, it's helpful to apply a critical analysis technique of viewing design through different lenses.

Folks have been doing this for years in architecture and building design and other areas of design. But applying it to the web, and applying it to eLearning, and learning development and design is where we're at, now, or at least I am. The approach is basically looking at it from different perspectives and looking at your animation, your color, controls, readability, structure, things like that. The 12 lenses are out there, we'll link to it in the show notes.

First of all, the lens of animation and effects is a big one. We do a lot of, we're encouraged a lot to do some animation and effects in our eLearning, whether by the client, or by the authoring tools themselves, a lot of samples that we see out there. That's one of the lenses that I think really applies to our field, audio and video, of course, color.

You talk a lot about color in your design books, in your design practice. Controls is another really big one. I think readability is something that we don't talk as much about, and it's something that Jean Marrapodi talks a lot about with, in terms of accessibility. We don't think a lot about the accessibility of our just text content, our content in general. Even if it's a transcript of something you've made it technically accessible, it may not be that readable to somebody. They may not be able to read at a high enough level, they may have dyslexia, or another learning disability. Thinking about the readability of your content is a really good lens to look at things through that we don't always do.

Connie: Let's try to get specific about a few of those lenses. **What can a designer do to design inclusively when using animations?**

Brian: I think the best advice that I have, and this is through some research and also from Steven's article, is that it comes back to some cognitive load stuff, as well as, really a health and potentially a deadly issue for using animation and flashing, things like that. The three or four tips around animation and visual effects, one misusing animations can be confusing, can be distracting. If you don't need it to be there, if you're not sure why you're using it, then don't use it.

The second thing is that they are potentially deadly. The key that it was called out in the web standards is flashing more than three times a second, some high intensity effects and patterns can cause seizures. It can also just cause headaches, nausea, dizziness. I've heard of reports of websites that have different animations and different videos in the backgrounds, the background of a header, for instance, that have given people vertigo, for instance, they've made them nauseous because the motion that's happening in the background is giving them that feeling.

The biggest advice when it comes to animation, is one, do you need it? Understanding why you have it. Second is giving control to the user. Let them opt into, if you can, or at least be able to pause, stop, hide those animations, those things immediately upon coming to your content, come to your page, or that part of the course. If we're doing course design, I would actually give them an option to turn it on or off at the beginning, and present that to each person very early on, and give them that toggle option.

Connie: Pretty important stuff there. One thing that I've seen in the research is that, frequently animations are used to explain a process. In many cases, a series of stills is more effective. So, do a rough prototype of both, see which one is more effective.

Brian: Absolutely. That's great advice.

Connie: **Now, what can a designer do to design inclusively for graphics?**

Brian: Graphics is a big one. It's also an easy one that we can at least do a better job at very quickly. The big thing around images is often just alt text, or alternative text. That is if you hover over an image in a browser, you'll get the tool tip that'll tell you what that image is. If you're using a screen reader it will read that to you. The big question to ask is, “Does this image, do any of the images that we're using, any of the visuals that we're using contain information that would be lost if it were not viewable?” If somebody couldn't see it, does information that you're trying to transmit, that you're trying to teach somebody, get lost?

If it does, then make sure you annotate that. This is why we do this in the design phase, not in development. We want to note when we're doing or annotate, what the meaning or information you need to convey with that image is. Put that

into the storyboard. You're already writing the content around it. If you want to drop in an image, why are you dropping an image in there? What is the message that you're trying to convey with that image? What is the value of that to the learner, or to the person that's interacting with your content?

That way it's in your storyboard, it's in your design, you're doing this anyway. Then, you can also use that documentation for alt text later on. The rule that I have is that if I can't write a good alt text description for it, and it doesn't have meaning or add value to the screen, or to the space that I'm presenting content in, then I just delete it, because it's not valuable.

There are a lot of considerations around graphics when it comes to iconography and color. There's a lot of research out there. The big thing to think about is that considering all of the users, all of the people that might interact with your content. What color means to them in different cultures, what icons might mean to them, symbols in different cultures, mean different things.

Going beyond just adding a thumbs up icon and saying, this is a thumbs up icon in the alt text. Really thinking about why you're using these images and what they might mean to a broader audience is where we start to get into the inclusive design practice. There are a couple of really great resources specifically about alt text. The Five Golden Rules of Alt text. I won't go through them all, but it's essentially that everything must have some sort of alt attribute as an image so that the screen reader can decide whether it's decorative, or whether it's going to describe it to the user. Describe the information, not the picture. You want to describe the meaning of the image, not necessarily that it's a man holding a computer, or something like that. There's a great resource, The Five Golden Rules of Alt text.

There's also some really great recommendations around iconography and color in Stevens article. We'll link that up in the show notes. Then, one of the big things that we see a lot, especially in our spaces is infographics. They can be really, really helpful to describe, or portray some complex information. I know there's some really great examples of how effective they've been. Any complex image is really hard to explain in alt text. You don't just use a big infographic that you can zoom in on. If you're a sighted learner, you wouldn't just put all of the details of that infographic in the alt text.

The best practice is to write a short description about what the infographic is and why it's important, and what the messaging is within the infographic. Then, linking somewhere on that page to an alternate version that has it in text. If you have a complex process diagram that you're showing in an infographic, and maybe you have inputs and outputs, or something like that, having a bullet pointed list of that somewhere else that somebody can access is good. That's something that I think oftentimes people forget about. We have great tools like Canva, and other things to create these awesome infographics, but we don't always go through the process of thinking about what if somebody can't see it.

Connie: Really good points about the infographics and the solution for making them accessible, seems like something everyone can do. Also, I don't think it's well known that alt text should be descriptive, not of the image, but of the point.

Brian: Correct.

Connie: **If the image is decorative, we put nothing in the alt text field, is that the correct approach?**

Brian: Yes. Some tools will allow you to actually mark it as decorative. For instance, if you're using WordPress and you add an image, it's got a checkbox that you can check as decorative. Otherwise, some tools that don't have that if you just put the alt text and make it blank, then it will read it as decorative when the screen reader comes through that space.

Connie: **Let's say you're working in an authoring tool. You would just put one space there, is that what you mean?**

Brian: I think that's the best way to do it, because if you don't put it in... I'd have to look at the latest output from some of the authoring tools, because they have improved over time, they're not quite where I'd like them to be, but they are improving. If you don't add any alt text to an image, does it create an alt tag for that image or not? That's the key, is that it has to create an alt tag within the HTML output of that image. That's something that you want to double check when you're publishing and you're reviewing as well.

Connie: **What do you recommend for listeners as the best way to look at the output of their authoring tools?**

Brian: For instance, if I output something from Articulate Rise or Storyline, we can look at the source code of the HTML output and look at what the HTML code looks like. The alt tag is HTML code, if you have an image, source equals (img source=), and then in quotes you have where the image is coming from, and then the next field would be alt equals (alt=). Then, what's your descriptive text. You can view that in source code if you're looking at it in a browser.

Connie: What about the people who don't know HTML? **Is there some kind of list that would say when you're looking at the source code, look at your IMG tag to see how the screen reader would read it?**

Brian: Oh, that's a good question. the WCAG guidelines might have some specific resources tied to how to review existing content. I think you can also just put it through a screen reader. All the screen reader tools have a free download, and I highly recommend experiencing that no matter what, even if you're not looking at alt texts, just to see what your content is like for somebody that can't see. You can download a sample of, there's Jaws, there's a number of newer ones too. *[Editor's Note: Brian adds that you can do some checking with the WAVE browser plugin or use the "inspect element" function in your browser (right-click in Chrome) to see Rise output (or other tools) after publish.]*

Connie: That would be a powerful experience for anyone who hasn't tried reading through a screen reader. Okay. Let's move on to just a few more of the lenses. One that I'd like to hear a little bit more about, and I know it comes up a lot, is **what can a designer do to design inclusively for audio and video?**

Brian: This is a big one for us, especially as we start to include more video and a lot of our designs and our courses. The key for me is by default, no auto play, anything that's auto played or background, even most of us, it's just annoying and distracting more than anything. But even with all of that, it's also taking control away from the user. You'll hear me say a lot, "Leave control with the user," or "Give control to the people," because that's really what we're talking about.

We want to make sure it's really easy for somebody to play or pause any video, or audio. If not, remove entirely any background video. We're seeing a lot of background video in websites in different spaces now. That really isn't adding any value and it's distracting. It can be going back to the animation and effects issue. It could be potentially even deadly depending on how the video is produced.

Then obviously there's the closed captioning in the transcripts. Having alternative methods of being able to consume that content, if you're not hearing the content in the audio, or you're not seeing it in the video. That is beneficial to a lot of folks, there's been a lot of threads recently around a lot of folks that don't need closed captioning are still using closed captioning in things like Netflix and Amazon, because they prefer it that way.

You had mentioned that a lot of folks read your podcast transcripts, and that's really important to have because maybe somebody who just wants to skim the transcript and find the resources, or find a nugget of information, it's also really useful for reviewing content at a later date. Those are the things that you absolutely have to do. There are some other recommended guidelines and tips.

Connie: The thing that keeps running through my mind, not only do we have an ethical responsibility to do this, but it's going to help everyone in so many different ways and that the time and money that are spent on this are not going to be that great compared to the impact it can have on so many people's lives.

Brian: That's what I think is key there. I also, I think handling it in the design phase really helps us improve our designs across all types of people and types of users. That we're building for as many people as possible and designing for as many people as possible. Checking to make sure that our assumptions are correct. And even when you get into inclusive design, you're talking biases, the language that you use, and how you write, and different images that you might pull from stock photo sites.

Is it diverse? Is it inclusive? Do you have a broad spectrum of content, both visually and in text, scenarios, and things like that? Handling all that in the design phase is a lot easier than going back, or assigning that to a developer, and having to fix it later, or having to fix it in development. Because we can streamline our designs and we can simplify our designs as much as possible. So, I do think it's really helpful.

Connie: No matter what instructional design model someone is using, they can use the lenses and that inclusive design mindset as they go through analysis, design and storyboarding. I love your idea of just opening up channels, so that people can get in touch with you in case they want to give you feedback.

In terms of finding the diversity in the photos that I want, and in terms of accessibility options in authoring tools, all of those vendors really need to up their game and get on board with this because people won't be able to relate to the learning experiences we design when they're not diverse.

Brian: Right. It can definitely be improved considerably, especially in the ones that have the default libraries, right? Some improvement there, some of it would be really nice to see. There are really great libraries popping up here and there through different channels, really great resources, and some image libraries that are popping up here and there that I've added to my library that are more inclusive libraries, so that we can be thinking and it's a more diverse group of images and things. Those are starting to come together and a lot of them are free. I think you've shared a couple of them and we can definitely create a list of those that might help some folks get started.

Connie: Great idea.

Brian: The lens that I didn't really talk about too much, but it is pretty critical to eLearning, especially traditional eLearning, is time. There's this lens of time. In our space, a lot of it may end up being something around compliance. Harassment and discrimination prevention for California must be a minimum of two hours. Driver's ed classes that have to be a specific time on a slide, or in a section, or something like that. There's that lockdown effect that you get, where you prevent somebody from moving forward.

Alternatively, in previous courses that I've seen there are autoplays, so the slide will move to the next slide on its own. That's another area where we want to give control back to the users and assume that your user is going to be distracted, that they're going to open up another window. That they were going to have a phone call, that they're going to have something like that, so that you assume that you don't have control over the person's time, and making sure you're looking at your content and your design through that lens. This is a really good one for us to be thinking about.

Connie: Definitely. That's not one you hear much about. **I'm guessing that there may be people who are listening to this who are saying, "Okay, I'm ready. I want to get started." What would you suggest that they do?**

Brian: The big one that I'd start with is you have to commit to wanting to, right? You have to have some sort of motivation to do this, and whether that's ethical or compliance driven, it starts with caring. It starts with empathy. It starts with research. Don't wait until you have a shock to the system that says, "Hey, you created something that I can't see, or that I can learn from." That's what happened to me, and that's why I got into this. I developed a course that somebody couldn't learn from because I wasn't paying attention to contrast, text on the screen, the grays and the blacks, and things like that. They couldn't read it. I learned the hard way, and then had to go back and fix that.

So read, read books and blogs and best practices. A lot of it's been curated for you. I have a primer that I started that's totally a work in progress, but is absolutely somewhere that you can start, that has a bunch of free resources for contrast testing and color blindness testing, and alt texts, best practices, things like that. That's something you can immediately commit to doing and building into your design practice. I talk about redesigning your design practice a lot, because I do think that looking at empathy maps and looking at these at your design through these lenses and thinking more inclusively around how you write content, all of those things happen very early on. They have to happen in design. They can't happen in development. It is building these steps into your design practice.

The next thing that I'll recommend is just start small. There are a lot of things that you can do that are minutes of your time, not even hours. You can improve the accessibility of your content immediately with just a few things like alt texts and the color contrast checking. There's a great website called Hemingway app that allows you to your readability and your grade level for your writing that is free and out there. It's not perfect, but it's something you can start with right now if you're writing content today. Then again, the whole control aspect of being able to give control to someone who's learning from your content.

Connie: Providing learners with control is one of the most basic things that people who are learning how to develop in a multimedia format are taught because it provides a way for the learner to go back and review. Animations and videos often go by too quickly and controls can give people the ability to speed up a video if they want to get through it quickly.

Brian: Exactly.

Connie: Moving on. **What do you recommend for people who are working somewhere and management is resistant to inclusive design?**

Brian: The biggest thing is just ask forgiveness, not permission. That's the short one. I give you permission today to go and do the right thing and just be thinking about it from that perspective. Sometimes you're not going to have a manager or leadership that is going to pay attention to you. If you say, it's going to take you an extra day to go through this design or whatever, although I don't think it will take you that much extra time, but you need to be an advocate for folks that are not represented, folks that are not heard, that are not being designed for. That's what you can do right now.

I think the second thing is that you can build a taskforce if you're in an organization, or even if you're solo. If you're just a freelancer and you have a few people that you work with, contractors, or you work with some organizations, or finding local chapters of associations, things like that, where you can start talking with other folks about how to create some standards and build some ways, some channels for people to give you feedback.

The best thing that I have ever done is just opening up a forum and a channel for people to give me anonymous feedback. A lot of folks don't necessarily want to call out who they are and why they weren't able to learn from your content. Providing an anonymous option, and certainly a way for them to give you their contact information, if they want to have a conversation about it, but not required.

Allowing them to give you that feedback, creating a safe space for that, and then committing to listening to them. If they tell you something and they reveal that, that's them being vulnerable and you need to pay attention to that, give that some credence and do something about it. Make sure that you're also fixing your content and improving it as you get this feedback and engaging with them. Those are a couple of things you can do that don't require full enterprise support.

Then, I do think you can build some standards that then you can start to push around to different groups. If you're in a learning team, you can talk to your

marketing team and see what they're doing around it. There's other ways you could engage and initiate these conversations.

Connie: Those are some good ideas. **Brian, what do you see as the biggest challenge that we face regarding accessibility and inclusive design in the learning industry?**

Brian: The biggest thing for us is, in my opinion, the tools that we have to work with and the constraints that we have to work with them. For instance, we have a lot of learning management systems that are notoriously hard to use, or hard to navigate. Some of them might be technically accessible by 508, but they definitely aren't inclusive, and definitely aren't fully accessible on different devices, or different situations.

We have tools that we use that don't make it easy for us to develop accessible content. Some authoring tools present you with an alt text field immediately upon adding an image. They prompt you, they guide you in that process, but a lot of them don't. It's a menu item that's somewhat buried, you can do it, but it's an extra two or three steps.

I think those are some of the challenges that we have as opposed to, for instance, web design. Things like content management systems and other things are getting better, faster, and the frameworks are accessible and then you're adding content within them that also prompts you to creating more accessible stuff.

Also, an opportunity is that when we think about inclusive design, rather than just creating an accessible eLearning course, which is where my vocabulary has broadened and changing to inclusive design practices. That applies to all aspects, it applies to instructor-led training, and virtual training, and self-paced job aids. Anything that we're producing that, when we think about it from an inclusive perspective, are we designing this for as many people as possible?

Connie: Brian, this has been very motivating for me and I hope for the audience. I think I'm going to create my own standards as a consultant and speak to my clients about it. Some kind of simple checklist that they can get started with and then try to help them grow their inclusive design practice over time. I really do think

that most everyone listening can make a change in some way, if they're motivated to do so.

Brian: I think that's a great way to put it. I do think it's just everyone's responsibility to start to do something, to start somewhere. To make a commitment that from this day forward, you're going to design a little bit differently, or maybe a lot differently. Start to incorporate some of these best practices so that everybody benefits, because that's what ends up happening is everybody benefits from these better designs. You definitely have a longer shelf life for your content. It's more applicable to a broader audience. There's a lot of different benefits that come from this, not just from the ethical perspective.

Connie: That is so true, so true. Thanks a lot, Brian.

Brian: Thanks, Connie. I appreciate you having me.

Connie: Now I'd like to hear what you have changed, or what you plan to change, in terms of developing an inclusive design practice. You can leave your comments and you can find the show notes at http://theelearningcoach.com/podcasts/61/. Take care. I'll talk to you next time.