

## The eLearning Coach Podcast #9

### How to Make Better Explanations

with Lee LeFever

Show Resource Links: [thelearningcoach.com/podcasts/9](http://thelearningcoach.com/podcasts/9)

**Connie:** Hello learning people. Welcome to episode nine of the eLearning Coach podcast. In this episode, I chat with Lee LeFever, the co-creator of Common Craft videos and author of *The Art of Explanation*. I think the ability to effectively explain is critical in our field, yet this isn't really a topic you hear discussed very often. Let's put a stop to that right now. Here's the interview.

Hi Lee, welcome to the eLearning Coach podcast.

**Lee:** Oh, great to be here, thanks.

**Connie:** Your book, *The Art of Explanation*, seems so geared to helping organizations explain their products and ideas and it's also for educators. It just amazes me how well it works for instructional design. Your Common Craft videos are kind of famous in the world of instructional design. In terms of your book, what were you observing in your world that inspired you to write the art of explanation?

**Lee:** I think the book grew out of our history of making videos. I know we'll talk about that a little bit later but the idea for the videos sort of started in about 2004; I was at a conference and there was a CEO speaking and someone asked him what is RSS. He turned to them and said RSS is an XML based content syndication format. It just kind of blew me away that that was his description or explanation of RSS, which sounded perfectly logical to him, I'm sure. It was accurate and factual and succinct but useless to everybody in the room. I could see at the time that RSS was a part of this family of technologies that was going to become this social media revolution. I thought that what was going to keep these tools from being adopted was how they were being explained.

I saw this opportunity to explain them better; that led us to making videos. After we made videos for a few years, we kind of realized that what was making the videos work wasn't specific to any medium; that it was really fundamental communication skills that we all do everyday. The book is sort of our way of looking at our work and the videos and then pulling out what we think could apply to every medium; hopefully explain ideas better overall.

**Connie:** Right, I've recommended it on my site to instructional designers. I think it has a lot going for it. Can you give us your definition of explanation?

**Lee:** Ha-ha. I'll have to do it off the top of my head. I would say an explanation is a piece of communication that's designed to increase understanding. That's really, to me, the goal of explanation; is to increase understanding.

**Connie:** We, as instructional designers, we too spend our day trying to explain things to people but our explanations are so much longer.

**Lee:** That's not always a bad thing.

**Connie:** One thing I found fascinating in your research was the whole idea of self-explanation. Can you talk a little bit about the self-explanation effect?

**Lee:** Yeah, I'm happy to. It was something that I actually experienced myself before I knew that there was any research behind it. I found that when I would write the scripts that would become Common Craft videos, that the act of actually sitting down and thinking through how to present the ideas and an explanation for other people, taught me to see the ideas in a new way. I learned more about the subject just by writing about it and just by thinking through it. As I started researching the book, I ran across the work of a cognitive scientist at Berkeley named Tania Lombrozo. She had done some research and collected some other research that kind of backs this idea up. It goes back to tutors; that apparently tutors get more out of tutoring than the tutees in a lot of cases.

The same thing is true in explanation and that's part of the reason that I'm a big proponent of the idea that writing an explanation is really one of the most powerful things you can do, because it kind of gets your mind trained around this idea and helps you see it from a new perspective by simply writing it out.

**Connie:** Yeah, that's great. I can imagine using social media for that purpose. For example, after a course and getting together on a Facebook group specifically geared for that course, someone saying, okay, now I'd like you to write an explanation of such and such and then as everyone wrote their explanations they would learn from each other and they would learn by generating the explanation. I think that's a really important thing that we can remember.

**Lee:** Yeah, I think so too.

**Connie:** As people who design learning experiences, it's pretty important that we generate explanations that are understood as wide an audience as we can within our target group. What can go wrong? What makes some explanations fail?

**Lee:** There are lots of reasons. I think that one of the most prevalent, and this may not be the case in learning professionals, but I think just professionals in general is that I think we're all prone to making assumptions about our audience and what the audience already knows. That's a big reason I think explanations fail is because we start an explanation at a point maybe where we assume that they understand everything before that point. A lot of cases they don't and I think that's a big reason; is making these incorrect assumptions.

I think we also forget to build context and that kind of is another related subject where we always say to focus on the forest first and then talk about the trees. Most of us when we know a subject, we're really interested in the trees and we assume everybody understands the forest. If we don't take the time to take a step back and

kind of build a world around our ideas first, then the ideas don't have a chance to make as much sense as they would otherwise.

**Connie:** What you're saying is people need a framework and the big picture view, which is an adult learning principle, to be able to understand whatever it is that you're trying to explain.

**Lee:** Yeah, yeah definitely. Definitely. I think that we also tend to keep adding details or try to get too much information across in an explanation. I kind of think of explanation as really big ideas that are meant to help people see an idea from a different perspective or a new perspective versus a detailed process. That's kind of a different thing and to me the great explanations are able to motivate people to be interested in the details versus exploring the details themselves.

**Connie:** Speaking of motivation, your videos are so easy to watch and they're fun. Are you consciously trying to motivate the learner or the viewer to become interested. What techniques do you use for motivation?

**Lee:** I think that part of it is conscious but part of it is just sort of story telling and communication style that has evolved. I think that we almost always use some kind of basic story where we have a character and you follow this character through a series of events. I think that we're big on empathy and the idea that you want the audience to be able to see themselves to some degree in the story and solving similar problems so that they can then feel the relief and imagine themselves feeling the relief of understanding something just like the person in the story did. I think another part of that is looking for sort of novel ways to present an idea. This is something I've been thinking about very recently.

When people ask about, what about the risk of dumbing down your message too much and people feel you're being condescending and that sort of thing. I think that one of the reasons we've been able to create explanations that people enjoy is because the goal is not to dumb something down; it's not to simplify to the point that everybody can understand it. The point is really transformation; it's taking an idea and transforming it into something that maybe somebody didn't expect. Sort of giving them this new mental model for understanding something that I think can be appreciated by all levels.

**Connie:** Yeah, a lovely idea of trying to do something novel because that's definitely been proven to gain and sustain attention.

**Lee:** Yeah.

**Connie:** I think you're right going about it that way. We sure do struggle with that a lot because so many of our topics are very dry and boring. In fact, I don't even think I've worked with a topic that wasn't dry and boring.

**Lee:** One of the examples I use in my talk is an example that I think is really interesting is...I don't know if you're familiar with the work from the early 1900's by a guy named Jam Handy?

**Connie:** No.

**Lee:** He made videos that I think are in that 1930's, 40's style of the big voice and the...it's almost like stop, drop, and roll or duck and cover kind of thing. He explained things in really an amazing way. There's one that's a famous one recently about the differential gear.

**Connie:** Okay.

**Lee:** How a differential gear works. If you look up differential gear video Jam Handy; it's J-A-M and then Handy, it's a really great example of explanation for a deadly boring idea. Who really wants to...who seeks out how a differential gear works? The way he did it was really novel and interesting and it builds context and really answers the question, why does it make sense that this thing exists.

**Connie:** I would love to see that video; I'm going to watch it today. I also really like that name Jam Handy. I'm thinking of changing my Twitter handle.

**Lee:** Ha-ha.

**Connie:** When you were talking about making assumptions, I guess that's what you mean when you discuss the curse of knowledge in your book.

**Lee:** Yeah.

**Connie:** One thing we always have to deal with is we often work with subject matter experts who really have the curse of knowledge. They can't...not only can they not understand what people don't know, but they also want to put in all those minute details; the kinds of things that begin to bore people and they can't even remember. Sorry if I sound like I'm complaining a lot.

**Lee:** Not at all.

**Connie:** How do you think people can overcome the curse of knowledge? How can they find out what their audience does know and doesn't know?

**Lee:** It's really hard; it's probably one of the biggest challenges. How far to turn that knob in terms of finding the right place for the audience. Unfortunately, I don't think you often have a way to know if you're looking at an audience of twenty people, it's not like they have...they're wearing badges or something that tell you what they know in most cases. You do have to make those assumptions. There's a couple of ways I look at it; one is that think of it in terms of cost. What's the negative consequence or cost to choosing one, let's say option A versus option B. In this case, option A might be let's assume that people know as much as I know and we're going to make sure that the experts are taken care of and that we're talking to the experts.

There will be some people behind them and that's okay. Option B is to actually account for some of the people who are still starting to learn about the subject and spend a little time doing those little things like building context and talking about the

big picture. In my mind, that time spent on the people who are still learning really only validates the expert, it validates their ideas. Sure, they might think I know this stuff, but what's the cost? The cost is lower. In my mind of validating these ideas for the experts and appealing to the new people, compared to leaving those new people behind. I think overall I like to say start a little bit with an appeal to the beginners so that they feel confident that they can get up to the level so that the rest of what you're discussing actually makes sense to everyone.

**Connie:** I can understand that that would be the best choice if you're looking at it in terms of cost. That kind of brings me to the next question I wanted to ask which has to do with packaging aspect of putting together an explanation. I love your idea of agreement and I don't feel that we use that enough in our industry. Can you talk a little bit about what you mean by agreement and how you use it?

**Lee:** The idea of agreement kind of goes back to one of the things that I describe as the fuel that kind of keeps explanations going and working and I think it's this idea of confidence. That without confidence, you're not able to get anything done in terms of explanation. The goal of explanation is to build and sustain confidence. In that context, the best thing we can do is give them an easy...give the audience an easy first step that sort of sets the stage and gives them a good reason to get their heads nodding. One way that we do this is that by making a few statements that are non controversial that everyone can sort of agree on in the beginning. We call these we can all agree statements. Our video on augmented reality starts off talking about we can all agree that reality is pretty great. We actually use that line.

**Connie:** Love it.

**Lee:** We can all agree that it has been a cold winter or that computers are valuable business tools or whatever it is that's just kind of an introduction to set the stage and give them that easy first step.

**Connie:** Yeah, I love that. I think that that is something that we can definitely adopt. I don't think I would have thought of that in terms of reality. That's a great first statement. One other thing you talk about, and this is really big in the world of eLearning, is stories. That they make facts meaningful and I totally agree. When do you think is most effective to use stories in an explanation and when is it not effective or less effective?

**Lee:** Hey, that's a good question. The first thing I think about is a lot of our videos include some kind of story. I have a little bit of a contrarian view in terms of story telling. I think that we kind of get used to...or the general public I think rightly so thinks of story as what they see in movies and in books and there's this compelling character that goes on a heroes journey and saves a damsel in distress, that kind of idea. I think that is a powerful form of storytelling but I think that really for explanations, it doesn't have to be so developed. Often just including a person whose experience and idea and being transformed by it in some way, is a kind of story that helps up give the audience something to empathize with and also brings ideas into the real world where suddenly it becomes more concrete because a person is actually interacting with this idea or product service, whatever it is.

I think a lot of things can fit into that sort of world. There are examples where when things get a little bit more descriptive; an example is we did a video that explains web browsers. I don't think that there's a story...necessarily a story about someone using a web browser that would work for that as well so we kind of took it to the approach of talking to someone as if we're trying to help them how to get the most out of a web browser. As things sort of get towards the more how does this work versus why should I care is how I would see the story fitting in. I think it's better on the why should I care and lesser so on how does this work.

**Connie:** That makes sense to me. I found the same thing in that a story doesn't need to be super developed. It's great when you have that opportunity but even just adding a little bit of a scenario to one of my courses, seems to draw the audience in just because they're people on the people doing something that they...that the audience can relate to. That's as far as I'll take it.

**Lee:** Yeah.

**Connie:** Let's turn to the Common Craft videos because people who design and develop learning products are just so interested in your approach. I hope you're not too tired of this question but can you share a little bit about your process in making the Common Craft explanations For examp, I know you start with research. Do you use outlines, do you ever have learning objectives, that kind of thing?

**Lee:** First off, I'm always happy to talk about it.

**Connie:** Okay.

**Lee:** The process has evolved over the years we've been doing it. The basic ideas have always been the same. Once we have an idea, we do the research and often it's not even deep research because our videos are only three minutes long. Our goal is not...is more creative than research based because we want to transform this idea. I write the scripts but my wife, Sachi, is a big part of it. I sort of originate the scripts and all the creative parts of it and then she's the editor, she's the one that makes it all work together. In writing a script, this is not something I would necessarily recommend, but it's just my process, is I don't ever write outlines or even have objectives. I really just sit down and start writing. Like I said, not something I think is for everybody but that's just my process and over the years I've kind of gotten good at packaging these ideas into five hundred word chunks.

Sometimes they come out pretty quickly and sometimes they take a long time. Writing is a big part of it then we iterate on the script multiple times, sometimes for weeks before we feel like it's ready. Then I do a thumbnail storyboard, so that's just a hand drawn stick figure style storyboard to understand the different scenes and what materials will need to be created for the video. Then I create a list of the assets that will be needed for the video and then create those. Then once they're created and digitized, I import them actually into Powerpoint and use Powerpoint slides as each scene for the video. That way we use the title of the...on each Powerpoint slide



as the script for that scene and then the images for that scene on a slide. As you peel through the slides, it's sort of like the experience of watching the video.

**Connie:** So you're doing a screencap...a screen recording.

**Lee:** No, we don't actually record it. You could do that. It really just helps us make sure the images are right and they match the script. We have sort of each scene laid out.

**Connie:** Oh, okay.

**Lee:** Then we can send that to people and make changes very easily that way. Then because the images that will actually appear in the video are used in the storyboard, then when it comes time to actually make the video, we just print the slides. Then cut out the pieces of paper from PowerPoint to use in the video.

**Connie:** Oh, okay. So you're really shooting video.

**Lee:** Yeah, Common Craft videos are actual live action videos with stop motion photography.

**Connie:** Wow, that's amazing. It does make sense that you wouldn't need learning objectives for a three minute video. You can probably hold a lot of that information in your head. People are always asking me when I script do I start with the audio or do I start with video and I think it varies. Sometimes I start with one, sometimes I start with the other. Do you find that one approach works best for you?

**Lee:** Usually it's the script; usually it's the audio. Sometimes we'll be researching an idea and we'll find some sort of visual metaphor, or something, that will sort of drive the idea of the video. That's one case where the visuals take over but I would say 80 or 90% of the time, the script is always our starting point.

**Connie:** I know you mention in the book and you just said now that you have a five hundred word cut off and when I first read that I laughed out loud because eLearning have been known to make ten hour courses, can you imagine that? I could just imagine myself saying to a subject matter expert, I'm sorry that's over five hundred words. I'm wondering, where did you come up with that limit?

**Lee:** I think that there's kind of a rule of thumb in the online video world. This is sort of the lean forward kind of world of people on computers don't watch videos as for as long as they do sitting on a couch, let's say. The rule of thumb is around three minutes, people...once a video gets over three or four minutes, people start to tune out. For us, we usually estimate that one minute of Common Craft voiceover equals about one hundred sixty words.

**Connie:** Okay.

**Lee:** We use that as a rule of thumb. We always shoot for under five hundred and if it comes out at two and a half or two minutes, that's great too. It just depends on how many points we want to make or what the videos about. We really want to create a

video that's watched and that is viewed a lot and that's useful to people; I think people like those short videos. It's more of an online thing and lately research has shown that people are more likely to watch a short video.

**Connie:** Yeah, that makes sense. A lot of people are trying to create and I know you know this, Common Craft style videos on their own. Even if it doesn't look just like yours. I was wondering if you could tell people about your membership site because I think some people would be interested in that.

**Lee:** Yeah, I'm happy to. There's actually a couple things happening. One is new that hasn't been officially announced that I'm happy to talk about. First, Common Craft is a membership site and there's different levels of membership. We offer really two big things. The first is the library of what we call ready made videos. Most of these are about technology topics that are often hard to explain. An example of a recent video is big data. The term is being used more and more often, that's really hard to kind of get people to understand. In that case, if you're a teacher or trainer who is teaching technology, you can show a two or three minute Common Craft video as a way to introduce ideas. Then you can do your thing as a stand up instructor or however you're doing it and go further into it. We have over fifty videos that are mainly about technology that are all designed for that sue.

We give you embed codes to embed them on blogs, public websites, whatever you want. We even allow you to download the video file so that you can upload it to your learning management system or whatever it is that you're using. Then through years of making a video, we've accumulated a lot of digital assets of basically image files that have appeared in the videos. We kind of changed our philosophy and kind of perspective on the company where now our goal is to help people create their own Common Craft videos.

**Connie:** That's great.

**Lee:** We offer close to a thousand downloadable digital images all in Common Craft style. Same images that you see in the videos so that you can use them in presentations, your own videos, on documents, whatever it is you want to do. So those are the two big things you get with membership and we have different plans. If you just want the images or you just want the videos.

**Connie:** I think a lot of people could be interested in the images. What do you have that's new that's coming up?

**Lee:** Since we first started making Common Craft videos, people have asked us all the time, how can i make my own? I want to make my own. In the early days we weren't even sure if we wanted to promote that. Now we can see that there's an opportunity there and that we want people to make these Common Craft videos and at the same time there's these new tools that have appeared just in the last few years that make it easy to create your own animated video. The examples are goanimate.com and a couple of others Powtoon and Wideo, with a 'W', like video but with a 'W'.

**Connie:** You have all the sites bookmarked.



**Lee:** Yeah, yeah. We actually are soon going to announce a partnership with Go Animate where our cutout library will be available inside goanimate.com so that you can create Common Craft videos using nothing but a web browser.

**Connie:** Would you ever consider that approach or would you always want to shoot video?

**Lee:** That's a really good question; I've been doing a lot of things. You can do some of this too, I should say, using PowerPoint or Keynote. You can use the animation settings and record a voiceover and use screen casting software, for example, to capture a presentation that way that you could turn into a video. In doing that, I've created my own screencasts; I've obviously played with Go Animate and it's been a discussion point with us because our style of making Common Craft videos I think is there is something special about the live action and human hands that are actually doing things or get the experience of looking over someone's shoulder; we like that but it's also quite time consuming. That's always the balance. It might lose some of that authenticity but we could do more videos, and we're not sure where we feel about that.

**Connie:** Yeah.

**Lee:** For now we're going to stick with the authentic real Common Craft videos that are live action.

**Connie:** Right, you'd have to get photographs of fingers to slide things in and out.

**Lee:** People have actually asked us about recording my hands making movements over a green screen. So that they could digitally include them.

**Connie:** Famous hands. It's time to wrap things up. I was just wondering if you have any final advice to give people to help them create better explanations.

**Lee:** I think that the biggest thing, and this goes for everybody whether you're an instructor or any kind of professional, is that I think there's a pretty good chance that you take explanation for granted. That your explanations just happen; you do it all the time, you do it so often that the thought of actually improving this one part of your communication might not have ever occurred to you. That's really the thing; if you just think about it and consider and take a step back and think, oh, what I'm doing right now is an explanation; maybe I could get better at this. Then that's a big step, just to think about it. There's lots more you can learn about it from there but the idea initially is just to see that it's a skill that you can actually improve.

**Connie:** That is great advice. If everyone gave better explanations, the world would be a better place. Thank you so much for your time and wisdom Lee, I really appreciated this interview.

**Lee:** It was my pleasure. Thanks, Connie.

**Connie:** I've always admired the meticulous work that goes into making Common

Craft videos. It was really fun to get a peek behind the scenes at the thought processes Lee and his wife go through to create them. I hope you were inspired by the podcast and, as always, thanks for listening. Please stop by the eLearning Coach website and add to the conversation. Take care.