

**The eLearning Coach Podcast**  
**ELC 046: Best Podcast Gems Of 2013**  
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Connie Malamed: 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, and if you're listening to this in January 2018, Happy New Year. You may not know this, but I have been producing this podcast since January of 2013, and I've been learning and growing along with you. I've started looking back through the podcasts and I see that there are many older ones that you may not have heard or certainly you've forgotten. So I thought that every so often, I would pull out a few gems for you from years past and put them together into a "best of" show, So I hope you enjoy this one.

In the very first episode I spoke with Joe Fournier about finding a job in instructional design. In the management part of his career, Joe hired around 15 instructional designers and he had some very good advice to offer. In this segment, we were discussing what makes a job candidate stand out and the importance of a portfolio.

Joe Fournier: You know, that's something that I really can't emphasize too much, is the need to have good samples. When I interview for a position, I'm apt to look at 100 resumes personally.

Connie Malamed: Wow.

Joe Fournier: And recruiters are screening those, as well. So while there's a lot of competition for the roles, samples are essential because when you're looking at that many people, it's tough to look beyond the paper and see what someone's real competency is. So I look for a portfolio of some kind, pretty regularly.

Connie Malamed: That's really good information, I get that question a lot. Do people typically put their portfolios online for you? Or how do they usually present them to you?

Joe Fournier: Well, it's best if they do. Usually what I get is people want to send me individual files, .zip files are good. Part of the time people will tell me that they just can't share samples because they're proprietary.

Connie Malamed: Right.

Joe Fournier: And I understand, I don't want to see anything that's proprietary, and I don't know anyone who does. I've been very uncomfortable in the past when

someone came in and brought samples to me and I felt like they were proprietary, even though I was being reassured that they weren't. What's best really, in the corporate environment, I think is to put things online to be able to access an eLearning example. I want to be able to play it in the context in that environment, and if you send me a .zip file, depending on the organization, I may not be able to open it, or it may get stripped. It may not run properly because there's a lot of security inside organizations, so putting it online is probably the best thing to do.

The other thing that I've recommended this to people who otherwise would have been good candidates is go out and get some experience with a nonprofit, do some work for a cause that you believe in and help them craft a message and get it out there.

And the other thing, too, is not examples have to be eLearning, I mean, I'm perfectly happy seeing things that are instructor led and I've hired instructional designers who've had literally no eLearning experience whatsoever, knowing that they were going to be doing eLearning, but they were able to demonstrate the right level of competency that led me to have confidence that they would be able to master the tools that they needed to, but more importantly, master those kinds of designs. Interactive samples aren't really necessary all of the time. If you don't have them, it's probably not a wise use of your time to fake it and go out and try to get a trial version of a piece of software just to create a quick interactive sample that's gonna show that you're totally a novice.

You might actually, instead, design or develop a decent storyboard that would convey the idea, which is something that we do in the instructional design process quite frequently, as well. And if you can convey the message through that storyboard, you may very well give yourself a leg up, even candidates that would produce eLearning might not have. That ability to take a complex idea and message it in a way that promotes learning is what's really at the core of what hiring managers are looking for from instructional designers.

Connie Malamed: In this next segment from 2013, Jane Bozarth, author of many books including *Social media for Trainers* and *Show Your Work*, helps us understand how to use social media for learning. She provides a great example of how to implement a social media strategy after the conclusion of a course.

What kind of criteria would you recommend for deciding yes, social media would actually really help and enhance this, or no, it would not?

Jane Bozarth: If there's nothing to talk about, if you're a class on things like personnel policies, the odds are not great that very many people want to talk about it. So we need to find out what people want to talk about, and I think that comes from listening. Most of the time, again, they want to talk about where they've run into problems, either executing a task, dealing with a particular kind of client, communicating with another work area, so we need to find that out. But be aware that content that is interesting to us or to a small sector of an

organization is probably not a big discussion bringer for everybody else, so let's think about that.

But, otherwise, where do people need to talk to each other, where do people have difficulty talking to each other, what are tasks, and I don't like soft skills because that's too broad for what I'm discussing, but where do people run into problems that this shared, collective knowledge would be useful. Dealing with a challenging vendor, or people in a customer service situation, where they come up against challenging callers or company policies that don't necessarily fit, they're trying to help a customer, but they're running up against walls in trying to deliver that help, where do people naturally want to talk.

One of my favorite uses for social media for learning, and it's not really a threat to anybody, this is an easy win, one of my favorite uses is an alumni group. Many of us who have done traditional training, when you have an extended course, like the leadership academy or a customer service certification program or administrative assistant certificate, that kind of thing, people meet each other, they form bonds either online or face to face, and they want to stay in touch, but they look at the instructor and say, "Will you keep an email list for me?"

One of the big wins with that situation is to set up something like a Facebook group or it could be LinkedIn, I mean, you could do it anyway, and feed your new course graduates into that as they finish and that way they go into the group knowing each other, knowing a few people, but then they go into a group of folks who have the same interests, who are struggling with the same problems, and it's a great way for them to stay in touch as they're implementing what they've learned, as they're trying stuff out, as they're running into things that maybe weren't covered in class, because I think we are not very good at following up on training. The event ends and we get the smile sheets and we are busy and we go on to the next course.

Connie Malamed: Right.

Jane Bozarth: So there's really no harm here. You're not stepping on anybody else's content, and it would be natural in that situation for people to outgrow it and move on, I mean, it's there as they're implementing their new learning and some folks may stay and some folks may go. Now when I have done these, I have found it takes me about six months of work to keep the energy going, to get enough people there, that folks are talking to each other. But after that, the group gradually starts to take over. Some sort of louder voices emerge, some of those ambassadors start stepping up, and I find it requires less and less of my energy as the group matures.

But it does take a little time up front. You can't just set up a group and say, "Okay, everybody ever took this, here's a group and you go."

Connie Malamed: Right.

Jane Bozarth: Be there to say what have you learned since class and what is the most valuable thing you took away, what is one thing ... we're redesigning the course, what is something we need to expand or what is something we need to cut. They love to talk about that kind of stuff. So an alumni group is a really good win.

Connie Malamed: The next segment I want to play focuses on stories. I spoke with Lisa Cron, who reads Hollywood scripts, teaches writing and wrote the book *Wired for Story*. She explained what a story is and how to hook readers and listeners.

In terms of writing a story, what do you think the most important element is?

Lisa Cron: The most important, the only really non-negotiable part when it comes to a story is you have to make the reader what to know what happens next. In other words, you have to make them curious because that's what gives the dopamine rush and that's what pulls us through. You don't have to be a great writer, I mean, that's kinda good news. It's not about writing well, it's about writing a story that puts us in someone else's shoes as they're dealing with a difficult situation and now we're dying to know, well, how are they gonna solve that problem and what do they need to learn in order to do it. And I don't mean necessarily you learn externally, but I mean what do they need to learn internally, what's it going to cost them emotionally to solve that problem? Once you've got that element down, once there's something that's pulling us in, we're there with you. Without that, we're not gonna go anywhere.

Connie Malamed: You're making me realize that the little vignettes and scenarios that we write could probably use a little more drama than what we often put in there and also that we should be peeking the listeners' or the readers' or the learners' curiosity.

I was wondering if you could explain what the protagonist is and what is the importance of this character to a story.

Lisa Cron: Absolutely. To answer the first part of the question is simple. The protagonist is the main character and, without a protagonist, there is no story, because the protagonist is our way into the story. They are the person who is solving the problem and who becomes our surrogate or our avatar in the story and everything that happens in the story is going to get its meaning and emotional weight based on how it is affecting that character who is in pursuit of some sort of a difficult quest. Think of a story as what happens when someone is forced to deal with a situation, the thing they'd really rather not, and what they have to learn in order to solve that problem. So if you don't have a protagonist, you don't have a story.

Connie Malamed: Sometimes we do write full length stories throughout an entire video or throughout an entire course, but we often write short ones, and one of the

main things we've been taught in instructional design is that we have to grab the learner's attention quickly, right at the start, and it sounds like stories need to do that, too. So what are some ways that we can capture the learner's attention quickly, how can we hook them?

Lisa Cron:

That is a great question and the answer is surprise, you have to surprise them, you have to break a pattern. Stories are what happens when our expectations aren't met. So the best way to get anyone's attention with anything is to break some sort of a pattern. For instance, every morning the sun comes up and every evening the sun sets. That's a pattern. Once something becomes a pattern, the way the brain works is we forget about it, we don't have to think about it because it's a safe pattern. I know when I go to bed at night, I do not have to worry, is the sun gonna come up in the morning? But if there's a story, if something happens and the sun doesn't come up in the morning, now I'm surprised and I want to know why. What does that mean, how is that going to change what I do, what do I need to do in order get the lights back on? So the answer is some sort of a surprise, some sort of a breaking of a pattern.

And often, interestingly sometimes, just a great example of this, sometimes it so goes to what we expect in a story, that when something doesn't happen, that's the surprise and that's what pulls us through because we're waiting for something to happen.

There was a great, I can't remember if it was a commercial or a PSA, and it opens with, you see a family, a happy people, they're in a van, they're driving down the street, everything's really good, everybody's having a good time. And the reason that you're really riveted is you're thinking, okay, they couldn't possibly show me in a PSA or commercial of just people driving down the street having a good time because who cares. Something has to happen, and the longer it doesn't happen, the more tense we are until, sure enough, another car slams into them. But that's breaking our expectation because we knew something was gonna happen and that's what pulled us in, waiting for that surprise.

Connie Malamed:

So we have to really bring surprise into our stories. I'm really seeing now how much better my stories could be. But what about the structure, that's one thing I don't think I understand enough. Do compelling stories have a specific structure?

Lisa Cron:

That's another great question. On the surface, yes, they do. But the problem is, is that good structure is really the byproduct of a story well told. And the problem with looking at just structure, for instance, a lot of writers really revere, there's a book called the Hero's Journey, and if I could take a match and burn every copy of it, I would. And the reason is, is because it causes writers to think of the plot level, what is going to happen in the story, the external part of the story, and that is not what the story is about. The story is about how the plot affects the protagonist.

So that really, if you want to talk about the structure of a story ... can I just talk about what a story is for one sec on that level, because I think that might help clarify this.

Connie Malamed: That would be great, please.

Lisa Cron: A story is how what happens affects someone in pursuit of a difficult goal and how they change as a result. So to kind of break that down, what happens is the plot, that's what's structured, it happens to someone, that's the protagonist that we've been talking about, in pursuit of a difficult goal, that's that story question, the problem that's going to be solved within the story. And what they learn as a result, that, Connie, is what the story is actually about. Story's internal, it's not external. So the plot is constructed to force the protagonist to go after this thing that they want, to go after this goal, but to learn what they need to learn in order to actually achieve it.

Connie Malamed: Next is an important segment from a conversation with Susan Weinschenk, from Podcast Seven. Susan specializes in applying psychology to design end user experience. Here we discuss human cognitive architecture, including the myth that people can hold around seven pieces of information in working memory. We also discussed the differences between schemas and mental models.

So let's start with our cognitive architecture. Can you talk about why they now say working memory can hold closer to four chunks of information rather than Miller's seven plus or minus two.

Susan Wenschenk: Yeah, this is something, I referred to this in my books as an urban legend. Miller gave a talk in 1956 at the American Psychological Association and it was about his ideas, that maybe there was a limit to how much information could be processed in general and how much people could remember, and he was really more speculating than providing research from a particular study. But that has just stuck so much. The research after Miller's paper, research in the '80s, the '90s, and even in 2000, has really shown that the number is three to four things.

And for those of your listeners who really like research, there's researchers, Battely and Cowen are two researchers that have shown that there have been many, many studies. So the number really is three or four, at most, is the amount of information that people can hold in their short-term memory before it starts to disappear, and it's also the number of things that people can deal with at a time. So if you're trying to make a decision, or you're trying to compare different things, the research is pretty clear that the number is three to four.

Connie Malamed: Isn't that amazing, because think of all the training materials that we're basing it on seven.

Susan Wenschenk: Well, I am as guilty as anyone else. I used to teach in my classes that it was seven plus or minus two. What happened was, when I was writing the book *One Hundred Things Every Designer Needs to Know About People*, in that book I was being very meticulous in getting references for all the research. And obviously, I knew about the Miller paper, I had a copy of the Miller paper, but when I went to look for more recent research on it because I thought, hey, 1956, that's a long time ago.

Connie Malamed: Right.

Susan Wenschenk: When I went to look for more recent research, that was when I found that actually that number was not right and that the research had not borne it out.

Connie Malamed: I kind of went through the same experience. I couldn't find newer research, so I emailed Stephen Kosslyn, the cognitive psychologist who writes a lot about mental imagery, and he said the same thing. He said now it seems like it's closer to three or four bits of information and that blew my mind.

Susan Wenschenk: You have to be careful what's on the internet, right?

Connie Malamed: The other aspect of the research that I think is so fascinating is that working memory varies among individuals, so for some people it might even be five or six, but I think they're talking an average here of four.

Susan Wenschenk: Yeah and working memory does vary. And it's interesting because there's also research that shows that how good your working memory is, is one of the major predictors of how well you will do in school.

Connie Malamed: Exactly. I have read that, too, that's amazing. Moving on, I think the terms schemata, or schemas, and mental model are often confused. Can you describe the difference between the two?

Susan Wenschenk: They do have a lot in common, so I can understand how they could be confused, and maybe it's even too fine a nuance to worry about, but here's how I would describe them. A mental model is the expectation, it's the understanding that someone has about a product or an experience. It's what do I expect when I'm gonna read a book, I'm gonna go to the movies, I'm gonna attend a training course. What are my expectations about that? What does a course mean to me? When I think about attending a course, that means I go somewhere, I go into a training room, there's other students, there's an instructor, it takes about three days, right? So we can talk about what is someone's mental model of training. And we might be interested in that because perhaps we're gonna be doing online training and we want to think about their mental model of this course is really different than what it's actually gonna be. So the term mental model is, what are my expectations about using that product, using that service.

And a schema refers, I believe, is more of a cognitive psychology term that has to do with how information is stored, remembered, and processed. So we can talk, for instance, about if I say the word “face” to you, what is the schema that makes up a face? Well, let’s see, it’s probably someone’s head, then their eyes, then their nose, and then their mouth. If I use the term “computer programming,” what is the schema that you believe makes up what a computer programmer does?

So it’s more about conceptual understanding of something rather than the idea of an expectation of what an experience is going to be like. So that’s pretty subtle, but does that make sense?

Connie Malamed: Yes, it is subtle, but I think that helps. I also think of mental model as how something works. Would you also add that to your category?

Susan Wenschenk: Definitely, definitely, yeah. In the field of user interface design, which I have a lot of background in, we talk about people having a mental model of a software product they’re about to use and how that’s gonna fit into the way they work.

Connie Malamed: There were a lot of favorites from the first year and I can't play them all, but I also cannot leave out Alberto Cairo from podcast 10. Alberto is an infographics journalist and designer, and he's also a professor on the subject, and an author.

In this conversation, we discuss the importance of visuals and the meaning and purpose of information graphics.

Can you define infographics and their purpose?

Alberto Cairo: Yeah, an infographic is basically visual representation of evidence, a visual representation of information of many different kinds of information. It could be quantitative information, quantitative data, or it could be qualitative information. So basically, what an infographic does is to get raw information, for example, raw data, and we transform that into visual forms that the human brain can understand.

That means, for instance, that we can begin by having an Excel spreadsheet with tons of numbers about unemployment, or poverty, or whatever, and it is impossible to extract any meaning from that table just because it's made of just numbers and what we do, that is our raw material. It's just a piece of marble, you get that piece of marble and you transform your piece of marble into a statue, in order to convey an emotion or something, like a piece of art. And with data, we do exactly the same thing. You get the data, you get the numbers, and you shape those numbers, you transform those numbers into a visual shape that the human brain can use to extract patterns and trends into those data.

It could be a statistical graph, it could be a data map, so you can see geographic patterns in the data, etc. And you can also have qualitative information. So, for

instance, if you want to explain how a piece of machinery, or a car, or whatever you want, you want to explain how that works, you can transform that information, rather than explaining it using just words, you can use a combination of words and visuals. So you can create a step-by-step visual explanation of how to operate that piece of machinery and that is an infographic, as well. The confusion today, I believe, and the conflict that you mention in your question about the redefinition of infographics is that today we have many people who think that an infographic is just a bunch of numbers on one side, very simple numbers, with a bunch of illustrations.

So you put a picture gram and then a number, then another picture gram and then another number. And for me, that is not an infographic, that is just a table, a table with illustrations. So rather than letting really see trends and patterns in the data, what you're doing basically is just creating a beautiful, nice looking poster that doesn't have readers understand the depth of the topic that you are talking about.

Connie Malamed: Right. Those infographics don't really add anything to your analysis or understanding, generally.

Alberto Cairo: That's correct. An infographic is basically, in my opinion, an infographic could be a piece of visual analysis. So basically, you transform those data into a graphic or several graphics connected with an artist because there is a storytelling component in infographics as well. But those graphics need to be deep enough for the readers to be able to understand all the complexity of the data that lies behind those graphics.

What happens today is that if you just, for example, if you just create an infographic where you show average unemployment in the United States and you say the average unemployment in the United States is 16% and you put a picture gram, that doesn't show me the complexity of the data because there are regional differences in the United States. There are differences between the different sectors of the economy. There are lots of differences in unemployment depending on the education people have. So all those are parts or all those are components or all those are elements that should be present in your infographic in order for readers to understand what the story is about. So you shouldn't suggest to a single number with a picture gram, you need to create graphics that let readers explore the complexity behind those numbers.

Connie Malamed: Beautifully said. In terms of cognition, what do you think the advantages are of visualizing information rather than just using words and numbers, or just words alone?

Alberto Cairo: Well, I usually say that if you want to communicate effectively, you have to become knowledgeable in words, in numbers obviously, and then visuals, so you cannot have one thing without the other. If you only know how to use words, you will be in trouble. But if you only know how to use visuals, you will be in trouble as well. And the reason for that is that there are certain stories can only

be told through a graphic and there are certain stories that can only be told through words, both spoken and written.

In terms of journalism, I usually explain to my colleagues in journalism that, let's say that you are creating this story about let's say an accident or, I don't know, a fire or something that happens right next door, some people die in an accident, something like that. The written story can take care of the human side of the story. So the victims, the relatives of the victims, what they're going through, etc., that can only be explained through words because words are very good for that to deal with emotions, to deal with the uncertainty of the human side of the story.

Whereas, the other side of the story, which is how many accidents have happened in this place before, you know, the timeline of the previous events similar to this one, all those things which are more evidence driven or data driven or database can be or should be better told through a graphic. So graphics and visuals and words are actually complimentary, you have to have both things. One of the advantages of visualizing information in certain cases, as I said before, there are many cases in which readers cannot understand, or even researchers, people trained in certain areas, cannot see patterns and the trends in pieces of data if they don't transform those things into graphics.

That is the reason why scientists use graphics all the time and statisticians use graphics all the time, because in some cases they cannot see connections between variables or trends and patterns if they don't have a graphic. You can only see through the graphic, using the graphic as a lens, a couple of lenses, to see through the complexity of the data.

Connie Malamed:

I hope you enjoyed a few of my favorite segments from the 2013 podcast. You can find the show notes with resources, a transcript, and links to the full versions of these podcasts at the [elearningcoach.com/podcasts/46](http://elearningcoach.com/podcasts/46). I'm excited about some of the great guests that I have lined up for this year, so I will talk to you soon. Take care.