The eLearning Coach Podcast

[ELC 081: Focusing On Behavior Change In Instructional Design](#)
with Julie Dirksen

Connie: Hello, learning people, and welcome to episode 81 of The eLearning Coach Podcast. In this episode, I speak with Julie Dirksen about what may be a missing aspect of the instructional design process, a way to implement a systems thinking approach to behavior change.

We discuss a behavior change model and walk through a scenario to demonstrate its use. Julie describes behavior change for learning design in her new book, *Talk to the Elephant*. She's also the author of the classic Design for How People Learn. Julie is a learning strategist, consultant, and instructional designer with usable learning creating highly interactive learning experiences for a wide range of clients. Here's our conversation.

Hi, Julie. Welcome to The eLearning Coach Podcast.

Julie: Hi. Thank you for having me.

Connie: I'm enjoying your new book, *Talk to the Elephant*.

Julie: I think you're the first person not actually involved in the production of the book who's read it, so it was lovely to talk to somebody who's actually been through it.

Connie: For people who have not read your previous book, Design for How People Learn, they may not understand what that title means. Can you explain it?

Julie: The title comes from a metaphor from Jonathan Haidt. He's a psychologist, and he has a metaphor in his book. It exists in other forms with other animals in other places, but his particular version of this metaphor is the elephant and the rider. What he's talking about is this idea that there are different systems making decisions in people's brains, and if you think about your brain, the oldest parts of your brain are things like breathing, and heart rate, and reflexes, and that's down by your spinal cord. Then, in the back you have the vision systems, and on the side, you have hearing and language processing, and you also have gross motor control and fine motor control. Then, right in the middle, you've got the limbic system, which is things like the amygdala and the hypothalamus, which is a lot of emotional regulation, fight or flight, those kinds of things. So, you've got a really big part of your brain that is concerned with your

existence within the physical world, and how it feels and how you control you and your body within it. So, it's things about perception, or movement, or sensing the world, or perceiving the world, or interpreting what you're seeing, or hearing, or smelling, or any of the senses.

Then, right in front your prefrontal cortex, right behind your eyes, we have this area of the brain that is a little bit more recent from the evolutionary point of view that is considered to be the center of executive control. So, it's things like planning for the future and controlling impulses, and rational decision-making, and all that kind of stuff. So, we have this little thing area of the brain upfront that is what Haidt refers to as the rider, and this is your rational, visceral, or verbal thinking brain sitting on the back of a big elephant, which is your emotional feeling, physical sensing brain.

Both entities have some influence when you're making a decision. So, an example I use in the book is when I was in the Stanford Virtual Reality Lab, I did the virtual reality simulation where you put the goggles on, and you are standing right in front of a board with a giant pit underneath it. So, the question is, can you walk across this board in this virtual reality above a giant pit? This little skinny little board. It's a foot-wide or something, or your perception is it's a foot-wide. I could not do it. I could not do it. Even though my intellectual knowing brain absolutely understood that I was in a fully carpeted conference lab room in a university in Northern California and that it was literally safe, there was nothing in this room unless I ran into a wall or something that could hurt me, I could not overcome my elephant, which is saying, "Scary, scary, scary, scary, scary, scary, scary." Right?

The only way that I could walk forward on the plank was if I looked up at the sky in the virtual reality situation and didn't look at the plank at all, and then I could make myself walk forward. So that is an example of my rider and my elephant totally not agreeing with each other. My rider is like, "You are in a conference room. It's fine." My elephant is like, "Scary, scary, scary, scary, scary." So, we have these two systems that are helping us make decisions all the time. Right? "Should I buy this car?" Well, logically I know it's a good car, but my elephant is like, "Eh, it doesn't feel good." Logically, I know that this other car over here has not that great gas mileage and has a tendency to rack up bills, but my elephant is like, "It's super fun. It's great. You really want this one."

So, we're always dealing with these two things. We need to figure out how to basically reconcile both of those, and so one of the problems with learning and development, and most training efforts is we're talking purely to the rider. Whenever you got a slide with a lot of bullet points on it, that is 100% communicating to the rider, and what you're saying to the elephant is, "This is a tedious topic, and you don't really need to pay much attention to it." The elephant is like, "Great. I could check my phone right now because my phone has fun things in it like TikTok videos."

So, we do need to consider both parts when we're designing learning experiences because if we talk entirely to the rider and we forget the elephant, we make things much harder for our learners because they have to not only focus their attention on their learning, but they have to continually push the elephant away that wants to distract them. These are some of the considerations, and I think of the book as being specifically designed for the "they know what to do, but they're still not doing it" problem.

Connie: Right.

Julie: Right? They have all of the intellectual knowledge that you would ever need about wearing safety glasses or making good choices around reducing sodium in their diets, or around making good financial decisions for retirement, or whatever thing you want to do, but they're still not doing that behavior for some reason. So, you've given them all the information. So, the question is then, what's missing, and what potentially could be helpful as part of a learning experience if you want people to not only know the right thing to do, but to actually do it?

Connie: That's really good. So, I can see that you're closing a gap. Can you talk about what you think is missing from the standard ID model that you address in the book?

Julie: Yeah. So, I first got interested in this topic... I want to say it was around maybe 2005, somewhere back at that point. I got attached to a project for the company that I was working for. We were working with University of Minnesota's School of Epidemiology on an AIDS and HIV prevention project. They specifically wanted to use digital outreach to talk to people about safe sex practices essentially. By 2005, most people understood that condom usage was an important part of safe sex practices. Most people had heard that message. We weren't missing that knowledge, and so just telling people louder and more emphatically that they really should

use condoms was not something that was necessarily going to change the behavior anymore because people already knew.

So, this is a really good example. Just repeating the importance, or the statistics, or the factual basis for it or something is very much talking to the rider. So then, the question is, what ways do we talk to the elephant around this issue? The particular group that I was working with had a model that they had looked at, and one of the things they really understood that was really great about that model was that taking care of yourself was a product of a lot of things. So sexual health was tied to mental health, was tied to physical health, was tied to emotional health, was tied to spiritual health. All of these kinds of things had an influence on whether or not people actively took steps to protect themselves in intimate relationships and did these kinds of things.

So, if you thought you were somebody, if your mental and emotional health were good and was worth protecting yourself, you were more likely to do it than if you were having struggles with those kinds of issues. So, it was a really great project, but one of the things that I was struggling with is we were trying to put this into e-learning environments and things like that was that so much of my toolbox as an instructional designer was about informing and was about transferring knowledge, and this was emphatically not a knowledge problem, right?

Connie: Mm-hmm.

Julie: It wasn't about finding good ways to tell people, "Do this behavior, and it's going to be safer for you." They already knew that. So, it was about a lot of other things, and I really didn't feel like my instructional design toolbox had the right tools for things that weren't about information, or procedures, or even really about skills in some cases. There were certain things about it that were skills-based, but a lot of it was about motivation. A lot of it was about other kinds of things like what's your environment, or what's your situation, or how are you planning your behaviors, or any of those kinds of things. It just felt like, "I don't think this toolbox is doing everything I need to do for this subject area. Where can I find some of this stuff that I feel like was missing?"

Then, one of the big things that happened was the book Nudge came out, which was the first big publication about behavioral economics. It was like this was starting to point towards some things where I'm like, "That's interesting. They have some tools that I should be adding to my toolbox as

an instructional designer." Then, gradually, you find other things. You find other models coming up and things like that. It got popularized through behavioral economics, but the truth was a lot of this research was happening in several different domains, and that has evolved, I want to say, into a general grouping around behavioral science. So, there's definitely an awareness of behavioral science as a discipline now that there wasn't 10 or 15 years ago, and I think so much of it is potentially useful to us as instructional designers. So that is fundamentally the impetus of the book is to try to bring more about behavioral science into learning and development and make it accessible to our practitioners.

Connie: That's a worthy goal, Julie. The example that you gave seems like it leads directly into the whole idea of systems thinking, which you write about in your book. In the case of condom usage, it was not a problem of knowledge.

Julie: Yeah, yeah.

Connie: It was the greater system. Can you talk about systems thinking and how that plays into the whole instructional design perspective and the whole behavioral change perspective?

Julie: Yeah. One of the challenges we have, again, as a field in learning and development is the fact that we tend to drop our interventions as one big thing, right? We're going to release a course, or we're going to launch a set of materials, or we're going to start offering a workshop, or anything like that. That's not how sustainable behavior change typically happens in the world, right? Sustainable behavior change is not like we just do one thing, and everybody is fixed now. Sustainable behavior change is we need to adjust several things about a system to make sure that we're continuing to support the behavior change overall.

It's the thermostat model, which is when it starts to get a little too cold, you bump it up, and when it gets a little too warm, you bump it down, and things like that. If we're looking at a behavior that we want to change within an organization, so let's say... I use the sales example a lot because I have been attached... I don't even know how many curriculums anymore where they want to change from product-based selling to consultative selling. So, the big change is they want people instead of showing up and saying, "This widget is the best widget in the world, and it's amazing, and you should totally buy this widget because it's going to do X, Y, and Z for you." They want the salesperson to walk into the room and say, "Tell me

about your challenges. Tell me about what's causing you difficulty right now." Then, eventually, you want to identify where they're having challenges, and then bring it back over and say, "Here's how this widget is going to help you with that problem that you have." Right?

So that's fundamentally the difference between product-based versus consultative selling. The idea that you're going to put somebody through a course on consultative selling and that that's going to change everything about their behaviors isn't taking into account the broader system that they're operating in because you might be taking somebody from something that's fundamentally working for them to sell widgets and asking them to change their behaviors, and it might be a slower burn. It might be something where it takes them a lot longer to get to the sales cycle, but what they're getting is they're getting a sales relationship with that customer where they're becoming a trusted partner, and then that's going to lead to being able to cross-sell all the different products that the company makes as opposed to just focusing on want to move widgets.

So, there may be very good reasons for that, but if the salesperson's in there and going, "Hey, what I was doing before was selling widgets. I sold this many widgets, and now I'm selling less widgets. How does this work?" and then if you get into things like the managers of the salespeople getting nervous because this is taking a long time to implement, and it's not working very well, and so they're not actually reinforcing it with their staff. Then, you get into issues of, "Hey, the product manager for widgets is losing their mind and getting really antsy despite the fact that actually, product sales across the portfolio are actually being lifted up a little bit." So, when we focus too tightly in one area of the system and just lean on that, we can create problems because if we're not taking into account all of the incentives or all of the things in the environment that support a behavior... So, when you're looking at that, you don't just need to train the salesperson on widgets. You have to have a conversation with the sales managers. How are they going to support it?

You may have to have a plan for sales to dip a little bit before we hopefully see it come back up. If we don't see it come back up, what are we going to do then? We don't yell at everybody. We figure out how to adjust the plan of what we're doing, and you might need support from senior management, or you might need support from the guy who is the product manager of widgets or whatever it is. They may all need to be participating, and you may say, "Okay. We're going to try this for six

weeks, and then we're going to adjust the approach if we're not seeing the results that we want to see," or maybe it's six months is how long it's going to take to really get to this point, but these are all things where a lot of times, as learning and development people, we're just handed, "Educate them on consultative selling, and teach them how to do it."

Connie: Right.

Julie: We're not having this bigger conversation about how the whole system is supporting the behavior.

Connie: So, a lot of your book is focused on... or an underlying framework is COM-B. That's C-O-M dash B. We thought that the best way to understand COM-B is to start with, of course, a scenario.

Julie: The example that we picked was creating good passwords as a cybersecurity measure. As I mentioned in the systems conversation, everything exists within a broader ecosystem. You can create the best passwords in the world, but if there's big data breaches happening in lots of organizations, your behavior won't change some of those outcomes. So, you do want to look at the broader system and consider things, but for our purposes, just to help talk through the model, we're going to focus on the narrow behavior of creating good passwords for your online accounts.

Connie: So, let's say that that's part of a larger IT initiative, and this is just one little aspect that L&D is focusing on. We're going to see how you can use the COM-B framework to apply it to this initiative.

Julie: Yeah. Absolutely. So, if we took that behavior and we started to look at COM-B, and I'll just explain really briefly where COM-B comes from. COM-B is a model, and it stands for Capability, Opportunity, and Motivation dash Behavior. Basically, those three things are the three things you're going to consider when you're dealing with the behavior is, "Are the people capable of doing the behavior? Do they have the opportunity to do the behavior?" and that specifically looks at social opportunity or physical opportunity. Does the environment support it? Then, motivation. Are they motivated to do the behavior? That provides you with a really nice framework for analyzing where the gap is between where they are now and where you want them to be in terms of actually doing the behavior.

COM-B is part of a broader program called The Behavior Change Wheel. There's a lot of great stuff about COM-B. I think it's a totally useful frame and lens to analyze problems with, but at the same time, keep in mind that

nothing covers everything. Nothing is going to be the answer all the time. So, if we look at the behavior of creating good passwords, we say, "Are people capable of doing this? Do people have the opportunity to do this, and are people motivated to do this?" Right?

The first thing we'd want to do with this is we'd want to go talk to people in our audience and say, "How are you doing passwords right now?" The trick for this is getting them to tell you the truth because... and it's not really a trick. The trick is establishing enough trust that they actually tell you what they're really doing around passwords. This one would be an interesting one to research because honestly, if somebody has a method for doing passwords, and they tell you it, they're potentially telling you how to reverse-engineer their passwords. So, there's an extra trust issue right there, but you do want to understand where people are right now because you can't help them unless you understand where they're coming from.

So, typically, a lot of the problems that come up with passwords is we've got a million of them. Some of the places where we log on has really weird, bizarre guidance around what the passwords have to be, but remembering all of your passwords is pretty much impossible now, I think. So, what you'd want to know also about your audience is how many people are relying on memory for passwords, or if they're not relying on memory, what are they using? Are they writing it down? Are they using a password manager? All of these kinds of things start to come into play because what we're going to design for them is hopefully something to help them from where they are now to whatever the next step is, and possibly some people in your audience are fine right now, right? They're using a password manager. They're creating unique passwords for every account.

Are they already doing this pretty well, except for a few people? Well, then you're probably not creating a training class at that point. You're probably just coaching a few people on password practices, or is it 70% of your audience is reusing the same basic passwords over and over again because they're easy to remember? So, we'll go ahead and assume that's the main problem that we're trying to address is that a big swath of our audience is reusing easy passwords so that they're easy to remember.

So, we've got our behavior identified. We want people to create complex passwords. We've also identified some ancillary behaviors that we need to consider like are we also going to try to create a policy or persuade people

to use password managers, or are we just concerned as long as they're creating good passwords, we don't care how they're saving these things? Because if we create long complex passwords that are hard to remember, then they're going to need to put them someplace. So, it's possible that we need to work on both of those behaviors. We need to work on the creating complex passwords behaviors and be also using an approved password manager.

From there, we would start to look at it. So, if we're just focusing on the complex password behavior and setting aside password managers right now, we say, "Are people capable of doing this?" So, within capability, do they know what a good password looks like? Maybe they do or maybe they don't. So, there might be a capability issue there that's just knowledge-based of knowing what elements you need to have in a good password. But then, we also have a capability issue of that memory piece, right? So, do people know how to create a good password, and are they going to be able to remember it?

Connie: So let me just remind people that all of that is part of the C for capability in COM-B.

Julie: Yeah. Within capability, we look at things like cognitive capability and also physical capability. Cognitive capability could be knowledge, but it could also be mental stamina or discipline. Then, if we move on to O, opportunity, an opportunity has two categories. One is social opportunity, so does your social environment support it? So, your social environment may be something like, "Oh, if you're trying to eat less sodium because you're concerned about high blood pressure, your social environment is going to have an impact on your ability to eat less sodium." Right?

It could be your family and family dinners, and that constitutes your social environment. If you've got a weekly nachos and margaritas meetup with your best friends, you have to figure out, "How am I still going to enjoy the social interaction despite the fact that the behavior that we typically do when I meet with these people is loaded with salt content? What am I going to do about it? Am I going to drink something else? Am I going to get a different snack? Are we going to change what we're going to do?" All of that is going to play into the behavior, consume less sodium.

Your social environment plays in your physical environment. You might empty out the cupboards of everything that has too high sodium content. So, do you have good access in your community to lower sodium canned

goods? For example, if you go to the grocery store, can you buy those, or are they hard to find? All of those kinds of things about your physical environment and the systems that you operate in are going to have an impact on your ability to adopt this new behavior.

Connie: Reducing sodium is a great example, but in terms of the password scenario, it doesn't seem that social opportunities are going to impact the behavior very much.

Julie: Absolutely. So, I think the social is probably fairly minor piece to it. Although if everybody around you is like, "Oh, this is really dumb, and I'm totally not going to do it," then that might have an influence, or if, for example, there was password sharing going on because you don't want to buy a bunch of licenses/accounts, and then people being annoyed because you're handing them big, horrible, complicated passwords, those kinds of things could play in.

When we think about the physical environment, then we are getting into the systems, and so the presence of a password manager is going to make a big difference. Is the password management system secure? Does the password management system let them create passwords easily, or is it a pain to use? All of these kinds of things are going to start to influence the behavior and the likelihood of behavior. Then, for motivation, we look at two different kinds of motivation. We look at reflective motivation, and we look at automatic motivation. Reflective motivation is motivation that you are aware of, and you can reflect on or talk about, and it could be your goals.

So, if you think all this nonsense about password stuff is just a pain that IT is forcing on you, your reflective motivation is not very positive about this particular behavior. If you think, "Oh, yeah. This is a really good idea, and it's part of my responsibilities to be safe with company data. I don't want anything bad to happen, and I want to be a responsible person about this. I see this as part of my job competencies," or, "I have a specific goal to do better with this," those are all positive forms of reflective motivation that are going to influence whether you do the behavior.

Then, automatic motivation are your habits, or biases, or things that operate below the conscious level a little bit. So, if you have a habit of always using the same cat name in your password, that habit may undermine creating safe unique passwords, or if you have a habit of always jotting it down on a post-it note and sticking it inside your planner,

that may also undermine good safe password kinds of things. If it just feels irritating and annoying, those feelings can be part of automatic motivation as well.

Connie: Ah, that makes so much sense. So, now, can you talk about how the COM-B framework will impact the solutions you might design?

Julie: What we can do is we can look at and say, "Okay. What are the issues in capability?" If you say, "Well, everybody knows how to do this, but they maybe don't have good stamina or focus on it. We're going to help people be creative about passwords and things like that." If we're looking at environments, we can make sure that they've got the good, really easy to use with a good user experience password manager, and that that's going to support the behavior. We're going to make sure that we have a policy around using two-factor authentication. We're going to look at all of the different things that we can do to support the behavior in terms of creating an environment.

Like I said, we decided we don't think social is a big one there, but we might look and see if there's any social issues. Then, when we look at motivation, we're looking at things like, "Are people aware of the consequences? Have people in our audience had the experience of having an account hacked? Can we remind them how that feels? Can we show them the consequence for people when hacks have happened and what bad things happen? Do they know those things? Are they already on board from a motivation point of view? Do we need to get them on board from a motivation view? Do they understand some of the factors that should influence the motivation, or do we need to help them with that?"

So, we can start to then, from there, pinpoint, "Okay. We don't need to tell them the basics, but we do need to have some good job aids about the systems, and we do need to do some micro-learning piece on creating passwords, or we can start to mix and match solutions to the particular areas we've pinpointed and start looking at ways to support people around it." There's a lot of solutions in the book. COM-B comes with this set of solutions called The Behavior Change Technique Taxonomy, The BCT taxonomy, which is a mouthful. I know. It's got a lot of possibilities in there. Another way to think about this is capability and motivation are both internal things to the person. The opportunity is everything around a person. So, capability is, do they have the ability? Motivation, do they want

to? Opportunity is, does everything around the person support the behavior, or are there things about it that are not supporting the behavior?

Connie: That was a really good summary. Thanks. So, what do you see as the advantage of analyzing behaviors in this way?

Julie: We do come in with the supposition that when something isn't going right, training is the answer. Right? We've all heard this. If we accept those mandates without really breaking them down a little bit, we get handed things to solve that, really, we can't solve.

Connie: Yes.

Julie: One of my favorite examples. I was doing some stuff for a big insurance company. We're working on how you create a multinational policy. In the middle of it, one of the stakeholders was like, "You know what's really important? People are not being careful about making sure they're entering the information accurately. Can we make sure that we put something in the training about the importance of entering the information accurately?" I said, "Sure. Yeah, we can do that. Can you tell me a little bit about what kind of feedback they get on their accuracy?" They're like, "Huh, I don't know if they get any feedback on their accuracy." I'm like, "Okay. All right. How do they get paid? What's their incentive system?" They're like, "Oh, the number of applications they do per hour." Yeah. You laugh because you see the problem here, right? We can put a thing in training that says accuracy is super important, but you're paying people for speed, and you're not giving them any feedback about accuracy.

Connie: Ridiculous.

Julie: Yeah.

Connie: That is the perfect example of why we need to use systems thinking.

Julie: So, a lot of this is to hopefully give you some really good methods for understanding the problem upfront, and then a really nice, easy-to-find set of tools that you can then bring to bear depending on what the situation is.

Connie: Perfect place to wrap up. Thank you so much, Julie. This was a very exciting and fascinating conversation.

To reiterate, the key purpose of the COM-B model is to guide our thinking as we try to understand how to change behavior and that we need to think about the capabilities, opportunities, and motivations of a group or individuals. I think that this is a fresh perspective for solving some of those

sticky learning design problems. I hope you found that helpful. You can find the show notes and a transcript at theelearningcoach.com/podcast/ the number 81. Take care, and I'll talk to you next time.