

**The eLearning Coach Podcast**  
**ELC 047: The Action Mapping Alternative**  
<http://thelearningcoach.com/podcasts/47>

Connie: Welcome to the eLearning Coach podcast, online at the [elearningcoach.com](http://thelearningcoach.com). I'm Connie Malamed, bringing your ideas and tips for success with creating online and mobile learning experiences.

Hello, everyone and welcome to episode 47 of the eLearning Coach podcast. If you are frustrated with the traditional methods of instructional design, then you'll be interested in this conversation with Cathy Moore. She's the creator of Action Mapping, a model for training design that focuses on improving workplace performance. Cathy's a training designer, teacher, speaker, and author. Her advice and designs have been used by many organizations and the US government. She also teaches online workshops on scenario design.

In this conversation, we discuss her book Map It, the changing role of learning experience designers, measuring the effects of training, how to tell whether training is the solution to a performance problem, and much more. You can find the show notes at the [elearningcoach.com/podcasts/47](http://thelearningcoach.com/podcasts/47). Here's the interview.

Hi Cathy, welcome to the eLearning Coach podcast.

Cathy: Hi, Connie. It's great to be here.

Connie: I've been going through your book, Map It and I have so many things I want to talk about with you. An important principle in your book and also, it's trending in our field, is that courses cannot fix all workplace performance problems. How did we get into that courses only mentality anyway?

Cathy: I think it has a couple causes. One being that the simplest answer is always the most attractive, and so people naturally tend to be drawn into courses like being sucked into a black hole. And also, we are increasingly, you know, over the years becoming over specialized and so, some of us are specializing in creating courses and so, that's what we sell, and that's what people buy.

Connie: Makes sense. Can you give us some examples that either you've been involved in or that you've heard about where learning experience designers, we're able to fix a performance problem by designing the solution that went beyond or in addition to a course, just to give people an idea of the types of solutions that could be out there.

Cathy: One of the biggest changes in direction that I was involved with was a client that felt that they needed ethics training for some practitioners. But, when they analyzed the problem they realized it wasn't going to be useful to do a course telling the practitioners, you know, don't lie. And instead what they discovered was that they were falsifying some information, fudging some data, due to cultural pressure that was coming from their bosses. And the focus of the project became the bosses, who needed

to become better managers, so they actually threw out the original idea for a course on ethics and it became a more complex approach to help the managers become better managers.

That's a bigger change. More often and what I hear a lot from people who are in my scenario design course, is that as they do the analysis they discover oh, hey, maybe we don't need a course at all. It looks like a job aide is just going to solve our problem. Or, a job aid will solve the problem, most of the problem and we need a lot less training than we thought. That's the most common.

Connie: And sometimes I see courses where people are having trouble with Legacy software that it's so old, the software needs to change. It's almost impossible to train people on.

Cathy: Exactly and sometimes in my past, I've wrote a course and scare quotes, for some software that didn't even have a help documentation system, so it was a very clumsy software and they hadn't bothered to even have a simple help screen. So, you know, I obediently wrote the course, but I also created like this two-page PDF that just summarizes the commands. And I think that's what really solved their problem and not the expensive course that they also bought.

Connie: War stories. Recently, I had a discussion on the Good Practice podcast and it was interesting. He thought that there was a certain amount of hubris, thinking that we had the capabilities to fix all kinds of workplace problems. How would you respond to that?

Cathy: First of all, I'm not sure who is saying that learning designers are supposed to fix all kinds of workplace problems. From what I'm saying, is that we should do the analysis that traditionally was part of our job and help our clients understand what is really causing the problem. It's usually the client's responsibility to fix aspects that are outside the scope of, you know, learning design, job aids, and performance support. So, it's our job to help the client see the problem, not for us to go out there like superheroes and fix everything.

Connie: Good answer. Maybe that was better than mine. To get all of us on the same page, let's talk a little bit about action mapping. Can you explain what that is?

Cathy: It was a model born out of frustration, somewhat based on what I was learning as a side ... I had a sideline as a marketing consultant and copywriter. Action Mapping is sort of reverse instructional design and certainly other models do the same thing. In academia, it would be described as designing the test before you design the instruction, but, since we're in business, we're ideally not designing knowledge tests.

So, what we're doing is we're starting with the goal. We're starting with the evaluation first, so we're asking, what is the problem we are trying to solve and how will we know it's solved? And by problem, I mean the visible, measurable, performance issue that is affecting the performance of the organization. So, poor sales, lots of lawsuits, things that are measurable and affecting performance.

We start with that, then we ask what people need to do on the job to achieve this goal of changing that measure and proving it. We ask why aren't they doing it, which is that analysis where we help the client see what's really causing the problem. And for the aspects of the problem that actually might require training, we design practice activities, not knowledge presentations to help people actually practice what they need to do in a safe place.

And only then do we identify what they allegedly need to know, and that information is driven by the activities. So, ideally it helps keep subject matter experts, for example, from throwing in all their favorite information that nobody really needs to know. And it also helps make sure that we are focusing our limited time on helping people change their behavior in ways that will actually have a measurable meaning impact on the business.

Connie: How many clients do you see that actually want to measure change?

Cathy: You know, a lot of them say they do. The trick is to help them identify what measure they are currently using, that is a good one to start with. Usually there's two problems. There's the client that says, "Oh, we don't measure anything." And that's almost always false. Although, in the case of non-profits, unfortunately, that may be true. But, most organizations do measure something.

The other trick is to get people to get past the fear of making a commitment to actually having an effect. There's a lot of passing the buck in big organizations and by saying, "We are going to focus on this measure and we are going to make it improve." You're taking a really bold step and it might be a little too bold for some people.

Connie: It is a bold step for the organization and for the learning experience designer because then everyone is accountable.

Cathy: Yeah, and what I'm hoping we're measuring is a change in the performance of the organization, so there's tracking what the people do. Like with like he completed this activity and there's also tracking whether his performance has improved? Is he selling more widgets as a result?

Connie: Right. Right. So, you've been teaching Action Mapping for quite a few years. How has it involved? What new things have been added or changed?

Cathy: When I first thought of the basics I put together, the basics of the model, I was strictly designing custom eLearning for corporate clients. So, it had an eLearning focus and it also had this focus of our job is to manage this amount of information that people are trying to cram in. It was sort of a defensive thing. Let's keep out excess information. Since then, it has involved to apply to all types of training and very importantly, I expanded the analysis step.

When I was working as a, you know, custom eLearning developer, basically no analysis was allowed because somebody had already decided that an online course was a

solution. But, as I got more out into the real world, the more complex world, I saw the complete absence of analysis and looked at various ways to analyze the problem.

So, I think it was in 2013, it was several years ago, I added this flowchart that helps you ask simple questions of the client and subject matter expert to identify what is really causing this problem and if training will help, what is its role.

Connie: Lately, I've been thinking, you know that methodology root cause analysis?

Cathy: Yes, it's like that.

Connie: It seems like we can incorporate that into our process when necessary. There's so many methodologies that we can, especially from user experience design, that we can incorporate into our practice when the need arises. It's great to know about them.

What criteria do you use to determine whether a workplace issue is a performance problem or whether that can be solved by a learning experience designer or whether it's something that you have to go back to the client and say, "Actually, this is not in my wheelhouse. This is what I'm finding."

Cathy: The flowchart I just mentioned, is something you go through with the client. Ideally, the client is there or at least the subject matter expert. So, you're not doing the analysis on your own. You're doing it with the SME client and it's a ... it guides the discussion and it has four categories where you can ask what elements, for example, of the environment might be causing this issue?

And the environment includes the tools people have, the culture of the organization, the larger culture outside the organization, the processes they're using, whether they even have been told what they're supposed to be doing. I consider that an environmental problem almost because it's a communication, a larger cultural issue. We get them to think about that.

We also get them to ask what component of it might be a knowledge problem? What component might be a skill's problem? And there's a few basic questions down this flowchart that help you narrow it down to the point that the client sees for themselves, "Hey, this problem that I thought would be solved with a course, I think I need to make these other changes as well." And if the course aspect of it, really the only thing that is in the skills branch, I think that's all that we need to train them on.

So, ideally, the client is making this decision for themselves. You're playing the naive outsider. I am not an expert in your department or your field. You know, so let me ask you some questions and you can tell me.

Connie: It kind of reminds me of putting an idea in someone's head and then letting them think that it was their idea.

Cathy: Exactly. That's what we're doing.

Connie: That's a great technique.

Cathy: You get a lot more buy-in if the client sees for themselves.

Connie: I think there's a little bit of fear or concern in our field that Action Mapping, agile methodologies are kind of replacing instructional design practice. What is your view about that? Do you think these can kind of meld well with instructional design or do you see it as a replacement?

Cathy: I see Action Mapping as a type of instructional design because if training is part of the solution, then the end product is, I'd like to think a well-designed instructional experience or learning experience. Whether it's a course or a series of standalone activities spaced out over time, a face to face workshop, or a brown bag lunch sessions, some mix of the above, it's all, you know, designing a learning experience, which I think of as instructional design.

It is not conventional instructional design in the sense that somebody gives you content and you turn it into instruction because that's what I'm trying to push against. So, if Action Mapping or agile or any of the other more iterative methodologies replace this practice of turning content into a course, I say that's fine. I say great.

Connie: Right, but it doesn't mean that you can't do an analysis and it doesn't mean that you can't use principles of learning, instructional theory cognitive psychology to come up with your solutions.

Cathy: Right. I'm not seeing them as exclusive at all. I mean, certainly as part of Action Mapping, for example, when you decide that training is part of the solution, then of course, you're using all of your understanding of adult learning theory and what the research supports. You're choosing media appropriately, according to research. You're doing all the usual instructional designing stuff. It's just that it's focused is driven by activity rather than by information and it's probably leaner than a conventional, you know, turn this content into a course would have produced.

Connie: Well, do you see any situations where you would recommend not using Action Mapping?

Cathy: I recommend when people say, you know, "Will Action Mapping work for my stuff?" I actually have an interactive on my website where you can say, "Will Action Mapping work for my project?" And it asks you several questions and depending on the way you answer those questions it says, yeah, or no, or maybe. And the no tends to be in response to people who say, "I need to create something to help people prepare for a test." I say, "Go right ahead. Action Mapping is not going to help you with that.", because a big focus of it is making sure that training is a solution and also making sure that the activities we design help people change what they do on the job.

If you don't care what people are doing on the job and your assignment is they must get a certain score on a knowledge test, then just design for the test. And, you know, Action

Mapping is not going to help you if someone somewhere has decided this is 100% conventional instruction. We don't care what they do.

Connie: Right. So, it's very workplace learning oriented.

Cathy: Right. It's not for education.

Connie: In terms of designing practice activities in Action Mapping, how do you recommend people go about figuring out which activities they should have people practice?

Cathy: This is part of the analysis that ideally, you've gone through with the client or subject matter expert and I recommend that the SME prioritize the behaviors according to which are most important or, which have the most impact or, which have the most disastrous consequences if done wrong, so that you're focusing on the high priority activities.

And then, ideally, you're working with the SME to not only pull what is the correct knowledge that they have to have, but what are the challenges that they face? What makes it hard? And so, your practice activity ideally, reproduces that aspect of the world. All the stuff that makes it hard and if it's a multiple-choice type of activity, the options are realistic and subtle and they include the common mistakes that people are making on the job.

So, these practice activities are highly contextual. They reproduce what people face on the job and they help us practice the high priority behaviors.

Connie: Even if you're using multiple choice, that goes back to some of the most basic guidelines for creating multiple choice questions. A lot of times, my clients because the content is, you know, much more complex than anything I know about. You know, the right answer is going to be a paragraph long and the wrong answers are, yes, no, all of the above. And it's so obvious. But, in this case we're not testing knowledge, we're helping people learn to solve a problem in the case that you're talking about.

Can you talk a little bit about the benefits of using branching scenarios in eLearning?

Cathy: Well, I like to distinguish between what many people call a mini-scenario and a branching scenario. The mini scenario might be your standard multiple-choice question, but it's designed as a contextual practice activity. So, you're put into a realistic scene, you need to say something to someone, or make a decision about something. You choose from maybe four options. You see the consequence of your choice. The end.

The branching scenario has more decision points and a longer story. And I think a well-designed branching scenario gives us a lot of advantages. One of the major ones and I think one that's overlooked too often is to help people recognize and recover from mistakes. So, a typical branching scenario might be a complex discussion, such as a negotiation with someone. You're negotiating. They are starting to look a little cool and

you think okay, I've done something wrong, how do I recover? In the real world you have to be able to do that. And so that's a way to help them practice that.

Connie: I like that. And from a technology perspective, because so many people are using learning management systems, what are some ways to deliver practice activities that are not part of a course maybe they can be practiced intermittently so you've got that space learning advantage? How have you seen that implemented?

Cathy: I have heard people say that their LMS does not on the surface appear to be able to do this, such as email one activity to people on Tuesday and then the following Tuesday email a different activity. But, they found that when they dug a little deeper in the settings of the LMS, it can do that.

So, the first response I would say is dig a little deeper and see if there is a feature to do that already. I am free of the LMS world, so luckily, I don't have to do that in my own materials. I put them on a website and I trust people to go there and do what they need to do. So, I'm not trying to track them. I just put these activities up and I say, "Here's some practice activities that can help you." You know, and they can use them or not.

So, I think part of it too is to let go of our need to track everything, but I know that that's a difficult thing for some organizations. But, you just want to deliver the things. For example, there are marketing platforms used by many small companies and large where you can create a multiple-choice question or an email full of links. You send it to somebody and the system tracks which link they have clicked and in response sends them another email.

So, for example, I could send out a soap opera by email. You make a decision. The next email you receive shows the consequence of your decision and then the next episode and you have to do another decision. And this is all run by marketing software, not by learning software.

Connie: Interesting. Yeah, that would be a great way to do it too. That may not work for people who do compliance training where regulators are watching what they do, but there's no reason why every practice activity can't be a module in an LMS and then you can just go in, do that practice activity, and be tracked if you need to.

Cathy: Yeah, there's probably ways around it if you sort of work with the way the LMS thinks but trick it a little bit. And also, the software, the marketing software that I just mentioned, it tracks who has opened the email and what they have clicked. So, even for compliance activities, it should be all right.

Connie: That could be work for some organizations. Now, let's turn to prototyping. Have you had experience with low fidelity prototypes like paper and pencil or do you prefer prototypes that are a little bit more implemented, such as with authoring tools, PowerPoint, HTML, or commercial tools?

Cathy: It depends on what the final format of the activity's going to be. For example, when I worked on some pretty intense branching scenarios for the US Army, I did them as, think it was ... oh, we didn't even have Twine then as a word document and it was a word document with hyperlinks. It was a draft with a scenario. I got a focus group together of people from the audience and I said, "Here's this draft idea for a plot." And now I remember it wasn't even a word document, it was a flowchart.

So, it was super low technology. I said, "Here's the story we've thought of. Here's a decision point. Here are the options we're going to offer. What do you think?" And they would say, "That's too simplistic." Or "That's realistic." Or "Actually, you should include this other option because people are always trying to say this thing." And so, they were sort of helping from the very basic plot level, looking just at a graphic of a flowchart projected on the wall.

For more detailed feedback when you get to the point of actually having a decision point or a multiple-choice sort of thing that you want to test on them, I'm a big fan of super low fidelity when it comes to graphics, but make it clickable if it's going to be eLearning, so they can see, for example, here's the question. There's a sketch of black and white cartoony sketch by my own very unartistic hand of like a stick figure and they make their choice.

The point of the prototype is to show what happens when they click their option. And, you know, the next screen appears, and they see the consequence of their choice. It's not feedback from the heavens saying, "Correct." Or "Incorrect." It is the story continues. And the prototype is also useful to show when can I look for optional information? Is there help on this screen or is there only help on the feedback screen?

It forces you to make all these operational decisions and then when you test it on people, I strongly recommend that you test a black and white thing with only sketches or no images at all so that people are responding to the challenge of the question and just the functionality of how it works. I click a thing and then I see the consequence, sort of.

Connie: Right. So, two tools that you can do that in, one is PowerPoint. At least for linking from one screen to another. And the other is Twine. Any other tools that you like to use?

Cathy: I like to use Balsamic to mock up any screens because it's black and white and looks sketchy, but you don't have to be able to sketch. You just start dragging sketchy looking icons onto the screen.

Connie: I love their sketchy look. I've used it for website design, but I've never used it for prototype design, so that's a great idea.

Cathy: You can export it as a png and stick it on a PowerPoint slide or stick it Twine.

Connie: Yes. Well, Cathy, thank you so much for your time. It was wonderful speaking with you.



Cathy: Thanks for having me. It was a pleasure talking with you.

Connie: That was great speaking with Cathy. We covered a lot of ground here and I hope you'll be able to adopt a few practices that she mentioned if they seem right for you. You'll find the show notes at the [elearningcoach.com/podcasts/47](http://elearningcoach.com/podcasts/47). Please leave a comment about this or other episodes. I'd like to hear what you think. Thanks for listening and I will talk to you next time. Take care.