

The eLearning Coach Podcast #35
ELC 035: Storyboard Creation
with Kevin Thorn
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Welcome to the eLearning Coach Podcast. Online at thelearningcoach.com. I'm Connie Malamed, bringing you ideas and tips for success with creating online and mobile learning experiences.

Hello learning people, and welcome to episode 35 of the eLearning Coach Podcast. Storyboard creation can be a confusing process; it's fluid, and there's no one right way to do it. That's why I wanted to speak with Kevin Thorn, who teaches storyboarding classes and can share his process. Kevin is the owner of NuggetHead Studioz and has a wealth of experience in instructional design, storyboarding, eLearning development, illustration, graphic design, storytelling and cartooning. Be sure to check out the show notes with resource links at thelearningcoach.com/podcast/35. I hope you enjoy this conversation and find it helpful. Here's the interview.

Connie: Hello Kevin Thorn, welcome to the eLearning Coach Podcast.

Kevin: Thanks Connie. Thank you for inviting me.

Connie: We are going to talk about storyboarding, which for some reason is one of the most confusing topics, a topic that I get so many questions about, and I just thought that maybe we can clarify things and help people by having this conversation. Of course, knowing us, we'll probably make it muddier. But, you know, we'll try. To start, how do you define what a storyboard is, Kevin?

Kevin: What I look at as a storyboard is not a single document or a single tool, it's a process and a collection of documents that helps aid in not only the development but the transition from design to development. It's that map, it's those instructions. If you think of an architectural map to build a house, it's kind of the same thing. More importantly, I think a storyboard is that instruction map, because depending on how you author or develop - regardless of what developing/authoring platform you choose - each authoring platform has it's own language. So we want our instructions to speak to that development, especially if you are on a work team where you are passing off the design to some other developer, or you are passing on a graphics design request to a graphic designer and they need to know specifically what are those requirements in the overall project. In my experience, I have what is called a storyboard workbook. Think of a

project management workbook, it is kind of that same idea. Everything in there...you've got your assessment design storyboard, your style guides, your main storyboard, a visual storyboard, maybe even prototyping kind of storyboards. And then you just put all those documents together and that helps you with that transition from your design phase into development.

Connie: What you're talking about - as far as the process - that's because it's so iterative, right?

Kevin: That's it. I think there's a lot of folks, basically those that are just starting with storyboard, they think there's this protocol, there's one way to do it. There is no right or wrong way to do it. It's a process. And the idea that I've learned is that if you do implement a storyboarding process and document your work, I can guarantee you that your development phase/cycle will go so much smoother. Including your review cycles, because you've defined it. One of the things that I teach a lot of times is that transition from design to development.

What I find with young designers and young developers - young as in, time in this industry - they get into development and they're still designing while they're developing. They go down these rabbit holes and they get themselves backed into a corner, and then they're rushed to a deadline and they are not able to implement their design in what they initially had visioned, because they didn't plan their design. They started with a good plan, but then they didn't finish it all out and then they end up in development, and then got themselves down a rabbit hole.

If you take the time to remember what hat you have on - I say this a lot, we have so many different design hats we wear, from graphic design to UI design to experience design to assessment design, all these different design hats that we wear - it's important to understand the discipline of knowing what hat you have on at one time and make sure that you catch yourself. And that just takes time and practice. You just have to have the experience to know, 'Uh oh, I'm trying to design while I'm developing, so this is where I need to stop and rethink.' If this is not going, let's go back to the design. And that's what you had mentioned a minute ago, it's that iterative process, and knowing when to change directions. That's where that collection of storyboard documents aids you in that process.

Connie: One day I got an email from someone who said, 'Who writes the storyboard? Is it the learning experience designer or is it the subject matter expert?' In my experience, it's almost always the instructional designer. What about you?

Kevin: That's a great question. I've had projects where it's the learning experience designer as well as the subject matter experts, or anywhere in-between. I think the project itself is going to dictate. I've been on projects before where the subject matter expert takes the lead and writes what they think is a storyboard, or what they've been taught or what they've been used to doing as a storyboard, but has never really developed anything. Or they're coming from a face-to-face kind of training background, and how they would storyboard. Then you just have to manage expectations along the way. In some cases, I'll let them do it, then I'll take it apart and re-write it, put it in what I need in order to move to development.

Sometimes, I have clients who are really interested in the process and they want to learn, so it becomes more of an education process along the way. Like almost consulting. 'We're going to do this, and this is why this document is laid out this way, this is why we're not putting all this in this document, we're going to have two documents.' So then it more becomes a teaching process of, 'Here's how one approach to a storyboarding process is.' Again, I always go back to this: there's never a right or wrong way, and a project is really going to dictate what you're going to need and which direction you're going to go with that process.

Connie: Right.

Kevin: Again, it's a great question. Subject matter experts have the knowledge, learning experience designers have instructional design skills along with writing, so it is a collaborate process I think.

Connie: And of course, sometimes the subject matter expert will give us the content, and then after doing an analysis and re-organizing it, that's how we can begin to storyboard. So Kevin, just to summarize all of this, why would you say that in the appropriate time and in the appropriate project it's a good idea to use storyboards?

Kevin: Because it will save you time in the long run. And I know that's hard to see on the front end, a lot of the workforce projects that come on a person's desk, they don't have a whole lot of time to put it together. They dive right into developing and designing at the same time with their chosen authoring platform. And they get done, and they're proud of it being done, but would almost argue that everybody would look back at their own work and say, 'You know, I know I can do better.'

Connie: Right.

Kevin: 'I've got really great ideas. I just didn't have the time.' Or skills, or fill-in the blank. It's a part of a process and it's a part of a workflow, meaning it's iterative and it's fluid and it's dynamic and it's a living document. So as you go through one project and you storyboard, you may not be able to hit all the buttons along the way, but in your next project, 'OK, what worked? What didn't work? Let me adjust and flex.' And the benefit that I've found in the last five or six years of building a storyboard process is, once I get to development there's no question.

Everything's clearly defined on what needs to be done, so I can take that design hat off and I don't have to think about graphics, I don't have to think about interactions, I don't have to think about assessments and the design of the experience. I can just go right to development. If you can just turn on the music and put your headphones on and put your head down and fly through development, kind of numb without thinking, and you're just following a set of instructions, your development time goes by in a fraction of the time. That's why you use them.

And it's very difficult, because you have to say, 'Well, I don't have a whole lot of time.' But if you put 60, 70 percent of your time on the front end design, and you define every requirement that you need, identify every asset that has to go into it, then when you're ready to develop, that's it. It's kind like what I call a content freeze. We're not making any changes until we get to beta. Now, let's just go put it together, and then when we get to beta, we'll come back and review and do a Q/A and figure out where we need to adjust some things. But there's a huge benefit, it will save you time in the long run.

Connie: Now the other aspect of it is that there are a lot of people who work on teams, so another benefit to the storyboard is that it communicates the design to either programmers who might be developing it and the subject matter experts, so you can get feedback, because it's always easier to change something on paper than it is once it's been developed.

Kevin: Right.

Connie: Let's move on to the next topic, which is, what should someone include in a storyboard?

Kevin: What I have in my process is called a main storyboard, or the main document. That's the one that identifies the screens, the navigation, the high-level information that you need. Some of the things I don't put in the main storyboard are visuals or graphics,

because that deters. The reason I say that is...let's just say you are using a background image or some kind of supporting photograph. And you put it where it should fit on a particular screen and you've got some design notes or development notes or maybe even a script. And you send that storyboard off for review, and there's that one subject matter expert that hones-in on the photograph and says, 'You know, I don't think it should be a morning shot because it's not fitting, and I think it should be more of an afternoon sunset shot.' Or even if you use characters or, 'I don't like that blue shirt, I think it should be a green shirt.'

What they're doing is they're focusing on the wrong information in the storyboard. Visual design is, as you know Connie, an entire different methodology to approach, with themes and UI's and the whole graphic design part of it. I think there's a parallel process that goes along there. So my main storyboard has your pertinent information, on-screen information, maybe navigation. If there's an interaction, let's say a knowledge check or some type of a critical thinking exercise that needs to happen at this point in the storyboard, I reference that. But that interaction design in itself is it's own design. So the interaction design is documented in a separate document, independent, so that I can concentrate with my subject matter expert, 'Let's think through this critical thinking exercise, let's think through this knowledge check. What's the behavior like? What's the experience going to be like?' Because there's a lot of little moving parts just in that one thing, and you don't have room in a main document to put all of those details. So I'll reference it or hyperlink it out to another document.

That goes back to what I was saying earlier, about a storyboard workbook: it's just a collection of documents that may be referenced back to a main storyboard. It's not really a table of contents, but it's a main document, and everything sort of branches off that document.

Connie: Do you put text and audio script in your main storyboard?

Kevin: I put the text. Anything that goes on screen goes in the main storyboard, yes. Audio narration, audio script does not. I put that in a separate document. The reason is, if I use an external voice talent, and I send them the script, if it's embedded inside a main document then there's a bunch of noise in that document that an audio talent - that if I hire a pro that's not even in the learning development industry, they're just a voice talent - that's just a bunch of noise that's irrelevant for them to focus and concentrate on. So the audio script goes in a separate document. It has the same reference numbers and screens and different things. But in a narration document, there's other things that

are of value to a voice actor that the subject matter expert cares about, but doesn't really want to focus in on.

What I mean by that is...Think of healthcare, or a healthcare script, where there's a lot of pronunciations that are related to medical terminology. A lot of times, we have to put pronunciations, or we have to say, 'Hey, the audience may understand this acronym, the voice talent may not.' So we have to spell out, 'Either say this acronym as a word, or say the word out by each letter.' Those things are little details that take up too much room in a main storyboard. So the audio script is referenced on each one. Now I am going to rewind, all the way back up. Situation dictates. If it's not a really big project, then yeah put it all in one document. I'm talking about some of the bigger...got a lot of media, a lot of graphics, a lot of audio, something like that.

Connie: Sure.

Kevin: Yeah, if you're not doing that, if you're doing sort of a small 10, 15 minute module, and it's not a whole lot of audio narration, then yeah put it in the main document. That's part of that workflow. That's that iterative process. What works for you is not going to work for me, and vice versa. Each project is going to dictate. No two storyboards are the same.

Connie: Right. Just for the benefit of the audience, the way I do it is, if I do use audio, which I seem to use less of these days, I'll write the script in an audio area of the storyboard for every slide or screen or sometimes I'll write it into the notes area if I'm storyboarding in PowerPoint. Then I'll copy and paste that script with a reference number into a Word document and set it up for the narrator with good spacing, pronunciations, emphasis and all of that. Is it a pain to copy and paste it out of the storyboard? Yes, of course it is, but that's what I do. I'll put a link to articles on audio scripting in the show notes, by the way.

Kevin: Well, that goes back to...that's a workflow, that's a process. So if you look at that, 'OK, that's a pain,' Well if you know you're going to do that, then why not start on that other document, put your script over there in the first place.

Connie: Because I want the narrator to be able to look at it all in one place. That's why, so they don't have two documents.

Kevin: Right.

Connie: But I mean, both ways, it probably depends.

Kevin: Yep.

Connie: Let me ask you something else. If you don't put any graphics in your storyboards, are you writing an explanation of what you want to depict?

Kevin: You know me, I'm a big visual guy, so my projects are going to be quite visual and quite graphic in a lot of ways. So I have two sort of main storyboards. One is the visual storyboard, and one is the main document with all the instructions. I've been using PowerPoint a lot more than I have Microsoft Word. The main reason is, Microsoft Word is a portrait document and eLearning is a landscape presentation. PowerPoint is a landscape presentation, so there's an equal aspect ratio match between PowerPoint and your typical eLearning. I'm not advocating PowerPoint as eLearning, or just importing a bunch of PowerPoint slides. But what I can do, I do the layout and composition in PowerPoint with basic shapes and graphics, and I can give a composition layout of what the screen may look like. And it's not just putting a photo in Microsoft Word document, because that photo in a Microsoft Word document with all the other content - script, and instructions, and screen size and all that - there's no context in what that visual experience is going to look like for the subject matter expert. They see a photo, and that's all they see. 'This photo is going to match and go on the screen with this text.' But how does that photo fit in the overall visual theme of the course or the project? So if you lay-out and do your composition in PowerPoint and you match those screens identical, then they can review the PowerPoint and say, 'OK, that's what that screen is going to look like, and then I'm going to go to this screen, and then I'm going to go to this screen.' And then a lot of times, I use the note section in PowerPoint for a lot of those instructions too. I'm still honing that process. I mean, it's free text down there in the notes pane, you can't add columns and tables and things like that like you can in a Microsoft Word document, so you have to be a little bit more creative when it comes to writing instructions in a notes pane in PowerPoint. Still working out some things on that.

Connie: I also use PowerPoint for storyboarding a lot, because it's so much easier than in Word. Even if you put Word in landscape mode, in PowerPoint it's so much easier to move shapes and a layout around, and you can give some kind of general idea. So, I find PowerPoint is great for that. We definitely do that the same. Sometimes! It depends.

Kevin: It depends, there we go again. It all depends.

Connie: So what about different types of storyboards? Do you ever use different types? Like I know some people have to do it in text-only.

Kevin: One of the big ones that I encourage folks to pull out of their storyboard is the assessment. The comment or the average - dare I say the word 'quiz' - is like a multiple choice quiz, you got true-false, multiple choice selection, things like that. And that's fine. But think about all the moving parts in just an average multiple choice question. You have the question statement, you have four choices, you have feedback. And then if you get any more complex than that, where you have conditional feedback or remedial feedback or remedial branching, there's a lot of moving parts just in an assessment. There are some companies - I used to work for one - that have a question writing policy. You had to write the questions a certain way and the choices had to be written a certain way. If you're using letter codes to depict the choices like A, B, C, D, and you use answers as in 'all of the above' or 'none of the above' or 'both A and B' or things like that, that almost a question-writing policy, and there's protocols involved in that because if you are using letter codes and you use 'all of the above,' then you can't use that randomization or shuffling those choices. And that now speaks to whatever authoring platform you're on, because those are features built into those authoring platforms. So you have to understand what your tool can and can't do, and then you have to speak backwards to your document. You need to know the feedback. So when we're writing questions and we're writing feedback, you don't want the same standard feedback every time you get a right answer. 'That's great, you got the correct answer!' 'That's great, you got the correct answer!' And you see that same correct feedback 20 times, that's not good instructional design. Correct feedback, you might want custom feedback for each choice, whether it be correct or incorrect. So there's a paragraph, then you have another paragraph for that incorrect feedback, and you have your question statement, and you have your choices, and which one is the correct choice, and which ones are not the correct choices. So I have an assessment storyboard independent of the main storyboard. So when we get to that area of the main storyboard, we're introducing a knowledge check of a series of questions. Then there's a complete reference that says, 'See this document for the assessment.' And that actually aids the subject matter expert, because if one person is assigned to work on the assessment while someone else is working on the main content, then you keep them separate documents because then you can stitch it all together at the end.

Connie: That's a good idea. One thing, although, you just reminded me, is I'll diagram out the structure and put that at the front of the storyboard so that the client understands it. Because if you're not familiar with it - and of course it's our job to educate clients or subject matter experts - it is difficult to understand what's going on. So a good diagram

can help. But before we go on, I just want to summarize that what can go into a storyboard or multiple storyboards is the title, the topic, the visual or an explanation of the visual, the audio, reference to the video, because you'll need a separate video script, the navigation, the text, the interactions and the assessments. And a diagram of the structure.

Kevin: That's a lot. Now, there's another sort of global section at the top of those main storyboards - I didn't think I mentioned this earlier - is a term I use called 'isolated' and 'global.' So if you have sort of a branching piece of content that comes off of one particular screen, that's isolated access, meaning you can only reach that piece of content from this location on this particular area of the project. Global access or global content are things like FAQ's, glossaries, other resources, things like that. And those need to be identified. You don't want to re-document or copy-and-paste that on every screen, because every screen is going to have global access to those pieces of content. So to save space, I have a table or a chunk at the beginning of the document that references global information. And global information might be, say, resources or glossary. And then glossary might be, 'See this PDF document,' and here's the glossary. Or, 'See this FAQ document,' here's where all the FAQ's are. Then when we get to development, we know where to find those documents.

Connie: Right. When we were talking about the visuals in a storyboard, there's so many different ways to convey what the visual will be. So one way is just a text explanation, as you were saying. Another way is to use the visual that you're going to use in the course. But I think at this stage, it's premature to actually pick out every visual that you're going to use. And another way is to just use simple shapes to represent people and objects. Sometimes I'll actually make a note at the beginning that says something like, 'These are not the actual visuals. They are just meant to convey the idea.' Once or twice I've gotten a subscription to clipart.com, and I just pulled out different clip-art. Actually, PowerPoint used to have that function, it used to come with clip-art, and it was so depressing when they took that out. It didn't look good, but it would help people imagine a little bit.

Kevin: Yeah. That's what I call a visual storyboard. A lot of times I'll do that in PowerPoint with just rectangles and arrows. But it gives that overall, 30,000 foot level bird-eye view if you will. The whole navigation structure. What's the success path of this from start to finish? And then you can identify with just a little bit of color change or thickness of borders on what is a global access versus an isolated access, where do knowledge checks fit. You don't have to put the details in there, you're just putting a

representation of that screen or that location that a learner is going to be visiting within that project. And then you visualize that on a big visual storyboard.

Connie: Sometimes before I start storyboarding, I will make thumbnail sketches. I'm guessing you will that times, too. Can you define for everyone what a thumbnail sketch is?

Kevin: Yeah. A thumbnail is a small rectangle. Just think of your screen; it's sort of a landscape layout. So I would think anybody that has sketched or doodled at one time in their life can draw a rectangle.

Connie: How many do you put on a page? I'll do like six to a page, and then start brainstorming and sketching different ideas. That's how I use it.

Kevin: I do those types of sketches when I do comics in learning. If I'm doing anything that's got a lot of artwork and a lot of visuals, because I need to depict each scene from one scene to the next. Almost like a comic. And I'll do a lot of thumbnail sketches with little, real loose sketches. Here's what this scene looks like, here's what that scene looks like. For instance, I just finished one where the scene was inside a clinic room, and there was a conversation between a patient and the doctor. The background scene never changed, it was always the room. So the background never really changed. What changed was the angle and the position of who was going to be talking. You'd see the back of the head of the doctor and the face of the patient as the patient was talking, so the over-the-shoulder scene from the doctor. And then it would flip, and then you'd see over-the-shoulder of the patient and you'd see the doctor's face. Or you might see both characters together, like more profile.

Connie: So you put in the camera angle and the camera position, essentially.

Kevin: Yeah.

Connie: When I do my sketches, I'm not an illustrator, so the sketches are just very rough. They help me think through the plan. What am I going to storyboard? Because you can only hold so much in working memory. So by using the thumbnail sketches as a cognitive aid, I can try out different approaches. I just put in stick-figures and shapes, and once in a while I have made an effort to actually draw it because I was showing an idea to a client. But generally it's a quick sketch to figure out the flow, the creative treatment. Once I get that down, I can start storyboarding.

Kevin: I've come up with a little language, if you will, as I'm drawing out these little sketches on what goes in certain areas. Like for instance, if it's a screen number I would put the number in that little sketch. If there's a video to go there, I might put another small rectangle inside that rectangle. And then, the familiar right-facing triangle inside a circle that looks like a play button. That visual - a circle, a triangle, and two rectangles - that visual depicts there's a video on this screen and it's going to pop up on the main screen. So I've created a little icon library of what various visual screens look like. And as I'm drawing out these sketches, say, 'OK, there's a video that's going to go here.' I don't have to describe the video yet, we just know in the main storyboard that there's going to be a video here, so I'm going to draw a little visual sketch of what that looks like, from a thumbnail sketch.

Connie: That's a great idea. Well Kevin, we're running out of time, so I wanted to thank you so much for telling about your storyboarding process. It was great to have you on the show.

Kevin: Thank you. Thanks for inviting me, Connie.

One of the main things you hopefully came away with from this conversation is that the situation dictates whether or not you need storyboards, and which process and workflow you will choose to use. Designing learning experiences is a fluid and iterative process. Be sure to check out the show notes with resource links and thelearningcoach.com/podcasts/35. Take care, and I'll talk to you next time.