# Synergie

FACHMAGAZIN FÜR DIGITALISIERUNG IN DER LEHRE | #03

**agilität**

GET THE THINGS DONE
**Agiles Projektmanagement an Hochschulen**

OER
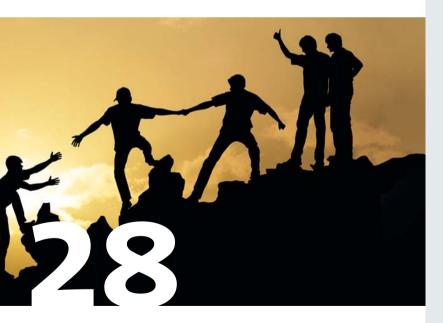**Open Educational Resources**

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**OER**

**Open Education und Open Educational Resources – deutsche und europäische Policy im Überblick**
Unterschiedlich gesetzte Schwerpunkte offenbaren unterschiedliche Prioritäten – zu begrüßen ist die politische Auseinandersetzung mit den Chancen digitaler Bildungsinhalte allemal.

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**AGILITÄT & DIGITALISIERUNG**

**Agile Prinzipien – was kann die Studiengangsenwicklung davon lernen?**
Die Weiterentwicklung von Studiengängen ist ein didaktischer Kernprozess an Hochschulen. Ein agiles Vorgehen, das auf Feedback-Schleifen setzt, kann dabei interessante Impulse setzen.

# INHALT #03

# AGILITÄT & DIGITALI-SIERUNG

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**SCHWERPUNKTTHEMA**

AGILITÄT & DIGITALISIERUNG
**Agiles Projektmanagement an Hochschulen – get the things done**
Mit einem auf die Besonderheiten von Hochschulen abgestimmten Vorgehen kann die nachhaltige Implementierung umfassender Reformen gelingen.

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**Open Educational Resources in der Schule – Bildung in der digitalen Welt**
Lernende werden durch die Nutzung mobiler Endgeräte informell und außerhalb der Schule geprägt. Welche Konsequenzen ergeben sich aus diesen Veränderungen beim Lehren und Lernen für OER?

# eduScrum

IM INTERVIEW: WILLY WIJNANDS

*Dear Willy Wijnands, how did you first get in contact with Scrum, and what was the starting point of your adapting the Scrum framework for the school context?*

It started with a bottle of beer and a barbeque in the summer of 2011 with Mark Reijn. Mark had just finished a Scrum course given by Jeff Sutherland at the company Schuberg Philis in the Netherlands, where Mark works as a software engineer.

Mark was very enthusiastic about Scrum, inspired by Jeff, and he explained it to me on one single (sheet of) paper.
That is how it began.

In August 2011 I started one class using Scrum to try out if it works in the classroom. In the beginning I was surprised that it was working.

So I began to use eduScrum in all my classes with success.

*For which classes and age groups do you use eduScrum, and what does a representative class session look like?*

I use it by myself in all my classes in the high school, the Ashram College in Alphen aan den Rijn in the Netherlands, where I have taught engineering, physics and chemistry since 1976. My students are between 12 and 19 years old.

The students work together in teams – an active, effective and efficient way of working. They have more fun, are intrinsically motivated and work hard.

At the beginning of each class hour all students run into the classroom (the teacher has no own classroom and neither do the students, so in between class hours it is real chaos in the school building). Each team puts their flap (eduScrum-Board with their planning) on the wall. The students hold a stand-up meeting in front of the flap for a few minutes. They exchange work status, reschedule the work, make arrangements for the work they have to do until the next lesson, agree on who does what, what is done in class and what they will take home as homework. Then they just get to work. Students decide on their own homework!

*Why does eduScrum work?*

I give the students ownership of their own learning process, but most important trust. The students take responsibility for what they do because I give them the freedom and the space they need. The effect is that students are more engaged, more productive and their results are better.

By giving the students the freedom and space to run their own class and learning process they become beautiful people.

Freedom is the acknowledgement of borders.

The teacher is no longer responsible for the learning process of his students, but delegates that responsibility to the students.

*How do pupils usually react to this new way of teaching?*

In the beginning it feels strange to them, because they are not used to working this way. They get a lot of freedom to work together in teams and I as a teacher don't give them homework. They do the homework by themselves. I give the assignment where I explain the what and the why of the assignment.

This learning objective is subject-specific. The responsibility to define and set the learning goal remains with me (*the what*

## The effect is that students are more engaged, more productive and their results are better.

# The struggle in the beginning can be a challenge.

*and why*), but *how* students get there they decide with their own team!

Forming teams in the eduScrum way is also strange for them, they are not used to it. They do work in (boys and girls mixed) teams to motivate each other. Logically; this is one of the basis of eduScrum.

I work with teams of four to five students. I discovered that this works best. These teams are also *"cross-functional"*, but slightly different than in Scrum. Every student writes and maintains a personal profile. What are your skills and improvement areas (*... teamwork, planning, management, explaining ...*). Subdividing themselves in teams of four, all students in the class make well-balanced teams that address skills and development areas. Even first-year high school students are doing this successfully!

*Do they also have the possibility of returning to more familiar modes of teaching?*
Yes and no. They experience this way of teaching and education for the first time, when they come to my class.

Some students don't like it, because it's a transparent way of working and the peer students tell each other what to do. Students listen better to their peers than to me.

They do also have the possibility of returning to their own familiar modes of learning. Alone or in couples of two. I'm not a teacher who talks the whole lesson, but I coach and facilitate the students. So when they want to learn in their own way, it's their choice. And this happens too, but most students want to work in teams. That is a normal, organic way of working. To be a member of a team feels good to people.

*What challenges did you face during the introduction of eduScrum to your way of teaching, and how did you tackle those challenges?*
The struggle in the beginning can be a challenge. But I knew that if you build a good relationship with the students as a first step, based on trust and respect, it will be easy to implement eduScrum in the classroom.

eduScrum can give students wings! But if you don't explain the WHY, they can't fly.

eduScrum is simple and that is at the same time the difficulty. Really understanding the principles and values is very important.

The other very important issue is that the teacher must have an agile mindset. Otherwise don't start, because you will fail.

*The inventors of Scrum state that in order to 'do Scrum', you have to adhere to the rules defined in the Scrum framework – otherwise one cannot call it 'Scrum'. What does this strict rule mean for eduScrum – a setting in which the teacher personifies a merger of two distinct roles as defined in the Scrum framework, those of Product Owner and Scrum Master?*
In eduScrum it is the same. You do it all or nothing. *If you take out one rule, it will fail.* There are differences between eduScrum and Scrum:
– The way of forming teams.
– The teacher is Product Owner and Scrum Master together.
– The retrospectives are not only based on the subject or product but also on the personal growth as a person and within the team, which is very important.

*Differences between eduScrum and conventional ways of teaching become apparent quite quickly – one only has to take a glimpse of the classroom setting and realizes: this is not what I'm used to. The role of the teacher as formal and frontal educator is transformed into a participatory role as educational adviser – a role that has the goal of helping learning groups of pupils along their ways with advice, incentives, and both group and individual support. Hence, the role of the teacher shifts from a formal broadcaster of knowledge towards an education facilitator. Our question here is: how do you make sure that teachers intervene in due time, when a) the independent work of pupils is taking a wrong direction and b) weaker students are left behind?*
I walk through the classroom to assist the teams, if needed, in my role as a teacher. The teams do the work and decide on their own process. I'm called in by the teams when they have questions or when they are blocked.

In general, they're rarely completely stuck. Mostly there is a team member that understands things better and explains within the team. And if they really don't know how to move on, they understand where and how they are stuck. So, they understand what they don't understand. For a teacher that makes it much easier to give them a little push in the right direction. Knowing what you do not understand, and why you do not understand this, is already quite some knowledge. This is teaching!
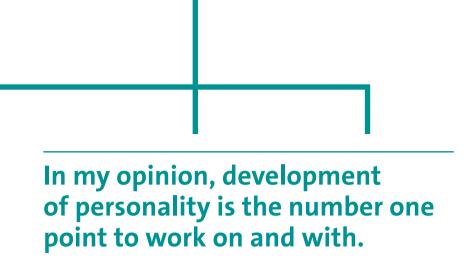
Besides helping the teams, I glance at each team's 'flap' to monitor their progress. That is easy to see, because the flap indicates the status clearly. Transparency above all.

Because I don't broadcast the whole time, I have time to support weaker students or teams.

# In my opinion, development of personality is the number one point to work on and with.

*All in all, the move away from ex-cathedra teaching and an acknowledgement of learners' personalities is nothing revolutionary or completely new in itself. How can eduScrum be differentiated from other progressive reformist approaches to education? And are there specific educational research approaches that you draw from in your work?*
I think that in the framework eduScrum all the educational approaches come together in an organic way in how you treat students and people. Students are people too, you can learn a lot from them. The principles I use beside the normal didactic and pedagogic principles in eduScrum are based on: Start with Why; Simon Sinek, The Power of Scrum; Jeff Sutherland, Rini van Solingen and Eelco Rustenburg; The Five Dysfunctions of a Team; Patrick Lencioni; The Speed of Trust; Stephen M. R. Covey and a lot of other books about personal growth, human and team behavior. Also look at the Hattie index (reflecting on one's own learning process has the highest Hattie Index) and the learning pyramids (Bales and Dale).

The eduScrum principles and values: ownership of their own learning process, trust. Freedom and the space they need within borders that give them orientation and security, developing themselves as people, discovering and knowing who they are. The 21st Century Skills (I prefer to name them the 4 C's: Creativity, Collaboration, Communication and Critical thinking), personal growth and personalized learning.)

*Team work, creativity, self-dependent learning – these are but a few of the keywords that come to mind when eduScrum is talked about. In your opinion, what effects does eduScrum have on pupils, and in what sense does eduScrum affect the development of personality?*
In my opinion, development of personality is the number one point to work on and with. The effect is that students are more engaged, more productive and their results are better. They discover who they are and what their abilities are. It is a wonderful experience to see them developing themselves!

*Within the scope of our current edition of 'Synergie', we decided to choose the topics of Agility and Open Educational Resources as thematic foci. Both of these topics can be seen as ways of coping with the changing basic conditions of our environment and life realities. In what ways, do you think, does this also hold true for eduScrum?*
The world is changing very fast and everybody, especially in education, has to cope with this change. eduScrum is a framework to cope with and adapt to this very fast-changing world. Of course students still have to "deliver" certain pieces of knowledge in our school system. But the beauty is that eduScrum doesn't only help students to deal with the conditions and facts we experience today, but prepares them to be able to react to whatever they will have to master in the future also. They learn how to plan,

they learn how to adjust and they learn how to learn.

*What kind of training do educators have to go through before they can actively test Scrum within the context of their classrooms?*
First of all teachers MUST have TRUST in their students. Next: an open agile mindset and giving students context-content-based assignments or even better: projects where students themselves can determine what they want to learn and most important HOW. Then the why of learning will become normal, which fosters a life-long learning process.

The teachers can follow a two day eduScrum training to learn how and why eduScrum works. eduScrum looks easy, but if you don't really understand it, you make it hard on you and on your students.

*How do you evaluate this model of instruction? Do you survey pupils and teachers, or do you also consider statistical indices about school profiles.*
I evaluated eduScrum by myself and my students (that's of course not scientific). The results are good. The marks are at least 10 percent better (not in the beginning). In the beginning the marks are mostly the same, but they did it by themselves and not by the way of traditional teaching. I see this also as a progress. Next to that, they finish earlier with their work and they have more fun.

People in the world, the Netherlands, England, England, Germany, Brazil etc. who are working with eduScrum are doing research around eduScrum.

*Let's talk about the omnipresent pressure to perform: Pupils' fear of being humiliated in front of their peers is strong, particularly during adolescence. Collaborating in small groups within the context of eduScrum quickly makes visible the individual differences in proficiency levels. How do you avoid situations in which learners might feel they are being overly controlled and monitored – situations that might well affect learners' eagerness to learn?*

Working with eduScrum is very transparent. Students are not afraid of transparency, they are just not used to it. When students don't work within the team, the other team members don't accept it and tell it to the student who doesn't want to work in their own peer way of telling. That works very well. When a team member doesn't want to work in a team at all, then I as a teacher take him out of that team and let him work on his own, alone. I don't control the students or teams. They do this by themselves.

This is important and belongs to the values and principles of eduScrum: let the students know and feel that the transparency of abilities and working status is not used against them, but for their best learning instead. We need transparency to enable the team and the teacher to support the students in the best possible way. For this, again, you need to build trust within the teams and most important between the teacher and the students.

*These days, many schools are confronted with increasingly heterogeneous groups of pupils, who have highly diverse biographical and educational backgrounds. In your opinion, is eduScrum an appropriate means to face those new challenges?*

I think this is not a problem at all. Children and students are flexible and agile by nature. Grown-ups lose these abilities.

*Dear Willy Wijnands, thank you very much for the interview!*

# eduScrum

Bei eduScrum handelt es sich um ein Rahmenwerk für den Schulunterricht, das die agilen, ursprünglich aus dem IT-Sektor stammenden Scrum-Prinzipien auf den schulischen Kontext überträgt. Die Verantwortung für den Lernprozess, die sogenannte Ownership, wird dabei von den Lehrenden auf die Lernenden übertragen. Indem diese ihre Arbeitsschritte selbst festlegen, um die von den Lehrenden gestellten Aufgaben im Rahmen von kleinen Teams co-kreativ zu bearbeiten, werden sie frühzeitig an selbstständige und kooperative Arbeitsformen herangeführt, wie sie heutzutage viele Bereiche des Erwerbslebens prägen. Ein „Stand-up", in dem der jeweilige Fokus der Unterrichtseinheit bestimmt wird, steht am Beginn jeder Stunde, mithilfe eines teameigenen Scrumboards wird der Lernprozess dabei dokumentiert und transparent gestaltet. Eine Retrospektive dient den Schülerinnen und Schülern dazu, ihre Arbeitstechniken kontinuierlich zu verbessern.

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PODCAST

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