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Nicole Lohfink: Schule und Spiel – mehr als reine Wissensvermittlung

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Die öffentliche Schule Quest to learn in New York City ist eine Modell-Schule, die in ihren Lehrmethoden auf spielbasiertes Lernen, Game Design und den Game Design Prozess setzt. In Zusammenarbeit von Erzieherinnen und Erziehern sowie Spielbegriff-Theoretikerinnen und -Theoretikern hat die Schule sukzessive ein Modell für jede Jahrgangstufe entwickelt, sodass nun von der sechsten bis zur zwölften Klasse in einem innovativen Lehr- und Lernansatz gearbeitet wird. Nicole Lohfink im Gespräch mit Rachelle Vallon, die die Entwicklung der Schule beinahe von Anfang an mitgestaltet hat.

merz: How do you define playfulness nowadays?

Vallon: I think there are different kinds of play. There isn't just play in the form of a game. When you think about a game, it is usually a structure that has rules, a space, and some sort of organized system. Board or computer games are specific games with specific systems, certain rules. But play can also exist outside of a game. For example, an activity or an exercise has elements of a game. One thing we notice in a game is: The goal is always very clear. Or, students are always getting feedback. For example, when teachers create a lesson they create a narrative, an imaginary story line for the students to follow, especially for the younger students. That gives them a reason; they feel like they should learn the material. So it almost feels like a game: Maybe there are these fantastic creatures that need help building houses, and students need to learn about measurements in order to help these creative creatures to build their houses. In that way, they are not opening an iPad or Laptop to play a game about geometry or measurement. They are in fact engaged in something that is playful and creative through this narrative. Sometimes, we have students create a project of some sort that is hands on and they go through the design process. The design process we like to teach is used to create games but you can also use it to create a project or to find a way to express a different idea.

merz: So what do you think is the attraction of playfulness or this kind of playful learning?

Vallon: I think the biggest attraction is something that at our school we call 'need to know'. That is one of the outcomes in the research that was done: Those scientists looked at games and wanted to know, why kids are always exited in games. Why, if they don't succeed at first, do they always keep trying? Even if they fail twice, four times, six times. But in school, when they don't succeed in math or writing, they don't want to go back; they are scared or bored. And the answer is: It's about those elements of a game! Knowing what the goal is in a game makes them want to go back. They want to complete the game or even be the winner. You always get immediate feedback and you are usually put into some sort of role. If you are playing monopoly you are asked to become a real estate mogul. Those are some of the things they realized kept students engaged and wanting to go back even if they didn't succeed. Instead of putting students in a classroom and say: Okay, class. Turn to page 25, we are going to learn about algebra or graphs or American history. That might turn them off or make them fearful. When you make them a game-setting and incorporate those elements of having a clear goal, putting them in a role and

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that creative narrative – it makes it fun and gives them that need to know. Then, instead of just learning about geometry, they learn about geometry because they have to solve that mission. So it is about finding different ways to engage students, which is really building their perseverance. In fact, as a result they start to use the same habits of not wanting to give up in other lessons, not just in games.

merz: Regarding this sort of knowledge: "I know what have I done wrong in a game so I come back and know immediately what I have to do differently". Isn't that also already giving a solution beforehand - like `this is how you have to behave in order to achieve´?

Vallon: Well, yes and no. I think in traditional schools sometimes they have one unit and that unit might be two to three months long. Let's say they are studying literature: They might read one book for a couple of weeks, then they have an assessment test or a writing piece. And maybe that won't be until a week from now, two weeks from now. But in a game, when you are playing, you are always getting feedback. Every single time you fail or every single time you move on to the next level. And usually, when you think about video games specifically, you need to use the skills that you learned in the previous level, to succeed in the next level. So nothing is done in isolation. Those are the aspects that move into the classrooms. Instead of just relaying, we do give tests along the way, every other day, maybe in the form of a game or an activity. This way you can always check in on every student to see: did they actually understand what I taught today or this week? And it also creates an environment for the students where they are not hesitant or fearful. Testing is a skill in itself that not everyone is good at. So when the assessment is not only a test but in a game or project maybe a student who does not well sitting and writing a test can do well in creating a project. So it is also providing multiple forms for students to show they actually learned what they were supposed to learn. That information will help to figure out how the teacher needs to proceed.

merz: What is the most prominent difference between Quest to learn and a classical school?

Vallon: The biggest difference is the mode of delivery of the instruction and the curriculum being developed from scratch. Also the narrative, the storyline is very unique, specifically for our school. Parents always ask if their child will be learning the same things as every other student in New York City. The answer is, of course, yes. We have to make sure of it! We have standards that every child has to master by the end of each grade. And when the teachers are creating their curriculum, the main difference from most other schools is, our teachers create their curriculum completely on their own from scratch, first based on the standards to make sure the students are learning what they should be learning. But then they go back and see where it's useful to put in a game or a game-like activity. But every student has different strengths and weaknesses, every group of students is dissimilar, every year, over and over again. The great thing about creating your own curriculum is that you can change it year by year based on the precise skills. Teachers are completely responsible and have autonomy over their curriculum. Also, it is the most beneficial for incorporating games and game-like activities.

merz: But you can't possibly create a personalized curriculum for each student, so you have to find something that is working for the majority?

Vallon: I will use one teacher as an example. Her curriculum is pretty set, she has been using the same story line and some of the same games - she had told me about one activity where the students start to identify positive traits about themselves. After they identify those positive traits they go on to the computer and use a program that creates comics and they create their own Superhero, an animated version of themselves. There are many steps to this larger project. The purpose is to empower themselves and they will then use this superhero to create a comic book about bullying and that way learn how to solve conflicts and that. She usually creates this comic book every year. This past year she said to me: I realized that this particular group of students struggled with the comic books. So she had to modify. Even if it is something as small as the amount of time she gives them to complete the comic book. But those are the little changes. Maybe it is not about changing the curriculum completely, but about the flexibility, to being able to see, day to day, week to week, what is working and what not. And there are also certain other things that we do. For example the homework requirements that the students get over their summer vacation. The teachers will use that to get some information on the student's abilities, to see if there is anything they might need to change in their curriculum for the school year coming up. Teachers are completely responsible and have autonomy over all their curriculum.

merz: Is there any sort of supervision, for example, anything that helps teachers whilst struggling with the adjustment of a curriculum or whilst being creative throughout the year with the same time and energy?

Vallon: When the school was created, there was a smaller organization at the education department, called New visions for public schools, that heard about the Institute of Play and their research. Those two organizations created our school. So the philosophy is a really important part and we try to make sure we always maintain those standards. The first part is the hiring as the school is not the right fit for every student and might also not be the right fit for every teacher. We therefore want to make sure that the teachers know what the model is and if they are really interested in creating the curriculum themselves with additional support. And once they come in, we have various types of support. We have mentors to help them during the process of creating their curriculum. We have one teacher who serves as a curriculum developer, so they spend half of their schedule meeting with teachers, checking in on their curriculum, seeing what is working and what is maybe a little too overboard. Creating a good curriculum requires team work, input from other people. And our supervisors also make sure, the curriculums are holding to the game-based learning.

merz: But with every great idea, every system, some things work better and others less good. Where do you see areas of improvement?

Vallon: One thing we had to learn is how this model translates into the upper, the high school grades. Because in New York we have state examinations that students need to receive their diploma and go to college. And a lot of

the high school courses are aligned to prepare them for these examinations. At the beginning, some of our teachers struggled in how to incorporate games and game-like activities under the pressure to make sure the students are prepared for these examinations. And that is definitely still going on, we always have to work on that. The model is the same but looks very different in the upper grades. For example, in the upper grade they have what is called problem set. Instead of helping a group of imaginary creatures build a house they might be working on global warming, hunger, or current issues in the world as those are more appropriate for their age-level. In a high school math class a teacher does a project based on the game-show 'Shark Tank' where they have to create their own Food-Trucks and use the math they learned about graphs and equations to create business portfolios. So I, for example, always advice our teachers and educators regarding to incorporate games or game-based learning: think about the audience, the age group of the students, the main learning goal and the most appropriate vehicle to get that accomplished.

merz: In what way are there any digital games involved in those vehicles?

Vallon: That was one misconception when we first opened the school. A lot of people had this understanding that we were a video-game school. We used to have students, who were interested in our school as they thought they would sit in front of a video game the whole day and magically learn math, science and English. When you look at the data-base of games, I would say, there are some digitally, but 85 percent of all the games we have are analog or paper-based games. Just a couple of games are on the iPad. For example, we use Minecraft a lot in art or math classes. We have one teacher who is very successfully teaching about slopes and incline by having the students create roller coasters on Minecraft. They have to create a video-game-walk through it and explain mathematically all the slopes in their roller coaster. Students participate in a huge design challenge at the end of the first term and the end of the year. Or, the students in sixth grade have to create a Rube-Goldberg-Machine. This way they learn about prototyping, about showing empathy, giving feedback and so forth. But we have a lot of technologies: computers, iPads, video game systems – but our biggest philosophy is their meaning and purpose!

merz: Media is still often perceived as dubious. Throughout time, each new development – books in medieval times, video in the 80s and nowadays computer games – has been perceived as a threat and sometimes people frown at the use of it in school. What do you think about that?

Vallon: It is a matter of fact that technology exists in today's society. We like to say that our kids are born with iPads and cellphones in their hands – unlike us. This makes it all more important to teach students the appropriate usage of those devices as we need to look at students holistically. This starts by teaching them how to write a proper e-mail, or when to use or not to use your phone. All those things are thought directly and indirectly at our school. There is a lot of research showing that this is really becoming important to colleges and to employers - looking for individuals who can solve complex problems, who can think outside of the box, who can think critically. Who can work with others. And games and game design does that so well, even if you are not directly teaching it, it happens when you are playing a game that is collaborative and you are in a classroom environment. Not many of

our games have a winning element where one person has to win over the other one. A collaborative game is teaching kids: I need to learn how to work with this individual, in order to succeed as a team, to be able to hear this other person's ideas but I also have ideas that I can contribute. I need to learn time management, to learn organization.

merz: Children are also involved in game-design?

Vallon: In three ways: The first is direct game-design. We have a class specific to our school, called 'Sports for the mind' and it is a media, arts and game design class - probably the class where there is the most direct game play and game-design happening. The younger kids maybe will start at the beginning of the school year with learning how to modify games. We go through game modification, through the play-testing process and how to play test games, how to provide constructive feedback. They go through a game and the kids learn a game usually has a space, has rules etc. Once they learn about that they learn about modification. What will happen if we maybe change one rule. Then they are given the opportunity to do that with something as simple as tic-tac-toe. They are given an assignment to create their own version of tic-tac-toe. Then eventually that will level up a little bit. In some of the other classes the teacher will allow students to design their own games around the curriculum they are learning. With a health teacher, the students were learning about the negative effects of tobacco and alcohol use. And they have to create board-games about it. Then there is using the design process in general: we have a special component of our school, called boss level. Similar to a video game when it is usually the final round where you have to beat the boss and you have to use everything you learned in the game to complete this really tough mission. So with boss-level students participate in a huge design challenge at the end of the first term and the end of the year. The sixth grade students have to create a Rube-Goldberg-Machine. This way the students learn about prototyping, about showing empathy, giving feedback etc. The third way is: occasionally students participate in a focus group and they play-test certain games and provide feedback on how to develop certain games, or improve or modify games that devel