The eLearning Coach Podcast #14

Are you getting any better?

with Julie Dirksen

Welcome to theelearningcoach podcast, online at theelearningcoach.com. I am Connie Malamed, bringing you ideas and tips for success with creating online and mobile learning experiences.

Hello learning people, welcome to episode 14 of theelearningcoach podcast. I had a little podcast break here, and it is great to be back. I hope you are doing well.

Now, on to today's topic. If you design learning experiences, how can you tell whether your skills are improving and where you might fall short? Is there a way to discover how well you are meeting the needs of your audience? Are you getting any better?

In this session, Julie Dirksen tackles this question. Julie is the author of the awesome book *Design For How People Learn*. She is an experienced independent consultant and instructional designer with more than 15 years creating highly interactive eLearning experiences. She also has a background in user experience design or UX, game-based learning, and behavior change. Now, here is our conversation.

Connie: High Julie, it is nice to have you on the podcast.

Julie: High Connie**,** I am really happy to be here.

Connie: At DevLearn, you were running a panel that had to deal with whether eLearning is broken or not.

Julie: Yes, is eLearning fundamentally broken?

Connie: What was that all about?

Julie: So one of the things that I have really been wondering is why we are not seeing as much progression in eLearning as we are in other fields. I feel like a lot of other web-based technology related fields look really different and have really moved forward in a lot of significant ways, whereas I feel like, and this could just be me being expressing my own frustrations, but I certainly feel like eLearning, we are not doing that much significantly different or better than what we were doing 10 years ago or even 15 years ago or even honestly 20 years ago.

If you go back to the pre-web, CD-ROM-based days where people were building some pretty interesting stuff with Authorware, Director and things like that, and granted they did not run on mine, but there were some really nice interesting interactive examples of eLearning going on and, maybe I am not seeing the really great examples that are getting built these days, but I just do not feel like there is stuff that is a lot better than what I was seeing 5, 10, 15, or even 20 years ago.

Connie: I guess in a lot of ways, I have had that same feeling and experience. So one of the things you have mentioned is that there is an absence of a feedback loop and that this could be one of the problems. Can you explain what you mean by feedback loop and how is it absent from our field?

Julie: Right. One of the things that we look at as instructional designers is how do people develop mastery, and one of the theories behind how people develop mastery is that it is a significant amount of time of deliberate practice. So if you look at things like the 10,000-Hour Rule with Malcolm Gladwell, kind of made famous in the book Outliers, he was looking at people who have this really high level of mastery and going back and tracking whether or not they had this sort of an enormous body of practice that they were calling on.

If you look at examples like Tiger Woods, we all know that Tiger Woods was pretty much putting in the womb basically; we have the stories about 2-year-old

Tiger Woods already clutching his little golf club and hitting wiffle balls or whatever it was.

When they look at other examples like, one of the things that Malcolm Gladwell talks about is, he looks at the Beatles, and the Beatles ostensibly were young and they became famous overnight. But when he goes back and he actually looks at it, they spend a couple of years playing in clubs in Berlin, and they would play for a kind of fleecy nightclubs or whatever, and they would play for 6 or 8 or 10 hours at a time, and so by the time the Beatles actually hit it big, they had this sort of an amazing body of hours of mastery, and the 10,000 part of it is probably a little soft, I mean it depends on what you are learning and it depends on aptitude and few of those other things.

One of my favorite initiatives around this 10,000 hours is a guy, who apparently quit his job, and I do not know exactly how he supports himself, but he is just trying to play golf for like 10,000 hours to see that if he could get himself on the tour.

Connie: Amazing, I think I am going to do that.

Julie: Yeah, I know, right? So it is an interesting notion that there is this big block of time and that is one of the critical requirements for mastery, and there is counter examples of people who really did do it in shorter periods of time and things like that, but the bulk of people who gets to a really high level at anything seem to have this sort of body of practice behind them. So this is an interesting question from me when I look at something like getting better at eLearning itself, why is that not seem to quite be working in our fields?

One other really crucial components for this level of mastery in this 10,000 hours is the idea of deliberate practice, and that is kind of a misnomer because what we are really talking about is practice, feedback, seeing the results of that practice or the attempt, getting feedback either externally or having a way of measuring your own feedback and then being able to then turn around and focus your effort better the next time.

So you are not just hitting a golf ball randomly a hundred times, you are hitting it a couple of times tweaking your swing and then hitting it a couple of more times seeing what works tweaking your swing or you got a coach who is watching you and is suggesting, you twist it, tell your grip, or whatever.

So this idea of deliberate practice has to have a really pretty tight feedback loop where you are getting the results of your performance and adjusting your performance as you go forward. If you do that, then that notion of 10,000 hours or just a large body of practice probably works pretty well. I you do not get feedback on it, I think Kathy Sierra has a thing that she talks about where it is instead of 10 years of practice, you get the same 1 year of practice over and over again.

Connie: It really is true. I guess most people in our field do not get a chance to watch learners use their eLearning products and do not get a chance to talk to them afterwards, do not get a chance to hear what is good and what is bad, is that what you are talking about?

Julie: Yeah, that is absolutely what I am talking about. There is really no kind of feedback loop that circles back around and tells you whether you made good design choices or not. I you compare this to somebody who does classroom training, and you can tell, like if you get into a face to face or instructor classroom situation, you can tell if this is a person who is not that experienced or if this is one of those people who has been doing this for a while.

Sometimes as they have been teaching the same class forever, they get kind of bored and that is a different thing, but you can tell when you are in the hands of somebody who is really experienced, they know how to explain things, they know how to give directions, they know to direct the attention of the class, and whenever I have taught live classes, I used to teach undergraduates, and I could tell right away. I would be a trying a new exercise with these undergraduates, and I can tell right away that, I am like “oh, I explained that badly.”

Connie: Yes, you really can tell. You get immediate feedback.

Julie: You are like, “oh, they did not understand, let me try a different way” or “let me re-organize this exercise the next time I do it” or “let me get a couple of more examples in my back pocket, so that I can kind of if one does not work, I can pull out another one.” So when you do that, get that practice, you really become very good at it, because you can see the results. Now, there is the bigger question of do the results then carry over to the real world and does behavior change and instructors frequently cannot see that, but they can see whether or not the class is kind of working at the most basic level, which is questions engaged, are they understanding things, will they be able to do this stuff that you want them to do, all of those kind of questions, you see that right away.

When I was at DevLearn and I was on this panel, one of the questions I asked the group, and I had a really packed room with probably 200 people in that room, so this was really crowded, people sitting on the floor, and when I asked the question to the group, “how many of you regularly get to see people using the stuff that you build, the eLearning that you build” and less than half the room had put their hands up, which makes me sad because it is really satisfying to see people use stuff.

Even it works or it does not work, it is just really satisfying to kind of close that loop and know if what are you doing is effective or it is not effective or things like that, and one of these big challenges is that what people usually see as an eLearning designer or developer is that they see the development process, and they think people do get better at that, they get more efficient, they get better at managing the project, so they get better at using Captivate or whatever it is.

Because they can see the results, so that they can see if they are taking too long or if that is not working the way they wanted to work. So I think people genuinely get better at the production process the longer they do it for the most part. What I do not think they do get better at though is necessarily the design piece, because quiet frankly, if you are not seeing people use it, you really just do not know. Then, at certain point you are saying “I think this is a good way to do eLearning,”,

but I could just be making that up because I have never seen anybody and how they react.

Connie: Right, and really, if you do not spend time with the learners, then the only way you can get any information is from looking at their test scores and seeing if your questions are well written, or if everyone seems to be getting a question wrong, then you can go back and say “well, I did not explain this well.”

Julie: Right, and so occasionally, you can get that kind of data, but honestly, a lot of the courses that I see getting built; you do not even get per question breakdowns.

Connie: Right.

Julie: You get an overall test score, and you might be able to judge that something is not working if nobody can pass the post test.

Connie: But you do not know why?

Julie: You do not know why, and quite frankly, almost all of the testing and assessment I see has a tendency to be kind of on the easy side and really they are more there for political reasons rather than genuine assessment of ability. Writing a multiple choice test or something that you can easily deploy in an eLearning environment is really really hard, writing a one that really genuinely gets at things, that is why we have psychometricians and that is why educational testing spends an enormous amount of money creating SAT questions, PMI spends on creating tests for the PMP exam and things like that is writing really good valid test questions is actually very difficult.

Connie: That is right, it is. So okay, that is one way that it is broken. Let us think about some ways that this can be fixed. I mean, one of the obvious one is to get together with members of your audience.

Julie: Yeah, you know very well that this is something that I get very passionate about, which is user testing, and really spending upfront time with your audience, so that you are putting things into their context and understanding kind of their perspective on it in the first place, but one of the biggest and best things that you can ever do as a designer is just to watch somebody use stuff you have built.

Connie: Right.

Julie: There is no really good reason why we cannot be doing that kind of thing. I ask that question pretty regularly too when I present to people, how many people are doing user testing or usability testing, and I get pretty mixed results on that one too, depending on the crowd.

Connie: Well, for the audience who is listening, what would be the quickest least painful way, if they did not have much budget or much time, to do some user testing that would at least be valuable and help them see what is going on? I have always heard just even testing 2 or 3 people can really make a big difference.

Julie: Yeah, and actually, Jakob Nielsen did a study; I think the article came out in 1994 called Guerrilla HCI. [*Editor's note: See link to the study in the show notes.*] He looked at the question of how many people do you need to test. One of the things he was seeing was that people were doing user testing, and this is more for software development, not really eLearning, because they felt like they had to test a really large audience. Because, really when we think about testing up to that point, the sort of legacy of that kind of testing came from academic research. In an academic research, you have this obligation to have things like statistically significant portion of the audience that you are testing, so that you can draw more generalized conclusions.

In user testing or usability testing, the way that it works is that you actually sit somebody down in front of something that you have made and you explain to them that they cannot do anything wrong, that they are golden, and that you are just hoping to try to find out where the interface does not really work, where it is

confusing or where the instructions are not good or where things do not really make sense, and so you have them do it. The best resource on this is the Steve Krug books if you want to get started. There is *Don't Make Me Think*, which is a classic, and there is a new version that is just coming out right now, I think, and then there is also *Rocket Surgery Made Easy*.

Julie: *Rocket Surgery Made Easy* is almost entirely about the usability process or user testing process, and the really delightful thing is that this has gotten very easy in this sort of era of WebEx and good web conferencing because you do not even physically need to bring people into do this.

What you do is you bring them into WebEx, you have them pull up your interface, if it is an eLearning program or whatever, on their screen, you give them control, so then they share their screen, and they basically go through your eLearning course, and may be kind of talk to you about what they are thinking as they go through it, and you just watch them and ideally record it, so that you can check back later, and you see where the instructions do not make sense, you see where they skip over stuff that you think they should probably have spend more time on, you see if they do not know where to go, all those sorts of things. None of this is stuff that will tell you increasingly that your eLearning works but you will find the issues where your eLearning does not work.

So to come back to the Jakob Nielsen example, he would put an interface in front of people and he would see if he tested 5 or 6 people, he would find 27 errors or issues in the interface, and if he continues to test people beyond about 5 or 6, he would get a diminishing return. So he might find a few new errors if he test 10 people or 20 people or 30 people, I am not sure how far he went with that, but what he found is that after about 5 or 6 users, you would consistently find at least about 80% of the issues in the interface and then continuing to test more than 5 or 6 people really just did not get you very much, and then you could fix them and may be test for a few more users and then see if anything else crops up after you fix kind of the obvious stuff.

Connie: Now, that is good for the usability of the product, but also, I like that approach where people will speak out loud what they are thinking, that might

help when someone is doing problem solving or trying to understand something that the eLearning courses teaches, we need to take these systems that work for other people and then adapt them to the world of learning and instruction.

Julie: Right, absolutely, and it is one of those things where obviously watching somebody use your eLearning is not going to tell you if they change their behavior back in the real world, but it is a really nice first step in that process. It is a very nice sort of minimum, and you can ask people like, does this make sense to you or things like that. If it seems like people are confused by the content, it is a really good initial step. It is not everything, but it is a really good initial way that starts to get a little bit more of a feedback loop going on.

Connie: Yeah, I think in my experience, it has been kind of shocking just asking someone who is on the team that I am on, can you understand these instructions, and when they misunderstand them, I am always shocked, because I might have spend an hour writing some small instructions and they are not working. For example, explaining how to do a drag and drop, I have seen people get confused by it.

Julie: One of the things about it is, I do not typically proofread my own work, not the real proofreading, I proofread my own work, of course, but if I am writing something for a course, I will always want there to be a quality assurance person who is going to do a final proofread on it. Because, one of the things that happens is I know what it is suppose to say, and so if I am missing a word or I have got something screwy going on in it, I am reading it with the “I know what it is suppose to say” in my mind, and I just cannot see the issues the way that a neutral person coming in and reading through it and proofreading it will see stuff. They will see that stuff because they do not have a preconceived notion of what it is supposed to say or how it is supposed to work. When you are a designer, you loose the ability to identify where stuff does not make sense.

Connie: Definitely.

Julie: So you really need that outside perspective, and ideally, these are people in your target audience, but honestly, if you cannot get people in your target audience, and sometimes it is hard, just putting it in front of anybody who was not involved with the whole design phase will be good, and you are not looking for their opinion, you are looking for their behaviors. You are not asking them if they like stuff or not, you can throw those questions on at the end if you want, but you are really looking for what are they doing with it or how are they interacting with it.

Connie: Right. So just to bring it all together, what we were saying is some of the ways that people can get feedback at least on usability and whether instructions are easy to understand is from user testing, there is also the think aloud process that I like.

Julie: Yeah, think aloud protocol where you ask people to verbalize what they are doing.

Connie: They are just informal discussions asking someone in the cubicle next to you, who was not part of the process, to run through it if you cannot find audience members, and then finally proofing and getting a good QA check. That would really improve our ability to become better at design.

Well, Julie, it looks like we are running out of time here. Did you have anything else that you wanted to say in terms of how we can fix the broken parts of eLearning and continue to make it better and just really improve?

Julie: Yeah, there is an idea that I have really been thinking a lot about, and I think it goes with user testing and things like that. A friend of mine who is a professor at Kent State in information architecture talks about organizations with a focus on right versus better. A focus on right is you need to somehow come up with the right answer. A focus on better is more of you try things and if they work well, you do the more, and if they do not work well, you do something different. Better is that sort of testing idea, let us try something small, see how it work, try something different, and so, it is very much similar to what agile is talking about

with project management where you do things in small bursts and then you kind of adjust, and it is very much prototyping and seeing what works and what does not work.

Because the problem with a focus on *right*, having to be able to come up with the right answer from the beginning is that, first of all, it is probably impossible because things change and ideas that sound good at first may be do not make it all the way through as being actually good ideas. The problem is that if you have this *right* focus, we have to be able to come up with a right answer and implement it, then people's reputations are at stake and people get defensive. Whereas if you got this focus off, is it better or not better, you can kind of say "okay, that did not work so well, but we do not have that much time invested in it, so we can go ahead and try something different." That sort of small iterative cycle is much better at sort of providing that feedback and trying things out, and I see the software development industry moving towards that, so that is probably my kind of closing thought on this, is learning how to be better, not learning how to be right.

Connie: Oh, I just love that. Thanks so much. I think that is a real positive way to end things, we just have to try to be flexible and try to go for better rather than right.

Julie: Yeah.

Connie: Alright. Well, thanks a lot Julie.

Julie: yeah, thank you. It has been fun.

Connie: I hope you enjoyed the podcast and found it informative and motivating. See if you can find ways to close that feedback loop, not just for yourself but because we are advocates for learners everywhere and because we want to move our field forward. I you would like to share your techniques for doing this or if you are looking for resources and a transcript, go to theelearningcoach.com/podcasts/14.

Thanks for sharing your valuable time with me, and I will talk to you next time. Take care.