

[00:00:00] Hello, and welcome back by another airport. Online learning expert interview, where I talked with people in the instructional design and eating field about methods and tools and how to.

[00:00:11] Engaging and effective learning courses. And today I'm talking with Mary Jo Leroux and she's a L and D professional. And she has a history as a video game producer, working with Marvel Disney, Sega and Ubisoft. And she's also the creator of the effective gamification program. Hi, I'm Mary Jo. Thanks for joining me.

[00:00:32] **Mark:** Before this interview I did some research about gamification and I saw that there are a lot of misconceptions about the concept of gamification. Yeah, some people think that it's sprinkling badges over Rine course. And then it's gamified, but can you explain a little bit more, what is gamification and what is not gamification?

[00:00:49] **Marie-Jo:** Thanks for having me. Yeah, so there is quite a bit of debate about what gamification is and isn't, and I try to stay away from that kind of debate because I don't feel it's very interesting for people. It's very interesting for gamification nerds like me and practitioners of gamification, but really what an.

[00:01:06] Instructional designer wants to know is this thing that I'm putting into my course going to be effective or not? That's really what's important. So it doesn't really matter whether you call it gamification or not. However it's all, to me, it's all gamification, whether it's just badges and points or a full on simulation it all falls under the umbrella of gamification, but of course there's a spectrum about how much effort there is into.

[00:01:29] Putting in the different types of mechanics and how effective they're going to be. The spectrum can go from full simulation, which is what I call cognitive gamification. It's part of what I call cognitive gamification, which are. The mechanics that will help you have a hands on experience and understand the content more intuitively all the way to motivational incentives and rewards and things like that, which are lower effort to put into to the course.

[00:01:58] But but operate in a different way by getting the learner to maybe persevere or want to try. So it's, to me, it's all gamification. But there are differences in how effective you're likely to be by putting them in.

[00:02:10] **Mark:** Yeah, so that there are two different terms and you have gamification and game based learning. And are there the same things, or is there a difference?

[00:02:18] **Marie-Jo:** It's all gamification, like I said game-based learning for me is a subset of gamification. So you gamification goes from very light surface things like using points and badges and adding them to your course all the way to a. A program that will check every box of what a game actually is.

[00:02:38] Maybe you have a setting and you have some goals that you have to achieve, which you may or may not reach. And everything about the program itself is gamified. And that, that could qualify as game based learning. Game based learning is part of gamification. One of the issues that there are with the definitions is that people often conflate gamification with the surface elements of gains the way it looks and the incentives structure, the rewards and that sort of thing.

[00:03:08] And that's what they bring into their courses because that's what they see when they're playing a game. However, The surface elements, aren't really where the active ingredients of games are. What makes a game more effective at teaching you something isn't necessarily how it looks or the fact that there are rewards associated with it.

[00:03:26] It's much more about how the challenges are organized in an increasingly complex way and gets, get you to increasingly upscale and want to persevere because the challenges are so well tweaked. The difficulty is. Just out of your reach, that when you make an attempt, you might be very close to actually attaining the goal.

[00:03:47] And so you're gonna wanna try again the way that. Challenges are organizing games are what makes people want to persevere and upscale. Also the fact that the challenges often call upon the same skills as you're gonna need in real life. That makes you learn things and upscale at things that are actually gonna be useful in your job.

[00:04:06] So those are the under the hood elements of games that actually make training more effective using games. Not necessarily the way the games look. Where people sometimes get disappointed is that they are going to apply the surface elements, the incentives, and the way that the look and feel and not find that there's that much of a difference in terms of learning outcomes.

[00:04:27] And that's understandable if you know that the active ingredient is actually like the way that challenges are. So long story short game-based learning is part of gamification. It's not necessarily more effective or less effective than just playing old gamification, but it's all to me under the umbrella of gamification.

[00:04:47] **Mark:** I'm thinking of some examples to. Be more specific on what it is for instance in the past, for instance, I made a course for our company, with the company where which I worked for, we made a course for a company and was about coffee. And what we did, we yeah, it was sort, it was a sort of quiz, but people can could.

[00:05:05] Get certain amounts of points at the start of the quiz. And for each question they could yeah, gamble is not the right word, but say, oh I play safe. You'll get one, one, a hundred points if you are correct. I I'm certain, so I'll set in 400. If you are correct, you get 400 points. If you're incorrect, you have 400 points off your off your points.

[00:05:30] And at the end there was a high score list. And what we saw at the end of the month, that there were people that tried 30 or 40 times that game. And we're at the top of the high score list, but also knew a lot more about the topic than people that yeah. Were lower at the high score list. And I played it three or four times and yeah Give up.

[00:05:51] **Marie-Jo:** There's a lot in what you just said. You've got some medical mission. I have to think about how much I know about a topic in order to make the right gamble. So you bringing that in, you bring in the fact of we have an uncertain reward. I'm gonna gamble big, but I'm not sure I'm gonna get it in.

[00:06:06] You've got some competition with the leader boards. And even if it's not competition against other people, it's been shown that if you only show me how well I'm doing compared to an average and prevent myself that has a big impact on replayability. And people's motivation to try again.

[00:06:24] So just in everything he described, there was something like three or four mechanics right there. Yeah. And I think for people this look, maybe look like it looks very complicated, but if you want to do something like this in storyline, it don't have to be. Too complicated to do it except of the leaderboard, but the yeah.

[00:06:45] Gambling part and the setting points for a question that's not so hard. So I think for people that are watching this interview that it's yeah, relatively easy to incorporate different game elements in your course. For sure. It's also, it's a spectrum for that reason too, if you don't have a lot of time budget or if you don't have a lot of control over the pro project, sometimes I get clients who wanna gamify their training, but they can only control one part of it.

[00:07:11] For example, the knowledge checks, but not how the information is presented. They can gamify that or depending on how comfortable they feel with gamify, the whole thing and building it full game based learning versus just gamifying. What they feel will have the most impact where the learner, where they've had some feedback from the learners where learners are struggling, or just getting tired or demotivated as a specific point in their course they can gamify just that if they want to.

[00:07:38] That's, what's the, that's the beauty of it is that you can take as little or as much as you want and bringing it into your. And you said you can only gamify the knowledge checks. Can you give an example then, for instance, to how to gamify that? So there's a, there's quite a few ways what I often do, and I don't wanna get too much in the weeds here, but what I often recommend is that people.

[00:08:00] Try to design their knowledge checks so that it leads to a range of possible outcomes. So for example if I'm asking you, what's the CA what's the population of Brazil, I can give you four answer choices. The range of possible outcomes is I'll get it right. Or I'll get it wrong. There's two possible outcomes.

[00:08:17] But if I ask you to guess, and I give you a slider, then you can be closer or farther away, and I can give you fewer and fewer points depending on how far you are from the right answer. And that allows people to try to get, try again and try to get closer. It allows you to to. It allows you to control difficulty more easily.

[00:08:37] So you can say you're gonna get full marks if you're 10% away versus 20% away, et cetera. So you can have a wider range of error tolerance if you like. So that allows you to really adjust the difficulty to your learner's current level of mastery. Those are ways that you can bring in that kind of game, thinking into a knowledge check you can play with how much information you're giving them in order to answer a question in a knowledge check versus how much noise you're putting.

[00:09:04] So how many decoys there are around the right answer. All these things allow you to. To play with the difficulty of the challenge and really tweak it to where the learner is right now. So that the challenge is interesting to them. It's not so easy that I'm sure I'm gonna make it because that's boring.

[00:09:21] And it's not so hard that it's impossible because that's all, that's frustrating. Either way people are gonna disengage. Difficulty balancing is extremely important to engage. And having a range of outcomes in your knowledge checks allows you to really control that. It's got a whole bunch of other advantages, but , I don't wanna nerd out too much about that.

[00:09:40] **Mark:** That's okay. I love the example for instance, that you say you can have question. So how how many people are living in Brazil. And then instead of four answer options that you do something with the slider, people have to also think on a different level to answer the question. Yeah, that's great.

[00:09:56] But if you look at year end courses, do you think that every course can be game fight?

[00:10:04] **Marie-Jo:** I do. As long as you have control over the format, what I mean by that is What you need in order to gamify something, is that the learner has to have a certain number of options of things that they can do and have the program change as a result of that.

[00:10:20] That's basic stuff. Asking somebody a question, giving them answer choices. And having them, them and giving them feedback as a result of that is a good example. But if you have a format, like for example, straight up video, there's not a lot that the learner can do here. If I'm watching a movie, I cannot affect how the movie's gonna change.

[00:10:39] Whereas when I'm gaming everything I do will change the outcome. And that's very simple, but it is necessary for your format to be able to allow the player to make some choices and to have some impact on what happens next. I'm not just talking about click and reveal where that's interactive, but it's not really gonna change the outcome.

[00:10:59] And there isn't a desired outcome that the learner may or may not get. So to me, that's not gamified, that's just interactive. So in order for something to be gamified, you want the format to be able to support player choice and have consequences as a result of the player's choice. Yes, I think every course can be gamified as long as you have control over the format.

[00:11:19] That being said, not every single game mechanic is appropriate for every single content. It's really important to pick the right mechanic. Ideally design the right mechanic for your content. One of the biggest mistakes I see is that people will take an existing game or something that they fell in love with, at a conference.

[00:11:38] And then they try to squeeze their content into that. But there's actually no connection between the structure of their content and the structure of the game mechanic they're using. So it's actually putting it in that format actually can obscure the content and make it harder to understand. So you really.

[00:11:54] Have to look at your content, try to find the game in it, which sounds esoteric, but there's actually a method to do that and design the game around it to make it more palatable and easier to understand for the learner.

[00:12:07] So people don't have to put their content in the game, but incorporate the game element elements in their course and think about which game elements I want to use in my course.

[00:12:17] And then do it at a proper way.

[00:12:20] One of the most important elements of engagement I talk about it all the time is challenge. The process of learning, the process of going from being inner to expert is challenging. So there's already challenge in the process of learning.

[00:12:31] So it's a matter of taking that challenge and making into the challenge of your game. It's also, we like to try to find patterns and things when we have a story that that, that seems to not make sense, we start making theories about why did he do that? Why who did this? And we're constantly trying to.

[00:12:49] Patterns in the chaos. And when we do find patterns in the chaos, the aha moment is a lot of fun and our brain loves that. So the fun is already also built into the process of figuring things out. So you don't have to inject that stuff in. You just have to take it out of your content and make it more salient.

[00:13:08] Also a lot of courses and a. Contents have a game like structure, module, lesson, et cetera, that can become levels, stages, et cetera. So there's a lot of commonalities between training as it exists, non gameified and games themselves. So it's relatively easy if you know the process to bring it out and transform it into a more or less gamified program.

[00:13:33] **Mark:** Yeah, I think people do a lot of learning courses. It's not, you don't want to gamify every course. You say it, it can be gamified every course, but do you want to gamify every course for for a learner?

[00:13:47] **Marie-Jo:** I think it always helps. And frankly, even if I was making a nonunified course, I don't think I could help, but intuitively put in things that are you wouldn't necessarily identify as gamified.

[00:13:59] But that game design thinking shows through just the idea of giving player clear goals. I say player, learner. I used to do giving, giving the learner clear goals and showing them exactly where they are with respect to that goal and that sort of thing. That's game thinking. And it would shows through, I don't think I could make a fully nonunified training program at this point.

[00:14:21] Just. Some of the very subtle influences in the design decisions come from games. And that, that experience of what works comes from having worked in games and done a lot of gamify training. I personally think everything should be gameified just because maybe a little bit or a lot, but I think it always can help if you pick the right thing and you.

[00:14:43] Injected at the right spot in your training.

[00:14:46] **Mark:** So for people that are going to want to incorporate gamification in the next course. Yeah. It's good to see how many elements you, you want to incorporate inter course, and it can be different for each course. So some courses have a little elements and other courses have yeah, a lot more elements put into it.

[00:15:04] **Marie-Jo:** Correct. I would much more take into account how much control you have over, over the process. Uh, In some projects you don't have a lot of control who your audience is, what your content is, where the audience is struggling the most, or likely to struggle where they're gonna have dips and motivation, that sort of thing.

[00:15:21] So of course, if you have limited time or limited control, You wanna make sure that your interventions are happening at those spots, where you're gonna get the most bang for your engagement buck. You want your, you wanna concentrate your gamification elements, where you can have the most impact? A lot of people come a lot of my clients wonder about a lot of.

[00:15:44] A lot of people struggle with not knowing where to start or not knowing what to pick. And they don't want to go through the process of trial

and error to figure out what's gonna actually work. So it's very important to, to know what the impact of every possible mechanic that you can put in would be so that you can choose with confidence where to put your effort, your time and your.

[00:16:10] **Mark:** and the right mechanic. If, as an instructional designer, I want to incorporate gamification in my ear. Of course. Yeah, what's the process and how do I start?

[00:16:18] **Marie-Jo:** As a VE I tell you the whole process, but like I said, you can take just any bit of that. Yeah. You don't have to do the whole thing, but the, what I call step zero, the table stakes is just plain old instructional design.

[00:16:31] You have to know what you're trying to achieve. What is the learner supposed to be able to do? What questions are they supposed to be able to answer once they finish this course or this program? So play, not learning object. Plain good instructional design, yeah. And that's not part of gamification, but it's necessary to start gamification.

[00:16:50] So that's step zero. So the process, what I would say is you start out by figuring out what challenges, what types of challenges you gonna put the learner through? What are they actually going to do? So for example if I'm teaching them how to bake something, maybe I wanna go all the way to a simulation and say, depending on what they put into the cake and how much time they put it in the oven and what temperature I'm gonna simulate, what would happen so that they can learn through trial and error.

[00:17:18] If I'm going all the way there, the activities are going to be about choosing ingredients, choosing temperature and that sort of thing. So those are my challenges. So I organize all, I design all my challenges in the process that we use is we isolate everything that they need to know. We teach that through Easy discovery and increasingly challenging challenges.

[00:17:39] And once they've mastered it through practice, then we can bind a new notion and we go on like that. So they're constantly active. So organizing, designing the challenges is the fundamental it's. What's going to give your training program. It's identities. What they're going to actually do. Then once you've done that you organize them into a game structure.

[00:18:03] So what are they gonna start with, et cetera? We build prototypes at that point too, to make sure that, it's actually intuitive and it's fun and it's

engaging and it's effective. And through the process of prototyping, oftentimes that's where great ideas come. That's another thing is you want to.

[00:18:20] A process because I don't believe that you can actually plan having good ideas. You can only make it more likely through your process. So once you design your challenges, I prototype them. And then I refine them through the ideas that come out of prototyping. Then. We organize them into a macro structure.

[00:18:39] We put in gates to say, okay how much how much mastery do they need in order to move on? So what's the wind condition. What's the point at which I'm okay with them. Moving on. It's, what's called a passing grade in a course usually, but there are other types of gates in unified training.

[00:18:57] You can have a collection gate, like I need to be able to do one of each of these things and then, okay. I can move on to the next stage. So once we've done all the kind of nitty gritty of the activities and organize them properly, Then to me, you already have a gamified program. That's playable from beginning to end.

[00:19:15] However, that's when motivational mechanics come in. A lot of people, most of the time will put in motivational mechanics on top of those cognitive mechanics that are just described motivational mechanics are everything. That's an incentive. Such as of course there's points, badges and leaderboards, but there's also power ups, collectibles, anything that peaks your curiosity side quest bonus missions that you don't have to do, but you can, if you want more extra practice, all those things fall into extra motivation, motivational mechanics for the player.

[00:19:46] And once you've built that on top, then that helps smooth the smooth your your difficulty curve all through your program. Once you've built your motivational mechanics. Usually I have a phase where I do some actual user testing with actual humans and usually members of my target audience.

[00:20:03] And that's where I will make sure that I'm balancing the difficulty exactly right. To make sure that everyone is never bored. And that ideally my program can adjust its difficulty to whoever comes in. And finally, once that's all. Then I work on what I call the rapper, which is the interface making sure that I onboard people properly.

[00:20:27] That's when I talk, I think about tutorials more, more intensely which is a weird thing to do at the end. But to me, tutorials are not just things that

happening at the beginning, you wanna teach people what they need to know about how to play and what their goals. All throughout when they need it, not front loading everything.

[00:20:43] So I think about tutorials. How am I gonna give them clear feedback? How am I gonna make sure to minimize all the cognitive workload that they have to do in order to understand what they're supposed to do so that there's as little cognitive load as possible, expanding on understanding what they need to do and much more on understanding how to bake a cake.

[00:21:02] So the final part is the rapper. That's also, when we think about theme and setting and sound design, visual, Polish, all those things. So that's the whole process. And I, like I said, once you master it, I think you can pick just one part of it and say, I'm gonna apply this lever here because that's all I have time or inclination or control to do.

[00:21:25] How's that line with you?

[00:21:27] **Mark:** It's landing. I'm thinking of how how would I start if I'm actual an instructional designer because yeah. I have to know things about identification. Yeah, I have to know a lot of things BEC when, before I can let my rephrase it. Do I need to know a lot of things before I can put in gamified elements into my course? Or can I start small with some things?

[00:21:49] **Marie-Jo:** Oh I think starting small is is. How we all start, really? You don't know, you don't need to do the whole thing. When I go through the process in a workshop, for example, I know that some of the decisions people are making in the early stages are gonna affect what they can do in the later stages, but they don't know that yet.

[00:22:06] And I, they have to go through the process in a linear fashion, but If they, for example, if they design their knowledge checks with a range of outcomes, like we talked before about, the population of Brazil, then, good practice early on will help you later on when you're in difficulty balancing mode and that sort of thing.

[00:22:22] But if you. If you only know a little bit that will help, that will, you will be able to apply that little bit, for example, good practices on how to implement badges, which I'm really not a fan of badges, but there are better ways of using badges than the way they're usually used. So for example, if all I know.

[00:22:44] How to make a better badge. I can apply that and have a little bit of an impact. One way that badges can be better is you can tie them to a collection so that you can actually show which ones people have and which ones they don't. And. For some people that will bother them when they have nine out of 10, they will try to get the 10th one because that will bother them.

[00:23:03] Also making sure that the badges are not a foregone conclusion just, they should be tied to something exceptional, like doing an extra mission or are having an exceptional score. So if you only know that you can apply that and get an effect of GAM.

[00:23:19] **Mark:** Yeah. Great. Yeah. That, yeah. Gives me thinking I'm myself as an instructional designer enough to start if I want to incorporate gamification of game elements in my next learning course.

[00:23:29] And what do you think are good examples or programs or online courses where gamify gamification is implemented properly? Do we have some examples

[00:23:40] **Marie-Jo:** Yeah. This is a strange one, but method.ac has a lot of courses, a lot of little exercises it's for learning how to control color and shape when you're doing graphic design.

[00:23:52] And it's just a whole bunch of little exercises. I haven't gotten to the end of it. It's just seems to be endless exercises on that. And it's very engag. And the beauty of it is it's very simple. But it's endlessly replayable. So I think that's a good use of exactly this idea that you don't have to build an entire, 3d a R VR simulation to leverage GAM gamification.

[00:24:16] This is a very simple one. One of the things that he does is to teach you good design is he just shows you the two, two images that are highly similar and tells you which one is the better design one. It's just a matter. Sometimes it's a subtle change in fonts and you choose one and then you choose the next one.

[00:24:32] And the next one it's super simple and effecti. So yeah, so I love that as an illustration of how it doesn't have to be complicated if you're looking for more complicated stuff. In one of my videos, I talk about a lab simulation where you're actually doing a PCR test, I think that's on lab exchange.org.

[00:24:48] There's a lot of courses like that online. Keyboard jump. Of course, if you want to build up your keyboard skills with psychomotor practice training.

So it's a good way to do that. Yeah, that are great. Great examples. What I will do is I'll put the examples in the show notes and people can watch them and yeah, for inspiration for their next for the next year.

[00:25:09] **Mark:** Okay. So if there's one piece of advice that you can give instructional designers and eager developers about game fine training programs, what would it be?

[00:25:22] **Marie-Jo:** So many I would say, and you can also pick street, but thank you. But like I said before, a little can go a long way.

[00:25:28] Don't fall into the trap of thinking that, oh my God, I need to get everything right. And I need to GAM a five from my whole thing from a to Z. So that's the first thing is a little can go a long way. The most important thing I would say. Find the game in your content, that is the design a game around your content, or choose a game that is very close in structured to your content that is very appropriate to your content.

[00:25:52] One of the things I learned the hard way was I used to go and see clients and show them examples of games that we've made in the past. And they would pick a game and then they would say, I want my, I want this game for my content and it didn't work together. Don't do that. yeah.

[00:26:06] **Mark:** That's something, what you told earlier then you're putting the content into the game instead of the other way around.

[00:26:11] **Marie-Jo:** Yeah. You're squeezing the content into the game. So don't do that really that when picking game mechanics, the most important thing, if you want it to be effective is to. And engaging is to make sure that it's related to your content because that's one thing that I've noticed also is the engagement and fun and effectiveness are the same thing.

[00:26:31] When you're talking about adult learners, people don't want to just be given some fun in their training. They wanna understand why this fun is going to actually be useful to them. They don't wanna waste their. Just having fun. They're but they're very happy if the fun is productive and they can see that they're actually progressing and it's actually relevant to them.

[00:26:50] They're gonna get engaged if they feel it's effective and it's, and if they are engaged, then it's going to be more effective. They're gonna pay more attention. So it's actually a virtuous cycle between engagement and

effectiveness. So very much very important to make sure that your game fits your content.

[00:27:06] and another trap that I see people fall into a lot is falling into the trap of not game first but format first. So they'll say we wanna make a VR game about X, or we wanna make an AR game about Y why VR? How is that gonna help people learn this content? These people learn this content specifically.

[00:27:25] And if it is that's fine. We've made VR games where, we're teaching people how to perform surgery. And you needed to be able to move things around in 3d space. So it makes sense to use VR there, but to start with graphics first or with tech first, I think might lead to bad decisions down the road.

[00:27:45] Because again, you're gonna spend a lot of budget on your graphics. When it's not necessarily, what's going to be most impactful, always think about what's under the hood and how you're organizing your challenges. I feel like that wasn't very coherent

[00:28:01] **Mark:** so I think it was and a good example, what you said about AR and VR. It's a good idea. If you want to teach some surgery or automechanics how they have to revision a motor, but for our compliance, of course you don't necessarily need ER or VR, which can incorporate other.

[00:28:23] **Marie-Jo:** Yeah. Or maybe you do for I, I for compliance, but really is it necessary don't think about the format first that's for sure.

[00:28:29] **Mark:** Yeah. Okay. Yeah. Great. Yeah. And as a last question I saw you have also an online course about gamification therefore, which people is the course suitable

[00:28:39] **Marie-Jo:** The course is for e-learning designers who are looking to go beyond traditional training and make training that's more fresh and innovative, but typically people who join the course are e-learning designers who crave step by step method some sort of framework that they can go back to and that they can they can.

[00:28:59] To figure out what the game mechanics are gonna be that are gonna be the most effective for their audience and their content. That way, whatever fun and engagement they put into the course will actually accelerate learners towards towards learning objective. That's why I called it an effective gamification framework.

[00:29:15] Not. Make your training fun. though fun is a great side effect. And it's the tool we use. It is not the end goal. So no, it's, the fun is not the first thing, but it's you have to come. Yeah. As of what you said to side effect. Yeah. As again, people, if they're interested after watching our interview are still apply for your online course.

[00:29:35] Oh, of course they can apply. Just go to the website and book a call. Okay. Yeah. What I said I will put the website of MEO in the in the video description and also in the notes of this video. So people can find a link to your your website and if they're interested, they they can book a call.

[00:29:51] Me Jo. I want to thank you for this interview. I think you have a lot of give offer a lot of great tips to incorporate gamify elements of GA elements in your next year. Course. Thank you for having me. Really enjoy talking about this stuff. Great. I hope the knowledge that Mary Jo shared with us was useful to you and gave you inspiration to start with gamification in your next learning course.

[00:30:18] All the links that Mary Jo and I mentioned in this video are linked down in the description of this video. Here. You can also find Mary Jo's. And more information about our effective gamification program. You can leave a comment below this video, if you have any questions about this topic. And do you want to know more, then you can watch this video met Marlo's brokers about how to create escape room in articulate storyline.

[00:30:43] Thanks for watching and feel free to hit the light button below. And don't forget to hit the subscribe button. So you won't miss any of my upcoming videos.