

SKILLAGENTS.COM INTERVIEWS WITH SKILLAGENTS

HOW GAMIFICATION RESHAPES LEARNING



“So when you’re designing, keep in mind that people need to be made aware of how they’re doing.”

— ANDRZEJ MARCZEWSKI

“I think with learning, one of the really key things is that ideal progression and being able to ‘level up’ as you learn more.”

— ANDRZEJ MARCZEWSKI

Selected Links from the Interview

Gamification Terms Introduced

- [User Types](#)
- [Virtual Economy](#)
- [Sandbox](#) (aka Open World)
- [The Player's Journey](#)
- [Theory of Flow](#)

Games and Gamified Systems Mentioned

- [Call of Duty](#)
- [Duolingo](#)
- [Civilization](#)
- [Zynga](#)
- [Foldit](#)
- [Nanocrafter](#)
- [Far Cry 3](#)
- [Growth Engineering](#)
- [StackExchange](#)
- [Khan Academy](#)
- [FourSquare](#)
- [Waze](#)

People Mentioned

- [Gabe Zichermann](#)
- [Amy Jo Kim](#)
- [Kris Duggan](#)
- [Jane McGonigal](#)
- [Richard Bartle](#)
- [Brian Burke](#)
- [Mihaly Csikszentmihalyi](#)

Books, Articles, and Presentations

- [Gamification of a Career](#) - Youtube Presentation
- [Flow](#) - Book
- [If you don't love games, step away from gamification](#) - Marczewski's blog post

Connect with Andrzej Marczewski

- Gamefied.co.uk
- [Yet Another Review Site](http://YetAnotherReviewSite.com)
- [Gamification: A Simple Introduction](#) - Book
- Twitter [@daverage](https://twitter.com/daverage)

Anna: Well, hi there. Nice to see you.

Andrzej: Hello.

Anna: Okay. All right, so I'm going to get us started. Welcome. Andrzej Marczewski first started as a web developer over a decade ago and his passion for gaming led him to create [Yet Another Review Site](http://YetAnotherReviewSite.com) which is a UK-based website focused on gaming news and reviews. For the past few years, he has written every week about gamification at Gamefied.co.uk and Andrzej is the author of [Gamification: A Simple Introduction](#). He has been a speaker at one of the largest gamification conferences, *Gamification World Congress*. He has talked about the gamification of a career, a presentation about what games can teach us about learning and progress in our careers and this year his presentation is focused on [User Types](#) and Player Types in gamification which I hope he can explain to us in the course of our interview. Welcome, Andrzej.

Andrzej: I thank you.

Anna: Of course, you get this a lot. You must. What is gamification?

Andrzej: It's different things to different people. For me, it's "The process of making things more game-like." If you get me on another day, it might be "Pervasive user-centric design." but the one I tend to stick with and the one that seems to cover the best bases is *making things more game-like*.

Anna: Okay. And so is gamification more appropriate for some audiences or learners than others?

Andrzej: No. As far as I'm concerned, all learning is a game so you can use game mechanics and game ideas in pretty much any kind of learning. There are certain

business applications that might not do it, but for learning I think it's pretty fair game.

Anna: Awesome. I guess it sounds like gamification can be applied anywhere, like you don't think there's a place where we should actually avoid it?

Andrzej: I think it comes down to some general sense and common sense. I remember asking [Gabe Zichermann](#) many years ago, is there anything he wouldn't gamify and he said, "Probably a funeral."

Anna: Oh! That's good.

Andrzej: So there are certain places where the appropriateness is, but you could always gamify the funeral parlor's HR system.

Anna: Wow, you're really into implementing this thing. That's awesome, I think. I don't know. Just don't set up the funeral stuff.

Andrzej: It could be weird.

Anna: Yeah. Can you explain game elements and some of the most common game elements that can be used in the development of learning games because our audience is very novice at this?

Andrzej: Okay. So the things you'll see commonly when you talk about game elements and game mechanics are things like points, badges and leaderboards.¹ That's kind of the real common stuff that's out there. But actually, it can be anything that games take for granted, so: levels, progression, experience, powering up. That kind of stuff. I think with learning, one of the really key things is that *ideal progression* and being able to "level up" as you learn more. They're kind of things you start seeing in education. It can be anything from a progress bar to a full [Virtual Economy](#).

Anna: So I guess it just depends on how complex you want to make it.

Andrzej: Yeah, and what's relevant to what you're doing as well, because sometimes when you look at gamification, if you look at the broader picture it can be anything just from making things look a little bit more game-like. So, making things look more appealing, easier to get into, and a bit more fun and as I said, all

¹ For more on "Game Mechanics" read <http://www.gamified.co.uk/2013/01/14/game-mechanics-in-gamification/>

the way up to full Virtual Economies (and kind of almost full games at some stage). It just comes down to what's relevant to your end user so that you get the best results for them.

Anna: So, if I already have existing learning or a course, can I simply add game elements on top or do I have to start from scratch?

Andrzej: You can but you're not likely to get massive results on it.

Anna: Okay.

Andrzej: This is actually one of your questions later on, I think, what are the common mistakes. But one of the common mistakes is doing just that, saying, "Here's all my stuff, I'm going to put points, badges and leaderboards on this and everyone is going to engage, it's going to be great fun." When actually, it's not. It's sort of one or two people going, "Oh, that's quite nice." and then get bored.

If you've got good learning materials already, rather than trying to add or sort of bolt on, as I say, virtual economies almost, I would say create systems where there's a real sense of progression. So, if you've got good materials already, you can just put them into a system where you can get from A to B but you've got to get good at B before you can get to C. Or you can put a system in where you can jump around and learn your own way. So, if there are bits of it you don't need, you can always use a "[Sandbox](#)" idea in a game, you just go where you want to but there is an overall theme and arc to what you're supposed to doing.²

Anna: Okay.

Andrzej: So yes, you can with these materials but often it's best to start with the idea you're going to gamify from the very beginning if you can.

Anna: So it seems like if your learning already included a mastery type of setup where there's a specific progression of topics, that's when you can actually start implementing it.

Andrzej: That's a good time to do it. It makes life easier, knowing that there is this level of mastery. You've seen the player journey stuff where you're—it's an Amy Jo Kim—

² A sandbox style game is any game where you can choose to not further the main storyline at will.

Anna: No.

Andrzej: Okay, so I'll step backwards. So, [Amy Jo Kim](#) who's a very well-known game designer. She has this thing called [The Player's Journey](#) and it starts off with *onboarding*—so getting people into the system. Then it moves into *habit building*—so getting people used to how the system works, getting them involved, and getting them engaged, and then moves onto *mastery*. So in *The Player's Journey*, you go into the game, you start off with tutorial level. Then you get into—in [Call of Duty](#)—say you begin shooting things until you're really good at shooting things and eventually you get the big boss at the end. That's kind of your journey. That's how learners tend to be. They come into something, they need to understand it, then they need to practice it. Then when they're really good at doing things, they move onto the next thing.

Anna: Cool. I like it when they've hit the big boss.

Andrzej: Yeah, “Boss battles”.

Anna: Okay. Can gamification be a distraction to the learning process and I'm assuming this can be done if I did it wrong. Can it be a distraction?

Andrzej: Absolutely. A really good example is when you've just put like points in. So, every time you do something you get a point. What you can get is people just playing to get the points. They aren't interested in learning anymore. They aren't interested in what they're supposed to be doing. What they're actually doing is just going there collecting things. So they're not learning anything. They're just going through the motions.

Especially the competitions and prizes. Prizes are always the killer with these systems because—*especially enterprise gamification fall for this quite regularly*—they'll have a really good system then they'll say there's an iPad if you get the most points. So everyone just tries to get the most points. They don't care about what they're doing so it can be a distraction.

And the other thing that can be a distraction is when you, and I've seen this, a lot of people say, “I've gamified something.” What they've done is they've made it look animated. They've put fun little graphics in and they've put little characters in. And I have done one where it should have been maybe a ten-minute reading, ten-minute video, ten-minute test at the end. But because I had to watch this animation

between everything I did—and it was this little chap building something. What was supposed to be half an hour took me nearly an hour because I couldn't skip this animation. So not only was it distracting, it was annoying.

So yeah, some people would just play the game. That's what they want to do, and if you give them a game, they'll play the game. Other times, it could be the way that it's designed. It doesn't fit in with what the actual needs are.

Anna: Okay. Wow, what you just said, even just adding the extra animation and I see that as well in my world.

Andrzej: Skip buttons, that's what you need, "Skip".

Anna: Yeah, every day. In life.

Andrzej: Yeah, true true.

Anna: So how do we begin designing gaming for desired outcomes instead of just for fun or variety or that kind of distraction? You explored other ways that games can be used in a workplace in your talk, the [Gamification of a Career](#). Can you tell us a little bit more about that?

Andrzej: Yeah, the Gamification of a Career, and I had to watch the video back just to remind myself of what I actually said. The way I was looking at it was you could map a career as a game board. So rather than when you're starting work—and it's the same in education—when you start you're kind of nothing. You have no idea what's actually happening and then at the end of the year you're told how you did. So you start from nowhere and then you're expected to do stuff for a year and then at the end of it, you're told how well you've done.

The big thing for me was that actually that needs to be broken up. You can't just expect people to go a whole year and not know what they've done. And as I said in the talk, in a game, if that was Mario, you've saved the princess and the year later you get told you completed it. There's no way of understanding your progress.

So when you're designing, keep in mind that people need to be made aware of how they're doing. People like to understand where they are. They don't need to be congratulated for it. They just need to know what it is. With games, the way they do this is they have your level, then you have kind of an "area map" that shows you the bits that you're coming to next, then it gives you the "world view" so it shows you

everything that can happen—or as much as you need them to see. So there's always this idea that I know if I get in here, there's something else coming and I know what it is and I know how I can be prepared for it. That's kind of where that original talk focused. It was just this idea of breaking stuff down, breaking feedback down more regularly.

In school, my daughter's seven so she's going through junior school at the moment. They're tested every week on things and they always know where they are and how they're progressing. I think that's really important. I think that's one of the biggest things that games give us, this idea that if you know where you're going then you've got some idea of how to get there, and why you want to get there.

So when you're starting it, make sure that you can give them an idea of what's coming next, and why it's important to them. And that's the other big thing. It's got to be something that they find important. You have to make it relevant. In business, you have an ethics course and everyone has to do an ethics course but actually what we don't really say is *why they have to do the ethics course*. You get a little bit at the beginning maybe if you're lucky, say, if you don't do this, you could get sued for millions. "How does that affect me?" Actually, it means you could go to jail because you did it. Suddenly, "Oh that's quite relevant to me." So as well as understanding sort of *what you're gamifying*—I'll break it down into *what you're gamifying*, *who you're gamifying it for*, and *why you're doing it*. People often forget "why". They just say, "We want to make it a game."... But why?

Anna: Yes, and actually compliance is a big topic in the forums where I've been visiting. It's all how do we gamify compliance and nobody's talking about how do we make it relevant? I like that point. It's huge. Okay, there's a lesson learned for a lot of people. Are there topics or learning materials that are actually harder to gamify than others? Are there topics which you would find very impossible to gamify, other than the funeral parlor?

Andrzej: Hahaha. If we bring it back to education rather than death, I suppose. I was thinking about this. I read the questions last night and had a little think about this. I can't think of anything that couldn't be gamified. There are things that are easier to gamify. So, math is real easy to gamify because as far as I'm concerned Math is a game anyway—it is, it's logic puzzles.

I think English is hard or languages are quite hard. Now [DuoLingo](#) does really well with this just by breaking things down but I think that there are certain ones where it's almost pure memory. If it's understanding, that's one thing. You can build a game around understanding something. I think with ones where it's just working off memory like History as well is another difficult one. Now a lot of people they taught their children History playing [Civilization](#). So, whilst it's may be difficult to gamify memorizing something, you can make that memorization fun to do. So in Civilization, you're creating worlds and kind of learning about world leaders and history through the game. So, there are definitely things that are hard. Anything where you've got to just basically memorize stuff is always slightly more difficult because there's no way of almost testing that knowledge without just saying, "Can you remember this date?"

Anna: Yes. Do you think that maybe the only factor might be, as far as making it difficult, would be if you really didn't know your audience very well?

Andrzej: Oh yeah, that's another big one. Actually, you go back to that "animations thing" again because some people might find that fun but actually for the majority of people in the business setting, that's a big turn off to them. That's not really relevant. Again, it comes down to relevancy. That isn't the sort of thing that gets them going, which is why I started with [User Types](#) originally, was to get some understanding why certain things worked for some people and don't work for others and how you can balance it.

Anna: Most organizations don't employ a full time game designer so how could somebody like me introduce game design or gamification to a learning project? Is there a way to incorporate gamification in a course the *right way*?

Andrzej: Yes. It's one of these things where, you can always have a go at it. And I was speaking—a couple years ago—I spoke to [Kris Duggan](#) from Badgeville, and one of his comments was: If you add something, it's better than doing nothing. He was talking about adding leaderboards to something. And, he said you might only engage with 10% of the people. That's 10% more than you have before. As long as you don't alienate the other 90%.

So, I think you can definitely have a go at it. If you've got materials already and you've got something set up already, you can just look at the idea of giving people simple virtual rewards and stuff—as long as those rewards have meaning to them.

So it's not, *you clicked a button reward*; it's *you have remembered the last three things Shakespeare wrote*. Whatever it is, but it's something that has meaning to them, it was a real achievement for them to get and it sits on a permanent records somewhere. It's not just a badge that when they finish the course, no one ever sees it again. It's something that actually has value to them. I always say if you're doing this in your company especially, if someone achieves something it needs to actually go towards their review. It's got to be part of their overall yearly assessment. There's no point giving it to them. There's no point of having a virtual badge on Twitter that has no value.

So you can go about it that way. You can have that almost bolt on side of things as long as you think about it quite carefully. You can always get platforms that do this. [Growth Engineering](#) is one that I've seen which their whole learning platform is gamified. It doesn't go much further than the leaderboards and points and badges but it's built in from the beginning so all the course materials when you do things give achievements to certain things.

So you just start thinking about—as you're building materials—how that can link in to an overall system. If somebody does something particularly extraordinary in one course, it's registered in socially—they're mentioned for it. That's another thing, being social. Get the social side of things right for them.

Anna: Okay, so when you're saying things like social, what do you mean?

Andrzej: When I was learning many, many years ago when I was at school, one of the big things we had is—I had the old Harry Potter “house system”. It was an all-boys school run by priests and we had four houses. I was in “Owls”, and everything I did at the school got me points or negative points, depending on what you did. So as a team, all through the years everyone was in one of these teams—just like Harry Potter—and at the end of the year, your house wanted to be the best, wanted to have the most points. So there's kind of a self-social regulation where if somebody wasn't pulling their weight, the other students might have a gentle word with them if they were continually doing something wrong... I say “gentle words”.

Anna: Boy's school.

Andrzej: Yeah, absolutely. Now, obviously you can't necessarily bring that forward into adult life. You can't have "gentle words" with people in the back of the bike shed in middle school—in the adult world.

Anna: You might.

Andrzej: You might but it has more ramifications in adult life.

Anna: That's true.

Andrzej: But the social aspect is really important because you're not on your own. Even if you did virtual learning, you're doing a MOOC or something you're still with other people. There are other people there. And I think what people need to remember is that everyone is good at something and can help somebody else. So if you're making the social aspect of learning, you're looking at creating the communities that supports itself where students are willing to help other students and can sort of self-regulate how people are doing in that course. That certainly can be really, really powerful.

Anna: But it almost seems like when you're doing that, the way you're designing it, you'd have to consider what you're measuring as well because it can't just be the achievement parts. There has to be several elements where a variety of individuals can contribute or gain value, right?

Andrzej: Yeah, so if you're looking at making a fully social system, as you say not just making it an achievement to the individual, you can measure where people have helped out so if somebody helps then the person they've helped can voluntarily reward them. That sort of thing. And do you remember the old forums where you have the "kudos button". So, if somebody helped you, give them "kudos". It's very simple but actually quite powerful because not only does it make the person who have received the kudos feel good about themselves, actually the people who've got the most kudos are the ones you want to go and ask for help because you know they will help you. So it gives them this level of recognition and that's how the [StackExchange](#) works. People help, they're then given points for helping, and actually everyone can then see. If I go to (the StackExchange) javascript forum... X, Y or Z has got the most points so he's probably the best person to ask for help.

Anna: And it's also a great way for you to give appreciation and feel good recognizing somebody else. I love that. I love that approach because then it isn't left to one person to dispense. It's the community reinforcing itself.

Andrzej: Absolutely. Exactly. You count on the community rather than just the lecturer at the end of the year saying why you've got an A, you've got a B. Actually the whole community can say, "Well actually, you were very helpful towards me so I think you've done well." If you can then build that into the overall score at the end, that's even better.

Anna: Cool. How would I assess a game for how effective it is and its potential to help learning? When and how would I go about testing and validating a learning game?

Andrzej: From the moment you have something that you can use. As soon as you have something that can be played, say if you're looking to design a serious game, so rather than a gamified system, you're looking at creating a game that teaches something.

Anna: Yes.

Andrzej: As with any game, you start testing as soon as you possibly can. If you look at video games now, a lot of them release their alphas years before the game comes out because they want to make sure that every single part of the game as they develop it is balanced the way their users want it balanced in a way that it gives the most value to the end users.

In education, there's no difference. If you're creating a serious game to help with something, you need to have people who are your target audience working with you to test them to make sure it actually does add value, it doesn't distract, it doesn't make it too hard to learn it, it doesn't sort of make it a longer process to learn it, and that somewhere down the line it's actually enjoyable to do as well. That is quite important with serious games. The serious games moniker says, "It's serious it's not fun." But actually if it's not fun, no one's going to play.

Anna: So it seems like you also need to have—I like this idea of obviously constant iteration, getting user feedback and then testing it with users. During your talk you had that point about gamifying the career and then you had this little board. Would you start almost at the very first step or a couple of steps in that board, those small

wins to see if people are engaging with just the first small wins, like right away you'd put it out?

Andrzej: Absolutely. With that board, the first few steps are the first few days in work so it's the *onboarding phase* and really that's the most critical thing of the entire game. If you don't get somebody into the system quickly and understand how to play it, then they aren't going to engage. Again, you go back to games. When I was young, you had to read a book to get to play it. There were no tutorials. You read the book, you waited half an hour for it to load then you played it, and had to reference the manual. Whereas nowadays when you'd go into these, it teaches you to play by playing. So, this is me, press this, and you'll jump—now jump over this—shoot this.

If that doesn't catch my attention really quickly, I stop playing. Because there are other things I can be doing. So those first few steps, you have to nail them to get people in the system and skilled up enough to be able to do the rest of what they need to do before the next big jump in skill levels. So yeah, definitely you start, well, right at the beginning. The mistake a lot of people make is they start at the end. They have the whole thing and they go, "Right. Now what? Let's just throw it at people and see what happens" And they aren't measuring it properly.

When you look at a company like [Zynga](#) when they have games like Farmville and things like that, they can measure everything you did. They can measure every single step of every single move you make during the game. They can see where people are struggling and they can rebalance exactly where they're struggling. Now I've heard game developers talk about, "Level 15 is really difficult. People kept falling over so we had to rebalance this microsecond of time in the game and make it so somebody may flow through that section rather quickly." So you've got to be able to have those metrics to see where people fall over and how you can help them back up again.

Anna: So how do you suggest somebody who's developing simply an e-learning module and their data might be that somebody stayed on a page longer, what kind of data would be very important? Are you measuring boredom? How would you do that?

Andrzej: Ha. If you could measure boredom that would be wonderful.

Anna: Oh, so it's not a metric? Hahaha.

Andrzej: I don't think it is. No, though I'd like to get a measure of that. If you had the camera on the whole time, you could probably see that. No, I think if you're doing just a simple standalone module, so we go back to our ethics course, there are lots of things you can do to make that standalone module feel better. You can make it more game-like. You can make the whole thing into a video game. Now, if you're just trying to measure things on a standard module, the way they tend to work is: you have some reading material, you have a video, and then you have a quiz. Then maybe have three rounds of that, and then at the end of it, a full knowledge test. So if you're going to stick with that, you're just going to see how people go through to that. The first thing you measure is: Have people stayed on the first page long enough to read it? Or do they just hitting skip as soon as they possibly can. That's the very first thing you're going to look at. If somebody's on that first page, I've got three paragraphs, it's going to take maybe a minimum of 30 seconds to read. If everybody's jumping off it on five [seconds], I've not captured them. They're not looking at it. There's something wrong with that page.

On the video, same thing. Are people clicking on the video and watching it or are they skipping?

And if it's possible—and you can do it in some browsers for instance—when you press Play, are they staying on the page or are they skipping off and browsing something else? So if you can measure that, you can measure whether or not you've actually engaged with them. Then obviously the test is easy. If people are getting your tests wrong, they're obviously not learning anything. They're not looking at it as a serious problem.

So within the first three steps, you've got three big things you can measure.

If they're skipping straight from the first page, why are they skipping? Is it because this is the third time they've gone through the course and they have to just quickly get to the end? Is it a rerun? Did they go through the first three bits absolutely fine and knew the answers, and it's actually step 7 that struck them, they had to redo it?

Or is it just the first page is so boring? So there's a boring metric.

They can't stay on it. There's nothing there for me to engage with. They aren't interested in text. It's written really badly. You've outsourced it to outer Mongolia,

and the English is terrible, or whatever it is. So you can measure that quite easily and you don't have to do anything clever with that to measure it. You just need to be able to time certain things and at the end of it see if they've actually retained anything.

Anna: Okay. Do you need to play games to design good games for other people?

Andrzej: That's a very nice question. I like this one. Personally, I think yes. Now it splits the gamification world, this one. There are some people who think gamification is so far removed from games that you don't have to be a game designer and in fact game designers would interfere, because they'd want to make *this* a game when it's *not really* a game. I think, I wrote a blog years ago saying, "[if you don't love games, step away from gamification.](#)"

It's like cars. If you don't like cars, why design them?

If you don't love something, how can you really be good at this? Technically, you could be amazing at it. Every step of the way technically, should work but if you don't actually love what you're doing, you don't understand the people you're doing it for, then you're always going to be missing the heart and soul of it. And I think a lot of gamification misses that. It misses the heart of game. I think [Jane McGonigal](#) said something along the lines of, "A lot of things have the bells and whistles of games, but don't have the heart." I think that's really key. I think you don't have to be a game designer. But if you don't understand what makes games enjoyable (so you don't play them), I think you're always going to struggle. You're never going to be as good as somebody who loves it.

Anna: So do you think that as somebody who plays games and enjoys them for a certain reason, would it maybe taint your ability to perceive why other people are playing the same game that you are? Can you make assumptions about why you're enjoying it?

Andrzej: No ... Hmm...

Anna: Sorry.

Andrzej: No, no, no, no it's a good one. People are different. And I did this thing a while back, a survey on fun. And I basically asked one question, "What do you find fun?" and from the back of that I've had actually something like 21 different core

themes that people find enjoyable and describe as fun. And that's everything from watching other people suffer. I think it's "schadenfreude" or something like that. It's got real name. All the way up to "family", you know, enjoying watching their children. And everything in between.

So there's a vast array of things people find fun. You can make some assumptions on what people might at least engage with. So, a lot of people are sociable. They are socializers. So, you can just assume that a good percentage will engage in something that involves social connection. You can't assume people will engage in things which involve winning. Because there's a gender split well. Competition works really well with men. And this is not a sexist thing—this is just a thing—people are seeing at the moment. Women are less interested in competing with each other. They would rather work together to achieve an outcome whereas when you look at competition, most competitive gamers are men.

Now, the game industry is getting a kicking at the moment for its gender split. And a lot of it is down to the fact that they just don't want—it's this method, "Girls are icky, we don't want them to play our games." I don't know what it is. It's really strange. And I've felt it.

Anna: The club. The club.

Andrzej: Yeah, exactly. It's the boy's club. But competition doesn't work. I don't like competing, for instance. I'm not interested in competition. I'm not interested in being top of the leaderboard. I'm interested in learning and being able to help other people learn. So, I split people into six vague groups that they kind of morph around. [Richard Bartle](#) split them of four and eight. [Amy Jo Kim](#) has groups of four. So you can make guesses. But just because you enjoy something, I enjoy [Call of Duty](#), it doesn't mean you're going to enjoy Call of Duty so you have to be aware of that. And yes, if I like a particular type of game, I might find it difficult to understand why you don't. So you have to broaden your mind a little bit and play things—just like reading, you have to read things that aren't really things you're interested in that broaden your mind a bit.

Anna: So how would I go about even distinguishing what kinds of people are in my organization before I design my game? What if it is mostly women and I want to put in a leaderboard and then it flops?

Andrzej: Well, you could survey them. That's one thing. Some people actually like to do surveys, so you can send out a survey which basically tests whether or not they're into competition, collaboration, they like games, they don't like games, they like leaderboards. So you can try and do that. It's like basic psychometric testing. It has varied hit rates.

Now, with my [User Types](#), I have a survey, which assesses what kind of user you'll likely to be in a gamified system. And I quickly realized actually what it tested was what user type you were *when you were doing a survey* and I got lots...

Anna: Haha. I just got that. I was like oh yes, there are those people. Okay, I get it.

Andrzej: Yeah. So when I'm doing a survey that was sent to me by social media, funnily enough, I come out as a "socializer". Because I'm on social media which kinds of gives you a slightly head start, and also I'm possibly an "achiever". And lots of achievers come through because it went through lots of universities, and you'd hope that people in universities tended to be achievers.

So, the survey can be useful. It can give you some kind of vague understanding of who your target audience is.

Research into what works for different genders and different age groups helps, but really it comes down to trial and error. In terms daft but you can do everything you want. You do all these surveys. You can give it to a group of people and they'll completely go against it because you've changed the context within the questions.

So, I can ask you questions in a survey. I can then ask you the same questions in a game and because the context where the questions came from is different, your way of doing it might be different. And people change through the course or game. You might go in—going through Bartle's Types—you go in as a "Killer" because you're interested in beating everybody and just destroying everything. And actually six months later, you might end up being a "Socializer" because you've done that, you're bored of that, you've done something else, and now you're there because your friends are in there.

So the way they answer questions about the game at the *beginning*, and at the *end* of their journey, are different. So you've got to be aware that the context that you're seeing is different from the context they see and it's different to how it will be in a few weeks' time. The leaderboard might be great fun for a month, and then after a

month people are like, “Well, I’ve been to the top, what’s there now? Where do I go from the top?” Do I create another leaderboard for the top ten so the top ten can compete and the bottom ten can compete? So, it comes down to a bit of research, a bit of vague understanding of your groups, and then testing things and testing on small groups of people, and iterating on that.

Anna: Yeah, actually when I was talking to Timothy Wilson, he is the author of *Redirect*, social psychologist, he was like “Everything is an experiment.” And he’s just scientific method, control groups—he was just really reinforcing that. I think almost there’s not enough of that. We apply a lot of things without gathering feedback until the very last moment or we launch.

Andrzej: Yeah, we have this thing of learning because you failed. I think one of the messages that games give us is that you can fail and it’s fine. You’ve just got to get back up and try again. So watching my daughter play games is great because she’ll constantly fail at jumping over the big monster but she’ll keep trying because it’s fun to do and she really wants to get that sense of achievement from beating the monster. She just needs to try and try and try. It’s this idea of fail and start again quickly. Don’t fail and fester on that. If you’re trying something within the group, especially when you’re in the testing phase, as long as the group you’re working with are aware that this is an experiment and that you’re not wasting vast quantities of money on it as well (another good thing), then you’ve got a chance to iterate and keep trying.

Anna: So who does gamification well in the workplace or the learning space? Any specific examples?

Andrzej: In the workspace, there are fewer than I’d hope, if I’m honest. There aren’t many big companies who are talking about doing great things with gamification. There are little pockets where you think, “Oh, that’s quite nice.” Education is better. So, [Growth Engineering](#), their platform I find, well, I hadn’t heard of them until a few months ago, and they showed some this platform and said, “We think we do gamification, but we’re not sure?” And we’re looking at it going, “Yeah, that’s really good.” Haha. The way you got the users going through your system is actually really mature, and they haven’t even realized that they’re doing gamification. They just kind of evolved it and tried things and it worked. And if it didn’t work, they got rid of it. So that was a really good example.

I love [DuoLingo](#). I think their education platform—and I think they just nail it absolutely. [Khan Academy](#) I think do a really good job. It's very light gamification but because you're able to go and then learn at your own pace, I think it's brilliant. They really have nailed that.

Anna: And they really did that revamp. That was just fairly recent where they just really introduced that Mastery concept.

Andrzej: Yeah, absolutely.

Anna: And it's solid. I love it.

Andrzej: I used to love [FourSquare](#). I thought... people say, it's very, very limited gamification... but they got millions of people to play their game. And I think you can't—

Anna: I was one of them

Andrzej: Yeah, I was myself for a while but I got bored. I got bored. Because they didn't change the game and they deliberately didn't because they were investing their time in building these two other apps. But I think you can't call it to failure. I think they got the onboarding absolutely spot on. What they forgot was the end game.

Anna: Yes!

Andrzej: There was nothing left once you won all the badges. It didn't become really that *social*. Another good examples is [Waze](#). Actually, have you ever seen Waze?

Anna: No.

Andrzej: It's a gamified crowdsourced GPS system. So, when you're driving—a passenger I assume that's why you're driving—the passenger, when it comes to a traffic jam, they can say, “We're in a jam.” And they get given kudos for it, and other people can thank them for it, because it immediately comes up on the map as being a traffic jam. So other people who are using Waze can instantly see what's coming up. Essentially it's a crowdsourcing traffic “venter” (as in vent).

Anna: Very cool.

Andrzej: Or if a road's closed, you can tell them so that the system can then update and give people redirection. So, I think that's really well done because it's a very social thing. If you're a passenger, you can find somebody else who's driving the same road as you to chat to. Just little things like that which I think are really good fun and actually works very well.

Anna: And curbing that isolation. That's awesome.

Andrzej: Yeah, so there are good examples. A project, [Foldit](#), where they were crowdsourcing solving protein folding. If you've ever heard of this? Have you heard of it?

Anna: I have, yes.

Andrzej: I think it's a wonderful system. And I think cancer research is a very good sort of same idea but [using a space shooter game](#). I think that works incredibly well.

They've got this game—I'm just trying to think what it's called.³ Essentially, you're flying through space, avoiding obstacles and shooting obstacles and actually what you're doing is you're mapping the dense little genome.

Anna: So why do you think that that's working? Why are people engaging? What do you think some elements there that are actually making it good?

Andrzej: From serious games like [Foldit](#) and the [space one](#) whose name I can't remember—I'll try to find it—they made a game that was actually engaging. The space one is quite fun to play. The puzzle one is actually really interesting because you're having to solve real puzzles. So, from that point of view, it was actually enjoyable to play. Then from the second point of view, you're solving a real world problem. In Foldit, you're helping to cure AIDS with this. With the other one, you're helping to cure cancer. So there's this *real altruism thing* there that actually I'm doing something that's worthwhile. It works for the greater good.

I think going to our education side of things, if you look at corporate responsibility. You engage in corporate responsibility—if you engage in it—usually because you know that you're helping some people. There's a group of people who really do want to save the planet and they're going to engage with your materials because they know that at the end of it they're helping something. For the rest of them, you

³ It's called Nanocrafter. See it here: <http://www.cancerresearchuk.org/support-us/play-to-cure-genes-in-space>

have to break it down into we save or we get money for doing this. So, there are two sides to that.

But then with most of these things it comes down because—with the learning platforms—they make the achievement amplified. So they amplify that good feeling you get from learning a new verb in French. “Yes, I’ve nailed it.” Then they amplify that by giving you something or making and giving you fanfare for it, just saying, “Well done.”

Then they also amplify the fact that you’ve got this course to mastery and you can see what the course is, you can see what’s coming next. They ramp up the difficulty.

If you’ve ever looked at the [Theory of Flow](#), [Mihaly Csikszentmihalyi’s Flow](#).

Anna: Nice pronunciation! Oh yeah! Haha

Andrzej: I practiced that for weeks, but I needed to do a talk. Then during the talk, I forgot how to pronounce it. When you think his Flow, we kind of mess around with Flow in gamification and games. We have a very small version. It just looks at boredom threshold and frustration. But actually if you can consider that if something’s too easy over time people don’t engage. And if something’s too hard, people don’t engage because they then get fed up and frustrated.

A platform like [Khan Academy](#) balances it beautifully. You only get to do things that are harder when you’re ready to do them. Rather than just throwing you straight into it. This is where progress helps. Rather than throwing everything at somebody, they just throw things at them that they know they can do. And that they’ve built the skills up that once they’ve done those, they can do the next bits. So it’s never too hard but it’s always a challenge. And it shouldn’t ever be too easy.

Anna: Last two questions: a lot of the learning that we design in our industry, as far as I’m concerned, starts off with extremely easy challenges. Can that be a de-motivator if something is so simple that you’re being handheld all the way to the end?

Andrzej: If it’s too long, yes. Now we go back to video games. There’s this game called [Far Cry 3](#) and they release this thing, Blood Dragon or something like that which is essentially a mock-up and a “Mickey Take” of all the ‘80’s films and games

from the '80s and kind of modern gaming as well—threw that stuff in there.⁴ It had this onboarding thing where you had to learn how to play the game. And it was as simple as walk forward, press “W” walk forward. And the game would say, “Congratulations, you could walk forwards!” really sarcastically. It was really obvious that it was just taking the piss. And it was, “Press ‘Jump’ and you will jump. Press ‘Run’ and you will run.”

But because it was quite funny, the way it was handling it, actually you just went along with it and you did what you needed to do because you did actually learn how to play even though you probably knew how to do it anyway. It just reinforced it. But very quickly, it went straight into, “I’ve let go of your hand; now you’ve got to go and win by yourself. If there’s anything new that you’re not aware of, I’ll teach you how to do the new thing but then you have to do everything else yourself.” So it kinda held your hand until you could really run, and then it would just chip in every now and again just to say, “Oh, this is something new. *Here ya go.*”

So yeah, absolutely, hold their hand at first, but if you hold the hand all the way through the learning, yeah, it’s going to get boring because they’re not really achieving everything. You can’t spoon-feed everything. They have to do things themselves eventually.

Anna: This is my last question. I think it’s a biggie. There’s a wall being separated between people who are going, “We should not use extrinsic motivation.” (like competition boards) versus “We should reinforce intrinsic motivation.” And it sounds like you’re saying that you can’t be blanket applying it because some people respond to extrinsic motivation and it works on them. So, can you tell us a little bit more about that?

Andrzej: That’s a dangerous quote, Christ! I’ve written reams about this and people, this is kind of *the argument*. Now the way I look at it, and this is my personal view and how I see things work, extrinsic motivation or extrinsic rewards have a place. They especially have a place in the early stages of something. So when I go back to that Flow concept, I mix up Flow and Player Journey to see what you can do it. And the idea was that during the early stages, you reward people for things that aren’t necessarily difficult but just pat them on the back enough to say “Well done, keep going, more stuff is happening.”

⁴ Note: “Mickey Take” is British slang for mocking something ... to make fun of it.

So through your onboarding, you're given these extrinsic pats on the back. When you're through the habit-building phase, when you should really know what you're doing and you're just practicing it and getting better and better, you then trail off. You don't need the rewards as much. They (the player) should be finding *their reason* for being there. Then by the time you're the master of it and you've really nailed all this, you shouldn't need rewards at all. You should be there for that *intrinsic reason*.

Now, the problem is that's really hard to do. Finding someone's reason to be there is quite difficult. Now in education, that reason should be Mastery—to learn. It isn't always. Now I did my degree because I needed to get a degree in my mind. I hated my course. I didn't understand it. I didn't get any satisfaction from it. But I was there because I needed to be there. So I didn't have an intrinsic reason to do my course. It really was extrinsic. I needed that certificate to get a good career. That was how my mind worked. And as such I scraped through. I hated every minute of it. And having done it all again, I would have cemented roads for four years instead. I would have probably gotten more from that in the long run.

So yeah, there is a place for extrinsic rewards. There is a place for leaderboards. There is a place for badges. But if that's all you've got, you're going to only capture people only for a short period of time, which is fine for some things if you're just doing a very short course. If it's a single module and that's all you're going to have to do for six months then absolutely fine. I think personally. They've got to do it.

Say, for instance again, we're going back to our ethics course, you've got to do the course. There isn't an intrinsic reason to do it for most people. If they're in to ethics, then there is. If you can convince them during the course that there is a reason to be interested in it, great. If not, do it because you've got to do it and we'll make it a bit more enjoyable for you. Well, you know, we won't make it painful to do.

If it is a course and it is a long thing and is a yearlong then you cannot just keep giving points and badges. It won't work. They aren't going to engage with that constantly over and over again. And it's difficult to maintain. If you keep having new badges, what value do they have? If come out at the end of the course with 800 badges, what value do they have? So it is that balance, and at some point you do have to get to a point where they're there because they want to be there. And if

they aren't there because they want to be, then really *they* should be considering why are they there? You can't please everyone. You cannot please everyone.

Anna: No, and I like what you said earlier, that trying something is better than nothing and if you engage 10% it's 10 more than before.

Andrzej: Yeah, just don't alienate the other 90%.

Anna: When you say alienate, what do you mean by that?

Andrzej: If you have a leaderboard, for instance, you have 1 winner and if it's a leaderboard of 100, you have 99 losers. So a leaderboard generates a lot of losers. So, if you get the use of it wrong, then what happens is: Yes, you've engaged the 10% who are competitive, but if it's that all you have, then there are 90% who've sat back going, "What's in it for me?"

I love this because this has just happened, this whole thing with Apple giving everyone U2's album. I've got to get in...

Anna: Haha. It's totally cool.

Andrzej: Now, you see, I'm not a U2 fan. I've got nothing against them particularly. But what I have something against is, being given a U2 album is supposed to be—from Apple's point of view—it was a lovely recognition of loyalty to the brand, which is fine except for the fact that I don't like U2. Say 30% of the population of iTunes users like U2, 30% have gone, "Yay! I've got a U2 album, wohoo!" 70% have gone, "Well, that's nice about those guys who like U2, where's my Metallic album?" "Where's the relevant prize or reward for me?" That's how you alienate people. By giving things to people that only a small percentage are actually going to like, and the rest are potentially going to actively dislike. So it's getting that balance. I say balance a lot in this interview.

Anna: Yes, balance and relevance.

Andrzej: Yeah, they're my two favourite words at the moment. Relevance is my favourite at the minute.

Anna: Oh, I thought it was U2. Haha! And I like the idea that you said that really the bad gift, the bad reward can actually be a way to tell somebody you don't really care about them and what they think, the lack of personalization.

Andrzej: Yeah, absolutely. With Apple, it was kind of, this actually proves we aren't in touch with our users anymore. Because no one buys Apple because the products are better *really*. If you look at the iPhone, I've got the iPhone and I've got the iPad, they're not actually—from a technology point of view—better than, in fact they're worse than most other products. But what they “get” is they get how to connect with a human being, the interface feels natural to me, their marketing almost felt humanized, and Steve Jobs was really good at making people buy with their hearts, not with their minds.

Anna: Yes.

Andrzej: And then they throw this [U2] at everybody and it just proves that they're missing Steve Jobs as far as I'm concerned. Because they've just lost touch with what they were good at.

Anna: And they're users.

Andrzej: Exactly. It's like getting an email—I love emails—which have “Dear” and then in brackets “Insert Name.”

Anna: Yes, what a bad—

Andrzej: They're my favourite. Not only are you sending an automated email, you haven't even got my name in your database.

Anna: Do you do that on purpose? Add random names so that you know the autoresponder is going to be “Jack Sparrow.”

Andrzej: Oh no. Because I review games, I get a lot of PR stuff and again you can always tell the ones who've gone through the effort of actually finding out who the game review websites are, and the ones who just bought a database because it does, it comes out as a different colored font, or it's a different font altogether with the mail and the rest of it. The rest of it is kind of one text like, then your company name is in bold and italic. And you just know these are placeholders that they're automatically filling in. That personalization is gone.

Anna: Haha. I have so many of those. Oh well. It lets you know really knowing your audience is so huge. You really can connect quite quickly if you do your homework, I think.

Andrzej: Yeah, absolutely. In education, I think, if you go to an actual sort of in a room, education with a teacher, a good teacher should understand their class within a few days—at most. They should have a vague idea of what people are going to actually enjoy, what engages them. My daughter, she likes Maths. She doesn't like reading so we're trying desperately to find ways in engaging her with reading. She loves games so I started writing her a game where her and sister are on an adventure through a magical kingdom. And it's a text adventure so she's got to read the text but then she's given choices.

I said to her, what do you like more? Do you like the fact that it's got pictures, that it's got you and your sister in it? She said, "No, I like the fact that I can choose where I go next?" So I suddenly realized that actually for her a lot of the problem is, she's got to read the book in a linear way. She has to go from page 1 to page 2 to page 3. So, yeah, I've started writing these games for her, but also on the side I'm looking for adventure game books that are for her age group.

And she loves princesses and she's really, really kind of stereotypical. If they created stereotypes for girls, she hits the majority of them. Except she loves Nerf fights. She loves Nerf guns. And she thinks the pink Nerf guns are rubbish because they're made for girls and that's not good because other ones are made for boys and they're better. Oh, okay. Fine. So yes, it's knowing how to engage that audience. You should be able to get a good idea of that fairly quickly.

Anna: Awesome. Wow, my mind is blown. This was fabulous. I know we're putting out a bunch of stuff and a bunch of blog posts and this is not going to stop. The gamification thing I think is just ramping up.

Andrzej: Oh yeah. It's funny because Gartner have got us—I'm quite happy where we are with Gartner's, the whole hype cycle thing. So, in 2013, we're at the top of their hype cycle and now we're dropping down the cycle. And everyone's going, "Oh, it's going out of fashion." It's like "No", its people are beginning to understand what they can and can't do. I mean Gartner said the same thing, I suppose, it was [Brian Burke](#). He said it's not that it's going out of fashion, it's just that people are understanding its limitations, its benefits, and how to do it properly. And also understanding that it's not easy.

You know, people put millions into games because good games are hard to make. For every good game, look at the failure rate. They say 80% of all gamified systems

will fail. Well, how many good games are there? When you consider the hundreds that are released every year, you only really hear about one or two out of all those hundreds that are actually worth playing. So, an 80% failure rate, that's a 20% success rate. That's great, as far as I'm concerned. I think we're in that, as they say, "The renaissance" kind of thing. We're at that point now where we're getting good at it and we're going to just see better and better things. We might see less of them, but we're going to see better versions of that thing.

Anna: Cool. Good, I'm excited. We have to talk again. We'll talk again after the long tail has pared down a bit and my industry has caught up. Because we're still just scrambling.

Andrzej: Absolutely. I'm more than happy to talk to you. I may try to look less fat the next time. Just looking at my little picture in the corner. It's like GWC.

Anna: Oh please. A camera always adds 15.

Andrzej: At GWC, I saw the video. I've seen it, the preview of the video for my last talk and I'm looking at myself going, "Oh, I need to exercise." That's all I could think.

Anna: Ha... That's every single... You're like a woman. Haha

Andrzej: Oh don't. My parents were told I'd be a girl. I think that they were not that far wrong it seems it seems. Oh, now we're going back to stereotypes again, aren't we?

Anna: Yeah. Seriously, this has been super educational and I really, really appreciate your time. This is awesome.

Andrzej: I'm really happy to do it. Thank you. Sorry, it's taken so long to arrange it.

Anna: No, it's totally fine and what's awesome is that most of the questions came from the people that read our blogs and the members so it's really relevant to them.

Andrzej: Awesome.

Anna: Yeah, thank you.

Andrzej: Excellent. I'm glad. I hope the answers satisfy them.

Anna: They'd better. Haha. Well, thanks so much and have a good afternoon.

Andrzej: Yes, 3:00 in the afternoon for me now. So only a couple of hours of work.

Anna: Awesome. Thank you.

Andrzej: You have a good morning.

Anna: I will. Thank you. All right, take care.

Andrzej: Thank you so much.

Anna: Bye.

Andrzej: Bye-bye.

[END OF INTERVIEW]