Fabian Hofmann (00:00):

In Mr. Hofmann's class, I get to earn points and I get to be a Jedi. I can suspend my disbelief and I'm learning history, but at the same time, I'm traveling through the galaxy.

Eric Cross (00:13):

Welcome to Science Connections. I'm your host, Eric Cross. My guest today is Fabian Hofmann. Fabian is a middle school IB educator, currently teaching seventh grade multimedia design and history at Albert Einstein Academy's middle school here in San Diego, California. He also hosts the podcast Rebel Teacher Alliance, a podcast dedicated to encouraging and supporting teachers to rethink student engagement. Fabian's one of the most innovative teachers that I've ever met. His use of technology and gamification makes learning fun and accessible for our students. And I have firsthand experience with these students because we teach on the same team and have worked alongside each other during my entire career as a teacher. In this episode, we discuss gamification of the classroom, how he approaches grading from an innovator's mindset, and his newest STEM class, Immersive Design, where his students are working with former Disney Imagineers to completely renovate their classroom into an interactive Star Wars-themed learning environment. And now, please enjoy my conversation with my good friend and colleague, Fabian Hofmann. We've worked together for how many years now? How many years have you been at Einstein?

Fabian Hofmann (01:23):

Well, I started when you started, like after you were student teaching, so 2014.

Eric Cross (01:28):

OK, so it's been a while.

Fabian Hofmann (01:30):

Yeah. And then I took two years off and I went to Hawaii. I couldn't handle the pressure. And then I came back. So we've worked together for six years but known each other for eight.

Eric Cross (01:39):

What's your origin story? We're gonna talk about your origin story. I told you.

Fabian Hofmann (01:42):

All right, cool. Right. So when I was a little boy...no. <Laugh>

Eric Cross (01:46):

This podcast is not that long!

Fabian Hofmann (01:49):

So no, I started out, teaching in 2009. I started student teaching in Germany and was teaching history and English. Did this two-year student-teaching program there. And then, when I was done, my wife and I, she's American, we got married and we decided to move to the States. And then I started teaching at a German cultural center called the Goethe-Institut in San Francisco. We lived in the Bay Area. And from there, after a year we moved down to San Diego; I started subbing; I worked for a year at High Tech High. I taught humanities there. And then, after that year, I ended up at Einstein teaching German because that was what was available. I didn't want to teach German. That wasn't like, on the top of my list. But it made sense because I had taught German in San Francisco and it kind of was like, "Well, I can do that, I guess." And then, yeah, and then I went back to—we went to Hawaii for a couple of years and then I came back here to start teaching history. So I've taught like a million things essentially.

Eric Cross (02:52):

And then during that time, what's your evolution been like in the classroom? Kind of like your view of education? And how does that play out in your day-to-day with kids?

Fabian Hofmann (02:59):

So when I started teaching here in the States, I noticed that it's very different. Technology was much further along here than it was in Germany. So when I got here and we had like an iPad cart; I helped setting up the iPad carts. And I worked with the Chromebooks and I was like, holy, holy crap, this is so

cool. Like, kids can like actually do things with this technology. And then, I mean, I love technology. I've had an iPad when it came out and stuff like that. And so I was like, "Oh, so how about we use this in our classroom?" And so I always moved—I moved very quickly to having students create on the iPad. And at first it was like, "Oh, we use the Apple apps and stuff." And then I went to an ed-tech teacher summit here in San Diego and my eyes were like opened to, "Oh my God, there's so much more than just the Apple apps." And ever since then I was like, "OK, we're gonna use this; we're gonna do that." It's just crazy stuff that I thought was cool and that students really seemed to enjoy, because it wasn't like a typical language class; it was more like, "Well, what can we do to create, and how can we somehow still use the language but we are learning coding at the same time, or we are creating something in 3D at the same time?" Like, I was always trying to make it have two angles: the language angle, obviously, and then also the technology angle.

Eric Cross (04:25):

What was it that kept you kind of pushing? 'Cause I remember the beginning in the Classcraft days to where you are now, I feel like you're like light-years ahead of where you started.

Fabian Hofmann (04:37):

So you were actually the one who showed me Classcraft, which is like a gamification portal, kind of off-the-shelf thing that you can subscribe to. It has some free features and it's like a gamification platform where students can create characters. And then these characters go on adventures. That's like their avatar, and they get experience points in the classroom game and stuff happens. You can create, like, adventure paths for them. So if you have an assignment that you want students to do that has different steps, so, that could be an adventure path. That's what I liked about Classcraft, is like this idea of like, "OK, we're taking a game and applying it." But it wasn't enough for me. And so I started developing my own classroom game. I did some reading. I met online with John Meehan, worked with him. I read the book by Michael Matera, Explore Like a Pirate. And so it just broadened my whole world to, or just opened the world of gamification to me.

Eric Cross (05:38):

You present on gamification; you mentor other teachers on gamification. You host a podcast where you talk about it. But for those people who haven't done it or gotten into it or maybe have a perception of it maybe that's not quite accurate, can you talk a little bit about like what gamification is and what it's not?

Fabian Hofmann (05:54):

1. So the biggest difference...we all know game-based learning, because we all do it. We use Quizlet; we use quizzes; we use Gimkit, Blookit, Jeopardy, anything like that. Those are game based. That's game-based learning. So using a game to facilitate learning. Which is great. I love game-based learning too. But the difference is with gamification, in the pure definition of gamification, is that you're using game mechanics and elements and apply them to a non-game setting. A couple of smart educators were like, "Why don't we just do that in our classroom?" And so we borrow these elements, these mechanics, these game mechanics, like getting experience points, and applying them to the classroom. So anything that students do, they earn points. So they turn in an assignment, that gets you a hundred points. They go and do something extra for the class, they get 50 points. Whatever it is, whatever your value is. That's one aspect, like a leaderboard, virtual money, stuff like that that just in reality is not necessary, but you're putting it somewhere where it doesn't exist. And all of a sudden students have this weird shift in their view where it's like, "Well, school is school, but in Mr. Hofmann's class, I get to earn points and I get to be a Jedi and I can suspend my disbelief and I'm learning history, but at the same time I'm like traveling through the galaxy." And it's just amazing how that shift happens just because we're changing the language a little bit.

Eric Cross (07:29):

Yeah. You seem to have like tapped into something that is already kind of in that zeitgeist culture thing. We're gaming and it appeals to—I know it appeals to our students regardless of how they feel about even the subject that's being taught, the fact that they're immersed into this environment where they're taking on this character role and they're part of this bigger narrative. And you've so dynamically constructed this whole storyline and these experiences, and they're learning experiences, like, they're learning, but they're enjoying it in a different way. But I wanted to ask you about something that I really admire that you do, and it's how you grade. And I remember the first time you said this, we were in a parent-teacher conference and we're all talking on Zoom with these parents and we're all sharing our spiel. And you go, I don't grade kids. They grade themselves. Can you talk a little bit about your conferencing with students? The rubric you use like that that, I've really been paying close attention to lately.

Fabian Hofmann (08:24):

Yeah. So, when I was working in Hawaii, I noticed I was teaching English, and grading papers in English is really not fun. Like, that is like my least favorite thing. Some teachers are like, "Yeah, it's grading! Awesome! I can read stuff!" For me, it's like, yes, I like to read stuff, but I—and it was the same in German class. I gave them feedback. Sometimes I would use oral feedback, I would, like, record stuff for

them, and they would listen to it, and then they would work on it. And so I noticed when I'm giving them feedback and its oral feedback, they're more inclined to actually work on the stuff that I was critiquing, versus when I sat down and I wrote something. They would never read it. Or some would, and most of them would not. And so I was like, this sucks. <Laughs> And I encountered this book called Hacking Assessment, because it's such a waste of time, right? You spend so much time, because you wanna do the due diligence. And for those few kids who actually do care, that benefits them. But I want this to benefit everybody. And so I read this book called Hacking Assessment, by Starr Sackstein. And she talks about how she put the onus of grading into the student hands, essentially. And so she did standard-based grading and essentially said, "You know what? Here's the thing. I am not going to grade you anymore. You are going to get a rubric that we are going to dissect and explain and make sure that you understand. And then you sit down and you give yourself a grade based on this rubric." And I was like, "Wow, what? That is....I can do that? And the cool thing about this book is that she covers all the roadblocks that we as teachers have. And she explains, like, she gives examples on what we can do to convince parents, to convince admin, to convince the community, convince other teachers why what we're doing is much, much better for a student than the previous system is. If you think about it, when a student comes into school, they start at a hundred, they start the year at a hundred, and all they're doing is just lose points. And they're just trying to keep up. Right? And it kind of flips this on its head, because not only with the gamification, I'm changing the name of the game, literally, but I'm also now with ungrading, I'm giving them the responsibility and the accountability to really look at their stuff and really be critical about how they're doing. And I taught like normal in my first year in Hawaii when I was teaching English, by me grading everything and turning it and giving it to them. And I used peer grade and I did all that kind of stuff. But in the end, I was always the one responsible for the grade. But then I started to do the ungrading move and I just started to conference with kids and started giving them feedback, with the help of gamification, because there's like a bunch of rubrics you can use to make it more fun. But all of a sudden, kids that in the year before would've failed my class in English, because they were English learners; they were just not into it; they didn't care as much...all of a sudden that flipped completely. I did the exact same content again. We had to write an essay and all of a sudden, the essays were all like, up there, because we sat down, we talked about it, we went through this review process, gave them feedback. In the end, they could say, "Hey, I want this grade. And then I still have the last say. I would say, say, "Yep, sounds good." Or "If you wanna get an A on this, or whatever it was, a 4, then here are the things you still need to do." And because I did that, all of a sudden, the students are like, "Oh, that's all I need to do?" And then they did it and turned it in, and all of a sudden, they got a 4. It's, it's amazing how that the conferencing with students, how that shifted their attitude. And I got to know my students way better than I ever had.

Eric Cross (12:20):

Yeah. That's, that's one of the things that I've noticed. And I watch you get so much more facetime with students having conferences than I do. I find myself grading...and, you know, at our school, it's mastery-based instruction, so students can retake assessments, but you're absolutely right: I give a

grade; they get a score; and some of 'em score lower, but in their minds it's like, OK, I'm done with that. And even though they can retake it, such a small percentage actually do. But the information that I give them in the feedback is often not read. But you're sitting down and having a conversation and really listening and there's so much more of a connection that you have. I just think it's so rich. But the question I have now is how do you make the time for those conversations with those kids in your class?

Fabian Hofmann (13:01):

Yeah, it's definitely a learning curve. Like the first year I did it, it was horrible. Like <laugh>, it cost so much time. Because kids came, because when it was time to grading, because I had not figured it out yet, I had not streamlined it. And I'm still learning. I'm still trying to figure this out and do it even better. But the idea is that you do something, you check in with me really quick. That doesn't have to be like a full-on conference. It's—I walk around or I call them up and say, "Hey, I saw you working on this. How did, how are you doing there? How many—" Like, let's say I use a rubric that gives them crystals for different parts. They write the introduction; they write a bibliography; whatever, so I can bring them up and say, "Hey, how is the bibliography looking?" And they're like, "Oh yeah, I'm missing...like, I only have like one or two sources." And then we say, "OK, so right now you would get two crystals out of three because you have something. When you come back, you get all the crystals." And so that's a gamified aspect again, right? They're coming back to get more crystals, not because they wanna do better necessarily. But because they're like, "Hey, I wanna get those crystals because it gives me points in the game." They are very good about like grading themselves and kind of like, they're really hard on themselves sometimes too. And I have students who are like—

Eric Cross (14:08):

Yeah, they are.

Fabian Hofmann (14:09):

"Well, how can you make sure that people don't just give themselves an eight?" And I'm like, "Because there's a system in place that that does not happen. Like, there is a rubric, and if they cannot back up what they want, then it's not gonna happen. They can write an eight all day long. I'm still the person entering it into the grade book!" <Laugh>

Eric Cross (14:27):

And let me premise this for listeners who don't teach at IB schools, which is probably like most people.

Fabian Hofmann (14:31):

Yeah.

Eric Cross (14:32):

So IB, we teach zero through eight on a rubric system. And seven-eight is kind of like the A, kind of, quote-unquote. I know IB people are probably cringing when I say that, but <laugh>, you know, when you transfer it to like a high school? Seven, eight would be the highest score, you know. Four, five, six. So when we say eight, we're talking about the highest score.

Fabian Hofmann (14:49):

Yeah. And so it's really interesting because I can call them out on stuff, and it's a one-on-one conversation, right? And if, especially if they turn something in that is not great, and they give themselves like a—I don't know, like a C, let's say, or a four, or whatever it is—and they're like, "And you're happy with that?" And then they're standing there and they're like, like, "No...?" <Laugh> And all of a sudden there's a conversation. Where it's like, and then I can be very intentionally like, "Hey man, I know you can do better. I would not—I'm not gonna accept this. I'm gonna push you to turn this in again." And most of them actually sit down and do more. It's a process. It takes a while. It's not pretty in the beginning. But the payout is, so it's incredible. Just like the amount of time that I get to spend with students, like specifically talking to them about things that they still need to work on, celebrating stuff they do, it's incredible. Like the relationships are just so different than what I had years ago.

Eric Cross (15:50):

And you've also created a system where we preach—and schools always talk about this Dweck growth mindset and not having a fixed mindset, but I wonder how many opportunities or how systems are set up that are actually fixed, where it's like one and done, OK, you did this exam and then that's it, but there's no opportunities to grow until the next exam! Which is gonna be....or whatever the assessment is, which is a whole different area of content or different topic or whatever. But here, you're actually able to facilitate this growth mindset and push back if a student says, like, "Well that's—I just got a four," and you can actually pour into them and talk to them. And do you ever hear more about a student's story as to why they were where they're at, as you're having these conferences?

Fabian Hofmann (16:29):

Oh, absolutely. Like for some kids who, who are just like not getting the work done or whatever, there's always something where it's not because they're not smart or because they're lazy. It's like, sometimes, literally they tell you, well, 'cause I ask them, "Hey, can you work on this at home?" Or "Can you come in during lunch, after school, whatever? I'm always here." And then they drop some bombs on you, like, "Hey, my parents, like, divorced. My mom lives in Mexico." 'Cause we live in San Diego. So some students live in Mexico and come to school here in San Diego and they get stuck at the border or, even though they have internet at home, they have to share. It's like kind of what we experienced during the pandemic, where it's like, there's like three kids at home and one computer. Stuff like that. Right? And it's these stories where you're like, first of all, it's very humbling 'cause they're going through stuff that I never had to go through. I mean, my childhood was not amazing, but compared to what they're going through, it's like, "Oh yeah, that exists." And it kind of like puts you in your place a little bit. It's also because of the system that I use. There's no late, really, in my class. Some of the students are like, "I need to subtract points from my grade because I turned it in late." And I'm like, "No, no, no, no, no. The fact that you're doing it is quote-unquote punishment enough 'cause you have to do it outside of class, you have to do it at home; you have to do it during lunch. Like, that is, that is not comfortable. You're still doing it. So why would I punish you by taking a grade away? That doesn't make sense. You got the work done. That's all that matters." I try to be that person that like is understanding. It's still pushing them to do their best and reminding them and harping on them. And with the spark that I threw in there and fanning that flame of them becoming a better student because I'm supporting them. You're supporting them. We're all—our seventh-grade team is incredibly supportive. And then some people might push back, like "That's not preparing them for the real world." This is the real world.

Eric Cross (18:20):

There's a lot of life skills that they're gonna need...but like, they're 12 right now! Or 11 or six, you know, whatever it is! Let's—we can hold off on taxes and the crushing weight of adult reality later on. You got it done! Well-done! I do wanna talk about this thing that is your baby lately, this embryonic thing that you've been growing and I've been fortunate to be able to watch it since its inception. But you have this class that you created from scratch that's essentially a STEM class. Two questions: Why did you create the class? And you've done some uncommon things. I'm gonna leave it wide open just for you to talk about it because it's your baby and I've been fortunate to be able to watch it from the start. So can you talk about that?

Fabian Hofmann (19:01):

So yeah, so I'm obsessed with Star Wars. I think that's putting it mildly. I love Star Wars. Always have. My classroom game is called Jedi Academy. And I've been playing around with this idea of creating a room that is more immersive. So I put a space, like a window to space, on my wall. I have the Millennium Falcon in my room. I have like a bunch of Resistance stuff or whatever. Anything Star Wars, you can find in my classroom. It's not like overloaded, but I was very intentional in the things that I put in there, because I want my students to come in and feel like they are playing the game. And one of those things that I used was like smells; I used sounds to try to immerse them more. And then so one day I was like, wouldn't it be cool to create a classroom that looks literally like a Star Wars set? Like you walked onto a set. Onto a spaceship, onto a rebel base, onto whatever it is. And how can I, how can I make that happen? And then we talked about it and you were like, "Yeah, how about you let the kids do it?" And that's kind of how the course was born. And now I have students in my classroom who are in the process of designing a classroom based on Star Wars. And they're gonna build everything. And we're all learning at the same time. I've never done anything like this. I do like STEM, but I've never like actually made it a class. And so I contacted a bunch of people on LinkedIn 'cause I was like, it would be cool to talk to an Imagineer and to get like my foot in the door at Disney and then have an Imagineer come in and tell us about what they did. I have this book called The Art of Galaxy's Edge, which is like the Star Wars land in Disneyland. And I just looked at the list and was like, "Who could be a good person to contact here?" And it said one of them was Eric Baker, and it said, "Executive Creative Director." And I googled him or I looked for him on LinkedIn and I found him and I was like, "I'm just gonna send him a message. I'm just gonna tell him what I do in my class in history, gamification and all that, and they're Jedi, and blah, blah, blah." And he wrote back! Like, he was the only person that wrote back. I wrote a bunch of people and he was like, "Yeah, I'd be super-interested. I don't know what you want me to do, but I'm down." And so it created this relationship between me and Eric Baker who used to work for Imagineering, who are like the people at Disney who create the rides in the park and all that. And I talked to him and he gave me some feedback on the room. And then he was like, "Oh, so if you ever want me to talk to students, I'm down." I was like, "Uh, yes!" And so we had him Zoom in. He talked about his life and how he became one of the people to look for when it comes to theme park design and to create immersive experiences. And I contacted other people on YouTube, like somebody who is like a Star Wars room builder. He's willing to chat with us about this project. And then, I discovered that there is this thing called Imagination Campus at Disneyland, which they offer workshops on immersive storytelling. And I was like, "Oh, that's what I want! I want my students to tell a story with my room!" And so I wrote up a proposal. Took a long time, but they signed—our admin signed it off. We kind of financed it. And then, about two weeks ago, you came along, another teacher, and we took 30something students to Disneyland and they did this workshop where they learned all about like how the Imagineers design story elements and put them in the parks. And then we took all of the kids to Galaxy's Edge. And we took a bunch of photos. We went on the rides together. We had this collective experience. And it was life-changing for a lot of students. Because, I mean, we're a Title One school; there's like, we have about 60% free or reduced lunch. And a lot of them had never been to Disneyland. About half of them had never been. Some of them went when they were little. And so just watching their faces, going to Disneyland, watching them walk into Galaxy's Edge, experiencing all these things, it was just, my mind was just blown. And I like literally, I don't know if you noticed, but I was just smiling. Literally.

Eric Cross (23:19):

You were loving it.

Fabian Hofmann (23:20):

Yeah. Then we come back and we have these amazing conversations about design and what they noticed and how they created this immersive experience in their world. And we talk about how we can bring this back to our classroom. And parents are sending emails saying, "Oh my God, we're so happy that you did this for our kids and you're the coolest teacher."

Eric Cross (23:39):

You touched on something that I wanted to ask you about. So you stay connected to people that inspire you, I feel like, or you have a pretty broad network of educators and professionals. Like, how much does that play into what you do in the classroom and the ideas that you have, as your network or your community of people?

Fabian Hofmann (23:57):

So the one network that helped me the most is Twitter. And I know people have opinions about Twitter, for good reason. But when I started to gamify, I just started to follow specific hashtags for areas that interested me. And that was gamification; eXPdup, which is like Explore like a Pirate—it's an acronym. And it just opened up all these people, all these people, all these educators who are out there just like doing cool stuff and sharing it on Twitter. And I started connecting with them. And one of them is on my podcast. We met through Twitter; we started sharing stuff. We started talking about the things that we do. We both happened to have a gamified classroom. And so we connected over this thing Twitter, and now we're like friends and we're presenting together at Q and all those places. Teacher Twitter is incredibly supportive and people want to show you the stuff that they work on, just like I do. Like when I have stuff that I worked out, I shared it on there. And it's so fun to hear back from teachers saying, "Hey, this looks awesome." It's just, it makes you feel good and it makes you feel like, "Oh, what I'm doing is not a total waste of time." <Laugh>

Eric Cross (25:10):

<laugh> Those thoughts do creep in, right? Like, even though you're doing something awesome and you might think so, we become our own worst critic sometimes, or we always see the things that we can improve and we overlook the things that we're doing well. Fabian, where can people hear more about you, about gamification, about what you're doing in the classroom, about how you're innovating? I know you talk about this stuff with some—and you talk about it with some pretty legit people in the education industry. So can you tell some folks where they can hear more about it?

Fabian Hofmann (25:37):

So you can find me on Twitter at Hofmann edu—one F, two Ns—edu, and then I also host a podcast called Rebel Teacher Alliance. There's three of us, where we talk all things gamification. But we also talk to teachers who don't gamify at all. And we just, we just invite people who are interesting, who have stuff to share, who do cool stuff. You can find the podcast on the internet at Rebel Teacher Alliance dot com. Follow us there. If you wanna be a guest, just send a message and we'll get you on.

Eric Cross (26:10):

Fabian, I'm gonna gush on you right now, but when you came back to Einstein, I was so happy because I knew that you sharpened me; you make me a better science teacher. Your innovation, your passion for kids, your sense of humor, your outside-the-box thinking, all of that. And when you got onto the seventh-grade team and you were here, I just knew that it was going to be awesome. And it has been. And so as a teaching colleague, as a friend, dude, you just rock, man. I'm super proud of you. And thank you for making me better.

Fabian Hofmann (26:40):

Aw, now I'm starting to cry. It's like, don't...

Eric Cross (26:43):

<laugh>. All true, dude. All true, my brother.

Fabian Hofmann (26:46):

Thank you.

Eric Cross (26:46):

All true. And thank you for letting me be part of the journey and I will definitely be walking down the hall asking you questions as I try to implement some of these great ideas that you're doing with kids. Thanks so much for listening. And now we wanna hear more about you. Do you know any inspiring educators? Nominate them as a future guest on Science Connections by emailing STEM at amplify.com. That's S T E M at amplify.com. Make sure to click subscribe wherever you listen to podcasts and join our Facebook group, Science Connections: The Community. Until next time.