The eLearning Coach Podcast #37
ELC 037: Applying Agile Principle To eLearning Projects
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Welcome to the eLearning Coach Podcast, online at the eLearningCoach.com. I'm Connie Malamed bringing you ideas and tips for success with creating online and mobile learning experiences.

Hello learning people, welcome to Episode 37. It seems like many people who design learning experiences are leaving traditional models behind. Perhaps you were trying out more iterative approaches and getting audience members involved early on. If you are looking for a set of methodologies that can be adopted to instructional design and development, you may be interested in Agile.

Today I'm speaking with Megan Torrance about Agile principles that can apply to instructional design. Megan is the chief energy officer of TorranceLearning, an eLearning design and development firm. She and the TorranceLearning team have developed the LLAMA Project Management approach, blending Agile principles with instructional design techniques. This episode has so many resources in the show notes, don't forget to go and check them out. You can find them at the elearningcoach.com/podcasts/37. Now, here's the interview.

Connie: Hi, Megan. Welcome to the eLearning Coach Podcast.

Megan: Hi. Thank you.

Connie: We are here to talk about using an Agile methodology and applying it to instructional design, eLearning and mobile design and development. That's our plan. Can you talk a little bit about where Agile started and what it's about in general?

Megan: Agile really comes from the software development industry. About the turn of the century or so there were a number of software developers who had realized that they were doing something different than the rest of the industry. And the rest of their industry was getting things late, horribly over-budget, not functional or doing what people actually wanted it to do. And the software industry was growing like crazy, but from a project management perspective they were a hot mess. And a bunch of guys — they all happened to be guys — came together and realized that they were doing something different. So they created what they called the Agile Manifesto, which are four vague value statements about the projects and the way that they were working that

really started things off. I started using Agile and borrowing it from my software development buddies who seemed to have their act together, because in instructional design projects we are often over-budget, or not on time, or not exactly what people asked us or had in mind when they commissioned the project. So we face many of the same problems and many of the same project processes as in a design-build kind of way.

Connie: On a practical note, how is Agile different than maybe what many instructional designers use, which is an ADDIE model or a Waterfall model?

Connie: Yeah ADDIE is the instructional design world's version of what pretty much everybody does and has been taught to do since about the fifties, where we start with all the thinking in the beginning, and all the thinking and all the planning, and trying to drive out all of the variability in the beginning of the project when we're in the analysis and the design. We then ask somebody to sign off. We say, sign off on our design before we go and spend money on development. Typically, a sign off at the end of development before we move on to implementation. And these seem like really sound things to be doing, to be signing off and committing on something before you go and spend the big money. The trouble is that these processes are designed, ADDIE is designed to work in a world that doesn't very often, and doesn't change very fast. And so you could think about all the things you needed to think about on a project, seal it, and then deliver on that. But what if the world changes in the middle of development? What if we learn something more about our learners and our users and the people we're supporting, or the business strategy changes, or our budget changes in the middle of a project, and we don't have the luxury of saying, nope, sorry, you signed off on that dude. And so an iterative process where we're doing all the same things, I'm not saying that ADDIE or the analysis and doing some design before you develop something, these things are bad, we just don't want to do them on a really, really short cycle. So, we're iteratively and incrementally adding to the project, but all along the timeline, rather than saving evaluation for the end, or sometimes not at all. And nobody ever looks back at it.

Admittedly ADDIE was designed to go back to the beginning. But typically in that process I'm talking to people until we get to an evaluation stage in its classical strictest implementation. And, admittedly, not a lot of people do that. But what we're trying to do with an interactive approach and an Agile approach is work very hard at getting something useful in front of actual learners, actual people, and not just seeing if they like the colors but seeing can they do the work based on this. And then, if they can't, what more do they need and what should we do in the next phase of our development,

and what can we learn from that. Each we get an iteration out, and will probably get deep in the weeds with iteration, we're asking is this the right product, but also it's an opportunity to challenge the question, have we been asking the right question and solving the right problem.

So, the plan evolves and the plan gets smarter the deliverable gets smarter and we deliver a better solution, it is often not exactly the same solution that was commissioned, because we've learned along the way and we're able to incorporate that learning in an iterative approach, with a waterfall approach, assumes we've done all the learning at the beginning.

Connie: And it is really amazing how much you do learn. When I think of when I used to use the older approach, the more traditional Waterfall model, what I learned from the start of the project to the end is huge, so much more at the end, so there's no way you can make all of those decisions at the beginning, it just doesn't make sense. So what are the key Agile practices that you think apply to eLearning design, to development project management?

Megan: We have six hallmarks of a successful Agile team. They are using personas and a particular method of scope definition upfront in the project, before they even start, but then reviewing those along the way to make sure that we're actually solving the right problem. Agile is an incredibly user-focused, learner-focused way of working, and the goal is to deliver value for the learner, not so much build something that might have a million features and parts. So set the project up by identifying personas, and then a primary learner persona. And then we're defining scope, and there's some key differences between what we're doing in instructional design world, or the software folks are doing for scope definition, so that's one of the tweaks that I make around the edges to a project, to Agile itself.

But then estimating the work in ways that are very, very truthful and very, very realistic. A lot of time in the real world when somebody says how long is it going to take you to do something, you get a pad on it, you build in some buffer, and you do that out of fear, being wrong. Or you underestimate grossly, out of fear, that it will turn somebody off, or not get to do the work if you tell them what it will actually take. It's a people-pleasing mode, and I'm a devout people pleaser, but estimating practices in Agile are designed to get the closest you can to an actual, realistic estimate, and then recognize that it may not be exactly that, it's an estimate, we're not holding it down in stone and committing very hard to that, because then you build more fear into it if you do that. So, we have to use estimating practices and there are several rules for estimating.

We have an iterative development that we talked about where each round of the project when you're getting feedback you're both improving the previous round, that's the iterative part, and you're advancing the entire project, and that's the incremental part. And those two together are ways in which we are moving forward with the project, getting something really, really early out that's actually useful and has some really cool stories about that where the people have actually been able to really use our first and early iterations to teach people or to help people learn what they needed to do on the job even before we've "finished" the project. It's super cool, and it kind of blew the client away, because they were like, wow, we're not even done and we're getting value out of this. That's just makes my heart sing, right.

We have very visual planning systems and very flat teams. So there are leaders in the teams, but the entire team is invested and involved in coming up with a project plan and managing that, and that's just a truer plan. I can rely on a plan that is developed by an Agile team more so than one that's developed by the project manager and foisted down upon them, because they know everybody is invested in it, it's an incredibly accountable model.

And then the last is a regular retrospective. The ability to learn as you go, not just about the project, but about how you as a project team are working together. And so you're not waiting to the end to do lessons learned. You're doing that at regular intervals throughout the project and applying that, and then, hopefully-- and my team is working on how do we share that across teams, not just within the team, where there's something that meaningful.

Connie: You're debriefing as you go along.

Megan: Yeah. So it's really hard. When you hit against the deadline and you're working really hard, you know what, we're humans, it's hard to stop then and go back and say, hey, let's think about our processes. So what we do is we take that opportunity when we send a version of a course out for review or a learning experience out for review, we then use that opportunity to pause ourselves and look at what we're doing as a project team. So at the end of that review period, we have both how did that deliverable work in the real world, and how did we do getting there to it.

Connie: That's a good idea. Let me ask you something about your iterative development and what you're passing on so you can see how a learner reacts to what

you've developed. Is there a way to quantify how big your prototype is, if we can call it that?

Megan: It varies for every single project. We actually ask in the beginning of the project as part of our kick-off, we start talking about the review cycles and what makes the most sense. We had one project where we were really unsure at what level did we need to present a particular concept. So it was a mentoring course and the target audience were hardcore automotive engineers, and the organization wanted very much for these engineers not to be telling their protégés what to do, like they're not assigning new work, they wanted to have a personal connection with that person without being too creepy and intrusive on their lives. And I came in and said, okay, I'm sorry, these people they're adults, they have families, they have friends, we don't have to teach them how not to be creepy, we don't have to teach them conversation starters and where are the boundaries and stuff like that. And the client said, "Oh, oh, we really do." So what we did as a first-iteration was rebuilt an instructor-led workshop. It was an hour-long workshop, we did one for the whole design of the courses that we were going to teach the mentors and their protégés, both sides of the same processes, so then they would take the course and then be ready to come together and actually implement. We gave them each the left and the right halves, so to speak, of the first steps in building that mentoring relationships.

I am all about the eLearning, but the highest bandwidth, best resolution, fastest way to get feedback is to teach it in front of a bunch of people. So we taught this as an instructor-led class, the lead instructional designer and I actually sat in front of everybody with the scripts for the videos, and we sat down, like the people in the video we were going to be sitting down, which was really awkward, because I'm kind of shy about things like that. But we were able to see, were they scratching their heads, were they scowling because we had insulted them, they were taking notes. So I was completely and totally wrong and so thrilled to know it. Before, we had spent $60,000 building them eLearning. So this was fabulous.

Now, here's the interesting thing, though, what we did was we took the instructor-led course, we cleaned it up after we had delivered it, we had some feedback and changes that we wanted to make, and then we gave that to the client, they then started teaching batches of people face-to-face using the instructor-led version of the course while we were going back and building out the e-Learning for the post rollout. And what that let us do is have the client actually getting value from the project before we'd actually ever sent them anywhere close to the final bill, and they were ecstatic and totally surprised. Is it more expensive in that case to build an instructor-led course before you build the

eLearning? Heck, yeah. And we'd built the right course, and we knew it because we had been able to test it. So that's an extreme case of how we evaluate.

There's other things right now. We are going to DemoFest at DevLearn, it's a mobile learning project, we're experimenting with some things. We're using Domino's Flow project which allows us to make-- you could make a screen by screen, like Captivate 9 mobile projects where don't scroll up and down, you move left to right, but with Flow you can also go up and down like a truly mobile responsive website. We're actually building two very, very similar courses with slightly different topics. One we're building vertical, and one we're building horizontal. And we want to test things like do people notice in the vertical version that there's a carousel, so that they are moving a little bit horizontal sometimes. Do people on a mobile device bother to watch the embedded videos compared to the number of people who are on a laptop bother to watch the embedded videos. How many videos on a page do they watch? Questions like this. We're using xAPI to get incredibly detailed information about the learning experience, at the same time that we're asking the learners-- instead of just multiple choice questions, what we're doing is we're asking freeform questions to ask people to relate to the content and put it in their own environment and their own context. The actual text entry that's being made by learners in this case is going to be reviewed by the client to see are we hitting the mark, are our learners able to make a connection, and we will be able to see the challenges that they enter and their personal responses to those challenges, and that's coming out as xAPI statements as well.

So we're using xAPI in case to evaluate both content as well as the very detailed nature of the experience. Whereas before you could watch somebody, we would love to watch somebody take a course, we'd love to watch somebody take a course and then actually do the work, can you do the work after you've learned this, and so there we're testing the usability and the efficacy of it. But a lot of times—unfortunately just the reality of it is— we're doing a survey afterwards, we can see in SCORM, did you pass the test, and then did you like it, did you have any technical difficulties, which was just really anecdotal information from the people who either are so annoyed or they have so much time on their hands that they can provide that for you.

Connie: So really in terms of how big your prototype or whatever you're giving client is in order to get feedback, it completely depends on the information that you need to get back. Like everything else in our field, it depends because every situation frequently is so unique, so it just depends, right?

Megan: It really depends, yeah. And I've even gone so far, there are times when we're trying to test out a learning experience and we don't build any of the learning but rather kind of a day in the life of this, and a day in life of that, and then we ask people how do you feel about these two. We ask more detailed questions than that. But we haven't even built anything. So it really varies on how much we know about the project and what we're doing before we get into getting some initial testing.

Connie: I've seen that you call this approach LLAMA, can you talk a little bit about that, what it means and how you explain it to people?

Megan: We started doing the traditional software approach to Agile. Ours is largely informed by extreme programming, which is a different kind of Agile than Scrum, which is what 80% of the software world uses. But we did some things that were different because there are qualitative differences between an instructional project and a software project. And we were actually using Cathy Moore's action mapping approach to come up with our scope. So, ours is an instructional design approach and it's spectacular, but we found that it also helped us narrow down the scope for a project and agree with the client and the scope for our project in a way that Agile traditional approach of story cards didn't really support instruction very well.

And we made a couple of other tweaks to how we were using Agile, and I started to get insecure about whether or not what we were doing was still called Agile. Had we made so many changes, and everybody adjusts Agile to their own situation, but I felt like maybe we'd taken it too far. So it was a Friday afternoon in July, gorgeous sunny day, we were all white boarding this out, and I said what is our process and what are we doing here and is it Agile? And somebody said, "Well, it's a lot like Agile." So what do you do? A whole bunch of instructional designers and developers who-- our job is to help people find ways to remember and then apply new concepts, somebody goes, "It looks a lot like Agile," and somebody goes, "Laaa." And, no kidding, somebody says "Maaa". And we're like, "It's LLAMA!"

So, that's why we have a lot like Agile, and then we have this awkward management approach stuck on the back of it. Over the weekend our graphics team, we have a Llama with a cape, like a super Llama, and we have stickers that say no problem, and we had a whole load of fun with this. But really what it is, is it takes Agile principles, adopted and adapted for instructional design project. And that has been something that is completely-- it had gotten a lot of traction, I was surprised at how much traction it got out in the world. And I care about this.

So, if you've had this experience, you get on a plane, you sit down, the person next to you says, "So what do you do?" And my standard answer out in the public, oh we design and develop eLearning." And they are looking at me like, "Oh, you are the person who is responsible for that horrible compliance course that I took!" You're a pariah. And, at the same time, when I go and I bit on projects, I see clients erecting incredible barriers and walls and hurdles to protect themselves from their vendors delivering the wrong thing, being late, being over-budget. So here we have as an industry this reputation for being late, wrong, and delivering things people don't want. And so I'm passionate about sharing this because I think it's better for all of us if we're on time, on budget, and doing what people want, they will want more of it. So that's my big, big thing.

Connie: Why don't you tell us a little bit more about the LLAMA model that you have adapted from Agile. I keep having this image of an animal in my head, I don't know why.

Megan: We start by kicking off a project in a way that supports Agile. So we are spending a lot of consultative time upfront with all the right people in the room. I want in that room the business sponsor for the work that we're doing. I want my client side project manager, I want some subject matter experts, I want some actual learners or representatives of the actual learners. And those people are not your subject matter experts. So, to have that group in the room and to know that the business sponsor, often not the subject matter expert, is the one who is driving. Well, we spend a lot of time on the project with the subject matter experts.

And we're doing in that kick off session is making sure that we understand the business school, the assembled set of leaner personas, and then the one that makes the most sense to focus on, and then we're defining scope and determining what's in and what's out of scope, and how in-depth each piece of scope needs to be. That session is in and of itself valuable. If the project stops there, I would say nineteen out of twenty of my projects, if the project stops there, the people in the room know more about what it is they were doing and what it is they were commissioning then they did walking into there. And it in and of itself is valuable. So it's a highly consultative session.

We then are managing the project in very specific terms. So we are breaking down our tasks, we're prioritizing tasks by what is most ready and most useful for the learners and for the client, we're estimating that fearless way and all of our crazy rules and rubrics for estimating. Planning our work we use online tools and Lego boards for resource management and then specific task management. And then we are providing every

single week a draft version for review with the client, if not a full-on iteration out to learners, a weekly status report, and an actual burn rate against the project estimate.

We are often sharing all the details of how it is we come up with a project estimate on a very, very regular basis. It's a very transparent approach. So typically by the time you get through project ignition and you're about to start project management, the scope and shape of the project has gotten a lot more-- it's much more clear to everybody where it is that we're going. But through that iterative approach we're then making adjustments on the fly, and we're guiding our client to choosing the most useful things to develop first. So we're doing a project where it had to be Windows, iOS, and Linux, and I thought, okay, we have to hit every computer in the world, everything has to be there, yes we understand this. But as we are working, the client is actually, well, actually, given these choices, I'd rather you spend more time on Windows and Mac and less time on the fringier cases so that we could serve the most people the best way. And those kinds of decisions are what we're doing every single day. So I consider Agile a very like a full-content project management approach.

Connie: How do you convince clients to allow you to estimate on the fly, to do continuous improvement, change things as you get more feedback from learners, because so often, number one, of course, people don't want you to change an estimate, and also there are those clients that have a traditional approach that they know what's best for their learners. How do you convince them that using this approach is better?

Megan: **Y**ou don't end up convincing everybody, and we lose some. I actually had a prospective client once say, "Well, I trust my vendors, I'm going to give them a project and two months later they're going to give it back to me, and I trust them to do the right thing." And I am 100% sure that I cannot read another person's mind, and I'm 100% sure that we will all learn together as we go. So, there are some times where as a vendor had the luxury, and everybody self-screens themselves out of situations that aren't going to be great.

But, here's the thing, Agile and this iterative approach don't have to take any more money or take any more time. They're not guaranteed to be faster and cheaper, but they're also not guaranteed to be slower and more expensive. So as we do this, we work with an estimate and we talk very, very frankly with our clients about that. And the estimate is based on our experience, it's based on the client's experience, it's based on how risky we think that this project is, and we're 100% up front, we say, look, when we do that second iteration, we kind of know for this project, this kind of project, that it's a two-week effort, or a four-week effort, or a one-week effort. We may be wrong, but this

is our estimate going in. We don't know exactly all the tasks we're going to be doing because we're going to react to what you're telling us on the review.

And so it takes a lot of communication, but also, fortunately, there are more and more organizations whose software teams are using Agile. There are more and more companies that use Agile for other things. So John Deere uses Agile to design and build tractors. But when they're designing huge equipment, they're using the same kinds of scoping and user discovery and planning that we're doing. And so when you start having more and more people getting more and more success with this, it's an easier sell to actually do it in the learning field. And I will say Agile sounds great, I've had people tell me I've been doing Agile for 30 years, whatever they want, I do, I'm the ultimate in flexibility. Agile isn't 30 years old, right? So nobody says, "I'm very, very rigid." Rigidity isn't really a selling piece. So, Agile at least sounds good, and then when we get to the nuts and bolts of it, helping a client understand what it actually means is important. And that's not to say we don't do fix-priced projects either, we do have not-to-exceed projects and we manage our scope to that by having really frank conversations with clients all along the way about where things are headed on the project.

Connie: I do think things are changing and I think that quite a few clients are getting more open to an iterative approach. Megan, we're running out of time and I would love to ask you one more question if you'll let me. Do you have any tool recommendations for collaboration and project management when we are using an Agile approach?

Megan: There are so many tools out there for Agile development. Here's my take on it. Many of the Agile-specific tools for project management are very heavily focused to software development and are a little bit weightier than we typically need in an instructional design and development environment. Where we have evaluated several of them in the past, my team actually uses Trello. We've tricked the daylight out of Trello with a lot of Chrome extensions and what not, but Trello is free, and you can upgrade to get extra features, but the free version will actually work just fine. And it's a very flexible approach. We use Slack for our team communications. Actually most of our team is co-located in a single spot which allows for that high resolution, high-bandwidth conversation very quickly. And we use OneNote for our project documentation. But Trello is really spectacular. There are lots of tools and lots of other things that other people do, I would say if you're looking for a tool and it touts its Gantt chart capabilities, then it maybe be more of a product that supports a Waterfall approach more than an Agile approach. You may find yourselves force-fitting you Agile approach into a Gantt chart driven tool.

Connie: Yeah, I hate those Gantt charts. But I have never used any Chrome extensions with Trello. Does anything come to mind that you would recommend?

Megan: We use Card Colors to put the labels, it's a little thing but it actually really helps. So we heavily use the labels and the color coding. So Card Colors actually puts the name of the label in the color code on the front face of the card, so that's kind of handy. We also use Scrum for Trello which allows us to put the work estimate, not the duration, which is how long will it take me to get it to you, but the work estimate, which is the actual "billable" part, the time I'm actually spending on that card. I can put the work estimate into the card and it will calculate on a list basis how many hours. And the Scrum for Trello work estimates use the Fibonacci sequence which is one of the rules for estimating hours. It encourages a more sane estimating basis.

Connie: Thank you for that. This was really interesting. I have a feeling that it's going to expand the way people think about their projects and hopefully help people do a better job and meet the learners' needs. Thanks so much for being on the eLearning Coach Podcast.

Megan: Thank you. I enjoyed it.

So, what do you think? Did you discover a principle or tool that you can adapt for your next project? Do you have some methods to recommend? You can share your thoughts as well as see the show notes and resources at the elearningcoach.com/podcasts/37. Talk to you next time. Take care!