

The eLearning Coach Podcast #16
Strategies That Improve the Interface to Learning
with Dorian Peters

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Connie Malamed: Hello learning people. I hope you are having a great week. It seems as though in our field, we are always searching for strategies and approaches to design learning experiences that are more engaging and effective. This episode looks at strategies related to the many ways that people interface with learning content.

Today, I am speaking with Dorian Peters, author of [Interface Design for Learning](#) and she is also the author of *Positive Computing*. Dorian has specialized in user experience design for learning for over a decade. She currently directs online strategy for the faculty of education at the University of Sydney. Alright, let's get started. Here's the interview.

Connie: Hi Dorian, it is good to have you on the podcast.

Dorian Peters: Hi Connie, really happy to be here, thanks for inviting me.

Connie: Your book, *Interface Design for Learning* has a lot of things in it that will interest learning professionals.

Dorian: Great.

Connie: One thing I thought was unusual in your book was that you used a broad definition of the digital learning interface. Can you explain how you define interfaces for learning?

Dorian: Absolutely. Well, words are really a tough thing in our field. Design can mean so many different things to different people, something like interface, something like UX, something like interaction design, it all gets defined in different ways depending on who you talk to. And at the same time, sometimes when I talk to people about visuals or graphics, there is this stigma attached as if we are talking only about decoration, like an optional thing or it is nice to happen.

So I really like to specify the area of work that I am in as interface design because you can define that very fairly as including the visuals and the graphics but also decisions about navigation, about information design of a page, about usability, about information architecture, multimedia, and interaction at that screen level, at the software level, and all of that stuff. It is important to deal with that stuff related to instructional design in the context of learning because it does affect learning.

At the same time in my book, I also mention, I draw a bit of attention to the physical stuff—the hardware that we interact with, like keyboards and digital pens. I do not talk a lot about it, Sharon Oviatt is definitely the go-to person for that, but it is important to consider. Usually, people have what they have, and we have to deal with it, but it is important to know what is better for learning and how it affects things.

Basically, what is important in my view is that we are talking about these types of things, visual things, interface design, user interface design related things in the context of learning, because that has been somewhat fairly overlooked in the past, and we need to start figuring out how to do that better.

Connie: Okay, well, I think your broad definition makes sense. Why don't we break it down and talk about some of the different ones that you mention in the book. One is visual learning, so can you talk a little bit about what extraneous cognitive load is and to how to reduce overload in visual learning?

Dorian: Absolutely. Look, this is something fundamental to interface designing, graphic design for learning. We can reduce the cognitive effort that learners have to put in, but I do need to qualify that. It is not that we wanted to stop them from using their brains, but they should not have to be using their brains to figure out the interface or to work out what a graphic is supposed to mean or how do I do this or oh, what is that. So the more of your brain you have to focus on the interface, the less is available for learning. So that is why we call it extraneous cognitive load, because it is not the essential cognitive load that is relating to processing learning content, it is extraneous to that, so it is getting in the way.

So as interface designers, we can have a huge impact on that for better or worse, so we can riddle the screen with bells and whistles and just send extraneous cognitive load kind of through the roof or we can pull back, we can make really careful decisions about how to add information like color or text doing the bare minimum, just what is needed.

This is why I have to mention actually Sharon Oviatt again, I like her term “quiet design” because really one of the best things an interface can do is get out of the way and kind of remain quiet. You do not especially want to draw attention to yourself because it should be about learning content and the learning activity that is going on.

Of course, that sounds simple, but it does take tremendous care and crafting, and that is where all the designer's skill comes in, you have to think critically about what needs to be most clearly presented and put the focus on that and be strict about how much visual information you do add.

A few simple techniques for doing that are kind of a basic rule that I am sure lot of people may have heard before, it is that we stick to relevant graphics. So

before you add any visual, you really should be asking yourself, does this visual really support the learning or is it just extra, and be honest, because research has shown that adding this extraneous material, even if it is interesting or especially if it is interesting but not related to the learning, outcomes will actually be reduced, performance will be reduced by that.

Another thing to think about is how you can simplify your visuals. You think of the designers of infographics and visualizations that are just amazing and gorgeous and insightful, they know how to tear down aspects of the visuals that are not the important aspects to just what is necessary for conveying a message or making information accessible.

So if you need a picture, yes you need a picture of a brain in an abstract sense, do not show photo of gray matter with all the details and the cross section, you can just draw the shape of a brain in black and white, and maybe that is enough.

Some really interesting research tells us that we actually recognize the line drawings of objects as quickly as we recognize the objects themselves, which is amazing to me, and it suggests that is how we represent objects in our brain actually.

Even more important perhaps is that we actually remember them better if we see them as line drawings. So use this to your advantage, embrace line drawings and simplified representations of things when the details are not important to the learning objectives. Of course, when the details are important to the learning objectives, then that needs to be included. This is a way of reducing that extraneous cognitive load because your learners are not having to spend time just getting past that unnecessary detail to figure out what the important bits are meant to be.

Third basic guideline is to put related text near the visuals to which they refer, related things together. if you have a diagram of a plant and you need to label it, first, do not label them A, B, C and explain that somewhere else, just label it directly, stem, petals, stamen, etc, and this reduces extraneous cognitive load because the learner is not having to move back and forth, what is that, what is that again, where was that?

This happens in any learning quite a fair bit when it comes to providing feedback, let me have an answer and we want to give feedback. Feedback is really valuable from a learning perspective in helping the learners to understand why, what they said is correct or incorrect, but put it near the question instead of somewhere else on the bottom of the screen or a following screen, and that is really going to help reduce that extraneous cognitive load as well.

Connie: Good. Those are 4 or 5 good points. I really like the idea that user interface should be transparent to the learner. They should not even have to

think about it, just as when a child becomes a good reader, they are no longer thinking of the phonetics and the letters, reading is just transparent, you just do it. That is the kind of thing I would like to keep in mind. What about visual perception, that is something that people may not think a lot about and really is so important because it is pretty much the first stage, once we bring in the sensory information. Can you talk about some strategies that support effective and maybe efficient visual perception?

Dorian: Definitely. I find this area really interesting, kind of really interesting area of science, because we tend to think that what we see is fact, it is seeing is believing and all this, and it turns out we are completely wrong. Our eyes trick us constantly, we really just take in a vague notion of what is out there and our brain does this amazing job of interpreting that and making it feel like it is incredibly detailed and real, and what is important for designers is when you know some of the rules about how our brain works, you can use that to your advantage or rather to the learner's advantage to make the learner's lives easier.

So for example, there are certain things called pop-out features, and these are things that we will notice unconsciously first and in under a second anytime we see something visually. So our brain is programmed to spot these things, and we are not even conscious about it. These things include the things like edges, color, especially pure color in a red, blue, yellow in there, pure primary fonts.

Movement always catches our visual attention and position, size of things we can pick up really quickly, depths, where things are in space, and I have a table of these in the book to put them all in one place, and because it is like a designer's arsenal, it is like these are tools we can use when we want to make things easy to focus on for the learner or give them ways of seeing different things in an image or visualization that are important. If we know about these, we can use them deliberately to direct attention and to guide the learners to information. If we do not know about them or are using the wrong way, then it obviously does the opposite, so their attention will be drawn to the wrong things.

Really, I think a cool example of that is, I love these Where's Waldo books, this hidden texture book, and they are great because they take these pop-out features which are these thick black edges, edges that are really intense, intense pure colors of reds, blues, and yellows, and greens, and they fill the entire page with them. So the results are totally overwhelming. You do not know where to look, the eye is not drawn in any kind of particular direction, there is nowhere that you land where you focus, they are just everywhere, and of course, that is why it is so much fun.

Because, this is a hidden pictures thing and you have to somehow combat that visual tendency, you have to kind of fight with your brain to discern something that is very similar to everything else on the page, and that kind of makes it a

game, but of course, we do not want our learners to have to fight with their brains when they are looking at our learning graphics.

Connie: So really a good rule of thumb would be, “Do not be like Waldo.”

Dorian: Yeah, definitely, unless you are making a hidden picture book.

Connie: Right and we are not making hidden picture books. Let us move on to social learning, I thought that was interesting in your book that you had a chapter on that. What have you found that the research says about social learning and what are its advantages?

Dorian: There’s a whole field of educational research out there dedicated to the idea that we learn socially, social constructivism, and there is a lot of research on how interaction with others is immensely powerful for learning.

We learn from others from the moment we are born, we are doing it more rapidly and frequently now because technology makes it in a sense so easy to connect to other people, to connect to experts, but I have to say my favorite quote on the value of, I guess collaboration specifically, is from Tony Bingham and Marcia Connor’s book, [The New Social Learning](#). I love it, it is a great book, and they say training often gives people solutions to problems already solved; collaboration addresses challenges no one has overcome before.

Connie: It really does.

Dorian: Yea, really, I love it. I think it is really powerful and it makes so much sense. You think about, if I am training, if I am teaching you something, it is because it is the established, this established knowledge, but then, how do you deal with things that nobody has figured out before. Collaboration is an amazing way to do that, and by learning with each other, of course, we get exposed to different perspectives, different ways of articulating things, different experiences, we learn from each other, we pay more attention is another thing when other people are around, it is great for engagement.

You know, one of the big advantages provided by modern social learning is that groups of people interested in the same thing can find each other and learn from each other, and I love that, and there are some beautiful examples of that. I mean, social learning environments, they can be a number of different things.

There is social media that we are incredibly familiar with, sometimes painfully too familiar with. But on the positive side, at my institution, for example, we use Yammer, the enterprise social network, and I have to say, before we got it, I had little to no contact with the other designers, instructional designers, digital designers in my institution outside my immediate thing, and I always lamented that. For me now, it is incredibly easy, we are all available to each other on the

system. We do not waste time on it, but we go there and we ask questions when we need to really share experiences and sometimes arrange meet-ups, I learn things constantly from them, but of course, that is just one kind of social learning in the modern world.

There are also things outside of the workplace, and I think one of the nicest examples is *Project Noah*, that is projectnoah.org, and it is this beautiful website, and it allows people who are interested in the natural world, in wildlife in their area to connect with a network of people that includes scientists, that includes high school kids, that includes people of all ages of all different levels of expertise.

And the beauty of it is that the high school kid has as much to contribute as the scientist because they arrange these bio-blitzes, which is where everybody in an area goes and takes as many pictures as possible and collects data on a particular species, let us say snakes. Probably not a good example, sounds a bit scary, but “take the picture of all the snakes in your area and where you found them.” And this becomes data that gets collected that is useful for the scientists, and at the same time, the people that are collecting that data are learning from the experts, so that is an amazing thing that really was not possible before, and now it is easy because it is an app on your mobile phone that makes that all possible.

Connie: That is really amazing. I had not heard of that project before.

Dorian: At the same time, this is a big learning network, but at the same time, a small online space where two people or a small group meets to brainstorm ideas for a class project is another social learning environment; I think it is an exciting space because it has so much potential.

Connie: Can you talk about a few strategies that we can use to support social learning and to encourage community within our organizations, kind of in a training context?

Dorian: Interface design has actually quite a surprising amount of power in this area, and I see at least three key areas where we can make a difference. One of those is in encouraging participation in a social learning group, another is in providing the social presence through the visuals, and then as you said, kind of building community.

So first of all, the look and feel affects the social environment because it will communicate established boundaries and expectations for a community. So it is a professional look and feel where I should behave as I would in my office, where I probably should not be posting all those drunken party photos, or is it informal? It is really the design that is going to communicate that, and that is important.

At a more detailed level, we can actually help motivate learners to participate more in discussion, in activities online by using visual cues, visual cues like badges or presenting stats. So there is research to show that interface cues like icons in discussion forums that show a user's experience in the community are valuable. In other words, their authority in the community, how much of their posts people have read, etc. So rre ratings of helpfulness, such as people tick this sign "did this help you?" "Yes" or favorite or Like this response, etc. So designating these kinds of things into the interface are actually quite helpful in boosting participation.

Another thing that can really make a difference, and this one I think is really interesting, is just design that conveys the strengths of social presence. Because the really amazing thing about social learning is that it is so built into our heart that even if we are learning completely individually, not collaboratively like we are doing individual courseware or something, it still helps to design for social presence, that includes social presence cues that make us feel like somebody else is there even if we are learning individually.

For example, for reading a book, if that book is written in first person, we learn more. So this is basically saying if I feel like somebody is talking to me directly, I am in the presence of somebody else, I pay more attention and I learn more. I think that is completely amazing.

If that is what text can do, imagine what design can do in this area, and therefore, if we are going to pay attention when we feel like other people are around us are really supporting that sense of the community, it is going to help learning. So for example, make sure that you are allowing your learners to include images of themselves, so that we can put names to faces and get to know each other and feel like real people are out there. Sometimes, the online environment can be really isolating and bland and lacking in any sense of humanity, so we need to change that as designers.

Connie: It really is amazing how much that works, I know if I am communicating with someone on Twitter and they do not have a picture, it just seems like, "Ha, what is that? What are you doing? Is that a real person?", and suddenly when it is a photo, it makes you feel so connected, it almost feels like you really know the person, so it really is amazing the effect that the visual cues have on social learning.

Dorian: There are also really interesting ways to use visuals to convey the sense that there are other people out there and network when they are, and sometimes this is low tech, okay. So a lot of the MOOCs will tell their learners upfront, go to this Google Map and pin yourself on there, and then you end up with a Google Map of 5000 little flags all over it in all the countries of the world. It is powerful, it is like "wow, look at all these people that are part of this experience from all these different places all over the world." And at the same time, you can zoom right into

your local area if you want to connect with people locally in some way. And then, of course, there are more sophisticated ways if you are fortunate enough to work with programmers on your team or something, you might develop tools that allow your learners to see everybody else in your company who is online here and maybe it is grouped by their interests, their location, or whatever works for your context, and this allows people to see that other people are there at the same time as them and to connect with them.

So making the community visible is important, I think, for online learning because otherwise, like I said, it can be quite isolating, and not just psychologically, it also improves learning outcomes which is what is amazing. One of my favorite examples here of just the idea of people being there is powerful even when they are not is this kids elearning program called Reading Eggs. It teaches literacy, and the menu is you move into different buildings, and the really funny thing is that whenever you move into a building, this other kids walking around in there. as a learner, you never feel alone in the interface, even though you are doing it may be all by yourself in your room on a computer, you feel this validation, which of course is important for kids, “oh other kids do this too.”

Connie: That was just really fascinating research about social learning. You also have a section on emotional learning and that really interests me a lot because cognition and emotion are so connected. As you were researching for your book, what were some of the more surprising things you came across regarding emotions and learning?

Dorian: It is really surprising to find out that we are literally incapable of making simple decisions without our emotions. It is like you said, cognition and emotion are completely doing this inextricable dance. We would like to think that the ideal decision maker was this person who is purely logical and did not let emotions sway their logic, and it is just completely wrong. We have been wrong all this time, and now scientists have found, literally, that people who lose their emotional functioning, because of injury for example, even if they are cognitively completely normal and sensible and intelligent, literally cannot decide what to have for dinner, that is amazing.

Connie: That is amazing.

Dorian: So we need to bust this myth that emotions are kind of weepy and detrimental and realize that we need them and they work with our cognitive processes and they make things like creativity, problem solving, and learning possible.

Connie: How do you think designers are going to address the emotional aspects of learning?

Dorian: We can use the interface and visuals to support emotions that are good for thinking and good for learning, and that is one way we can do it. So for example, we can help support engagement visually by using what we know about visual perception, which we talked about before, to guide attention to apply focus to the right things to avoid distractors.

But a really interesting area is the idea that we can support positive emotions, make people happier in a simple sense in order to make them more creative and that is what is really interesting. If you want broader open-minded thinking, you want to be putting your learners in a happy mood, that is what the research shows, and they have done all these experiments. For example, giving people candy before meeting or giving doctors little treats or something before they diagnose a patient and found that it literally improved the problem solving capacity of that group or that medical practitioner.

Literally, that has a strong effect on our mood. It makes sense because when we are kind of angry, even it is subtle, when we are kind of anxious, we get that tunnel vision, we focus on what is safe and that makes a lot of sense evolutionarily, but not so much when we are trying to learn something in general. I am not saying you always want to make your learners happy, but if you are wanting to support creativity and open ended thinking, then a happy mood is definitely the way to go.

On a basic level, a really good way to destroy a happy mood in your learners is to have poor usability. Fundamentally, you want to make sure that you apply all those principles of good usability, and that is like first step, number one, because otherwise anything else you do is not going to work.

Now beyond that, we can do things like show personality in our designs, and I think probably a lot of you maybe have noticed how many websites these days use humor that are silly. For example Flickr, when you are uploading a photo, it says “hold on there tiger,” and it is quite funny, and I have laughed at that multiple times. Immediately what that did was that I am not angry about sitting there waiting for this thing to download, I am “okay,” I am more forgiving. When people are in a better mood, they are all somewhat forgiving of the software and the struggles that they do come up against and more creative about solving those.

That is why the interface designs that are considered more aesthetic are actually easier to use, and this aesthetic usability effect, which is completely amazing. Designers have wanted that to be true, now we find out research shows us it is true, really genuinely, if two things are exactly the same functionally, that is of course, if one of them is considered more aesthetic, it is easier to use. That is basically because people are better at using it because they have been put in this positive mood, they are more creative, and they overcome any obstacles that they may have.

So having a personality, is like you are being polite and friendly with the interface. In other words, it is like the interface is not this cold machine but things are expressed in ways that are a bit more human.

I mean for example, when I was logging into Coursera, it of course is a MOOC platform, as I finished typing my name, it says hello Dorian, just on the side on the right there. I mean it is a little thing, right, but it says this is a friendly place to be, you can smile now. Another fun thing that some websites do, and we may have an opportunity to do, albeit carefully, is to use delighters. So delighter is a term that comes in the hospitality industry, and it is that little chocolate they put on the bed. It still is a little surprise that makes you go, “ohhh,” and lifts your mood, right? So it is like candy they gave at the beginning of the meeting.

Websites actually do use these too. One example is in the MailChimp program; whenever you schedule campaigns, you get a high-five from Freddie the Monkey. Again, how you approach the delighter is going to be very much dependent on the context of your company and what kind of values they want to express, but there are different ways of doing different things. For example, recently, I have redesigned the Internet where I work, and as part of the launch, which happens to be coming close to the holiday season, we hid little Christmas and Hanukkah presents around the site. And they were just pictures of presents and they just linked to funny holiday themed comics, but it was that way of lifting people’s mood in association with a change that we have just made to the interface and to the technical environment. So those are kind of two sneaky moves that we can keep up our sleeves, having personality and incorporating a little delighter here and there.

There are another couple of things. For example, the biophilia effect is really interesting, and it basically refers to research that shows that pictures of nature also improve our mood, help get rid of some of that anxiety, and that other negative emotions that can close off our creativity. So obviously when I say pictures of nature, I do not mean sharks photos or poisonous snakes, I mean images of fields, leafy views, for example. I can just feel that happening when I see a beautiful picture come upon my screen, “oh.” Pictures are enough to have some effect in that direction.

One example of the kind of learning online scenario that uses that effect is yogatoday.com, which I actually go to all the time, and they obviously have yoga classes online. They could have just filmed them in the studio, which is really typical for exercise and things like that, but they actually filmed every single one of their classes outdoors in these ridiculously stunning locations with these Grand Teton mountains behind them or these grassy fields that go on forever, and they are just gorgeous, and you can really feel it contribute to that sense of helping you focus and that calm. So it is very effective.

Connie: It is, now that people can use very large photos on websites and that is a certain particular design look, when you go to one of those sites that has a really large photograph of nature, you can feel yourself change. It is a physical feeling.

When you are talking about the humorous statements, which I just absolutely love in interface design and whenever I get one, it just completely relaxes me. I have started using that in eLearning, in particular when I am working on a compliance course, like a legal course that people just absolutely have to take, and I am really trying hard to make it interesting, I will put in humorous messages here and there, just to let them know “I know you don’t want to sit here, I am trying to make it is fun as I can really.”

Dorian: Fantastic and I think they do a few things. On the one hand, they get to smile and to laugh, they get to lighten the mood. On the other hand, it is that social presence that I feel the person here, there is a human being behind this program, and I may know them. So it is not this cold, externally imposed thing, so I think that is fantastic.

Connie: We should move on, because we are running out of time, to the multimedia and games that you discussed. You write about the benefits of multimedia and games, and I think we have probably read a lot about that, but what do you feel like is so special about using video in learning?

Dorian: Well, I think video is special for learning because with video, we can learn by watching, and to some extent, the reality is that we have been learning by watching since we were cave people. So, this is something that is really hardwired into our brain to learn through observation.

Now, with all the video freely available on the web, you find that what we tend to do these days if we want to learn something like a particular cooking technique or how to fold some origami or how to tie a square knot, we tend to just go the web and search a video, show me how to do it. This is brilliant, but the important thing to remember about cooking and making things is that these are motor skills. So these are the kinds of things that we have been learning how to do since forever, and these are the kinds of things where video can really help out, these procedures.

We have not been learning everything that way forever. So when it comes to video, we have to be thinking about how can we be putting physical tasks on to video. So you could have an expert demonstrate formats, whether that is a surgeon or a basketball player or a teacher or a dancer, and it even has advantages over live demonstration because you can pause it, you can rewind it, you can use close-ups and highlighting. Visual cues show what to look at and when you can use slowmo, all these things can make it easier for learners to discern the different kind of micro steps in the process, which is fantastic.

When it comes to abstract concepts, complex ideas, the movement of money around the globe and economics or the process of rain forming in the atmosphere, these are not things we have been learning by observing for thousands of years. So it turns out that in this case, static images actually do perform better, they actually do get better learning outcomes. So we do not want to necessarily be jumping to video for everything.

Another thing to remember about video is that it does not have to be just a passive medium, it does not have to be “I sit there and watch,” which of course has downsides because you have this huge risk of people getting bored very quickly. You can get hands-on with video in the digital world today, annotation, manipulating it, remixing, making your own video, or even just adding tags and notes and things like that or to ask questions, “This part of the video right here, what is that they did right or wrong.

And then, students can create their own videos, like they record themselves or their own performance and get help from comments from others, so it becomes a social interactive thing. It does not have to be just I am sitting there watching something for 20 minutes. These are great possibilities that have to do with modern digital video, which I think are exciting.

Connie: Those are great suggestions. What strategies are most effective for using video to support learning?

Dorian: Rule number one is the same for videos as it is for images as it is for other aspects of interface design. Make sure it is relevant, make sure it is actually supporting the learning objectives and is not just something interesting but extraneous. Ask yourself is video providing something that text and images alone cannot.

So I like the example of [FrancoToile](#), which is a French language website, and usually, we talk with repulsion about talking heads, “Oh God, talking heads” because they can be pretty horrible. But what you have on *FrancoToile* is short bits of people talking, but the whole point is the talking. This is a language website and what you get is that you are introduced to a wide variety of French accents, the variations on the language, speakers from all over the world, all sorts of different cultural backgrounds. You could explain all that in text. You could even show pictures, but being able to click on a map and get a video of real people with the sounds that they make and with the visuals of the expressions that they have on their face is clearly relevant to language learning in this context, and it makes for a much richer experience. So think about that, how is this going to support learning objectives and ways that other media cannot?

Another key issue, of course, that we come up with all the time is length, and wow, you hear different things about ideal video lengths for the web, for learning. First, keep in mind when you do have to have longer video, that is mainly a teacher or a lecture, break it up. That is what they do in a lot of the popular MOOCs. They cut the longer video into segments, so learners can manage this more easily, “Okay, that is 10 minutes, I will watch it on my break” as opposed to “That is 60 minutes, no.” The other thing though is that they script it and shoot it for the web.

I am not just walking into the lecture hall, sitting in the back, and getting some really bad video of somebody doing a lecture. They script it for the web and they perform it for the web, so there are no ums and ahs, and ideally, you are going to be able to cut to other things for variety, cut away to slides, to images that are representative, whatever you can to make it easier for the learner to understand what that person is saying and to add that variety on behalf of engagement. Of course, we always face resource and time constraints, goodness knows that I do, but aiming for that will help.

Another basic point is always make sure that your learners can control the pacing of video or animation because the risk of time-based media is that they move too fast and a learner misses and goes “What?” and gets left behind. So you want to allow for pausing, rewinding, all of that. I absolutely love this little button that they have which goes back 10 seconds or goes back 30 seconds, so the things that enable the learner to more easily control the pacing of the video, it is kind of the very basic essential thing as well.

Connie: Those are great strategies. One thing also that keeps learners interested is to be able to write, like on a white board-type display, so that as the person is writing, the learner is watching them, perhaps solve a mathematical problem. I was helping an economist do this for a MOOC, and he would write out his formulas and then solve them, and it was just kind of interesting watching him write, it was a little bit like the RSA videos where you see people drawing, except this was math. That is another strategy.

Dorian: Yeah, that is a fantastic point.

Connie: We sure have covered a lot, we have done visual learning, social learning, emotional learning, and multimedia, and so I really wanted to thank you so much for your time, Dorian.

Dorian: Thank you, it has been a pleasure.

Connie: It was fun covering so many varied topics in this interview; it is good to have a broad perspective and to think about how we can have an impact not just through the visual and multimedia interface but also to support the social and emotional aspects of learning. I would love to hear your comments about this

episode. For show notes or to leave a comment, go to thelearningcoach.com/podcasts/16.

Take care and I will talk to you soon.