The eduScrum Guide

"The rules of the Game"

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Written and developed by the eduScrum team

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Based on the English version of the Scrum guide, reviewed by Jeff Sutherland

Colophon

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Index

Introduction

Most of you reading this guide are not familiar with Scrum, but probably have an educational background. eduScrum is a combination of both; Scrum and education. Scrum is a framework for the development and maintenance of complex products. This makes it widely used in IT development and is now widely supported in this area. However, nowadays Scrum is increasingly being used in alternative areas.

One of these areas is education. The possible applicability of Scrum in education has prompted the eduScrum team to experiment with the Scrum framework within education. Although the outcomes of school results are fairly predictable, the process of achieving these outcomes is not. As a result, it shows strong similarities with the software development process. The three pillars, transparency, review and adaptation together with self-organizing teams have encouraged the eduScrum team to experiment with this framework.

For anyone who has had the opportunity to experience eduScrum in the classroom, it is no longer a secret. eduScrum is a co-creative process in which students are no longer held responsible, but feel responsible for their own work and learning process. Nobody tells the students what and how they should do their work, only the desired framework (Celebration Criteria) is set. Homework is no longer given by the teacher, but scheduled by the students themselves according to how they have arranged their work. When you are in an eduScrum class, you will certainly perceive the energy, mutual involvement and personal responsibility.

In his well-known video and book "Drive: The surprising truth about what motivates us." Dan Pink discusses research that indicates that people are not simply motivated by extrinsic rewards or punishments like a bonus, financial reward (carrot and stick model) when tasks become more complex and challenging. But rather that people are motivated intrinsically, and appreciate the opportunity for choice, autonomy, and self-organizing. This makes it clear that for the professionals of the 21st century a different way of motivating is needed than the traditional way of rewarding. Similarly, educational researchers Edward Deci and Richard Ryan have repeatedly shown how students are intrinsically motivated by being self-determined and becoming the owner of their own learning process. This is exactly what eduScrum and the people who use this framework strive for: We facilitate students autonomy, mastery, goals, freedom and space within set frameworks.

This guide contains the minimum set of preconditions for working successfully with eduScrum. The goal was to keep it simple and through experimentation and feedback from students create the minimal viable structure. Every element that can be left out is

also left out, but no more than that. Therefore, all elements, as described in this guide, are required to work with eduScrum. If you chose to omit certain elements then it is no longer eduScrum. The eduScrum framework is "lightweight" and offers sufficient space for a personalized approach. The personal development of the students is very important in eduScrum.

Purpose of the eduScrum Guide

eduScrum is a derivative of Scrum (a framework for the development and maintenance of complex products - Jeff Sutherland & Ken Schwaber 2017).

eduScrum is a framework for guiding students where the responsibility for the learning process is delegated from teacher to students. This guide describes the definition of eduScrum. This definition consists of the eduScrum roles, ceremonies, artifacts and the rules that bring these things together. This work was inspired by the original Scrum guide by Jeff Sutherland and Ken Schwaber.

In eduScrum learning is central: learning smarter, learning to collaborate better and getting to know yourself better. In addition, this way of working provides more responsibility, pleasure and energy, resulting in better results and shorter lead times. Young people make a positive personal development because of this which strengthens their confidence in themselves and among each other. The key to all this is ownership, the young people have the space to determine their own learning process within the set frameworks and learning objectives.

eduScrum not only improves the professional content but also their own personal development and the way of working within a team.

eduScrum Overview

eduScrum is a framework within which teachers and pupils tackle complex, challenging problems and pursue learning goals of the highest possible value in a productive and creative manner.

eduScrum is:

• Lightweight

• Easy to understand

• Difficult to master

Mastery of eduScrum is difficult, because it only prescribes the "Why" and the "What" and not the "How". eduScrum is not a process or technique for supervising students; it is a framework within which you can use the various processes and techniques. Students have the freedom to decide, which requires teachers with an agile mindset. Within eduScrum, the emphasis is on organizing and performing their work within the set time frame and learning objectives. Furthermore, eduScrum focuses on continuous improvement: inspection and adaptation through retrospectives. This provides insight into the effectiveness of the planning and the chosen approach of students so that they can improve themselves.

When working with eduScrum the quality (with regard to the subject, collaboration, and personal development) is constantly evolving during the school year. Students experience high ownership of their work, and as a result take great pride in the quality of their work. Ownership in combination with continuous improvement leads to higher quality. This is achieved by conducting reviews and retrospectives. In a review it is mainly about the "What" have you done (subject-related) and the retrospective examines both the content of what they have to deliver (subject-related) and personal development. This concerns the cooperation, use of personal qualities of yourself and the qualities of the team.

eduScrum Framework

The eduScrum framework, such as the Scrum framework, consists of teams and their associated roles, ceremonies, artifacts and rules. Each component within the framework serves a specific purpose and is essential for the use and success of eduScrum.

Specific implementation strategies for using the eduScrum framework may differ and are not described in this guide.

The eduScrum rules connect the ceremonies, roles and artifacts related to the interaction between them. The eduScrum rules are described throughout this text.

eduScrum Theory

eduScrum, like Scrum, is based on the theory of empirical process control, or empiricism. Empiricism assumes that knowledge arises from experience and making decisions based on what is known. eduScrum uses an iterative, incremental approach to optimize the feasibility of learning objectives and to manage risks.

Three pillars form the foundation of every implementation of empirical process control: transparency, review and adaptation.

Transparency

Significant aspects of the process must be visible to those responsible for the result. Transparency requires that these aspects are defined according to a common standard so that observers have a common understanding of what is being seen. For example:

• A common language related to the process must be shared by all participants;

• A common definition of "Ready" must be shared by those who perform the work and those who accept the working product.

Within eduScrum the focus is on adding value, in which value can be understood as the total of individual learning performance (s), personal development and collaboration. The eduScrum framework is therefore intended to make information transparent and thereby support the learning process. Transparency is needed to help students make the right decisions and thereby maximize value.

Inspection (Review)

eduScrum users must frequently review (inspect) the eduScrum elements and the progress towards the learning objectives, in order to detect undesirable deviations. The review moment may not be so frequent that the reviews get in the way of work. Reviews are most useful when they are carefully performed by both the team and teachers, where the work is done (the classroom or practice room).

Adaptation

If a student or teacher determines that one or more aspects of a process are not feasible and / or that the result will be unacceptable, the (partial) planning or work in progress will have to be adjusted. An adjustment must be made as quickly as possible to limit further deviations.

eduScrum prescribes six formal occasions for review (inspect) and adapt, as described

in the eduScrum ceremonies section of this document.

• team formation

• sprint planning meeting

• standup

• sprint review

• sprint retrospective

• personal reflection

The eduScrum Team

The eduScrum Team consists of Product Owner, eduScrum Master (team captain), and the team. The teacher fulfills both roles and decides on the why and what. The teacher shares the role of eduScrum Master with a student from each team, which we call team captain.

The student teams consist of four to six students. One of the students of the team fulfills the role of eduScrum-Master, which we call team captain.

Student teams are self-organizing and multidisciplinary. Self-organizing teams choose how they can best perform their work, rather than being told by someone outside the team. Multidisciplinary teams have all the skills needed to perform the work. The teams put themselves together based on skills and personal development areas. Although the team itself is responsible for the result and in that sense is independent, they are allowed to use the insights and information of other teams. Stimulating team-transcending collaboration is therefore encouraged. The team model in eduScrum is designed for optimum independence, collaboration, safety, flexibility, creativity, motivation and productivity.

Student teams provide iterative and incremental learning products, whereby opportunities for review / feedback and adjustment are maximized. Incremental deliveries of a “Done” learning product ensure that a potentially good result with regard to the learning objective is always achievable.

The teacher

The teacher actually has a hybrid role of Product Owner and eduScrum-Master (with the goal to turn this over to the student team captain). As Product Owner and eduScrum-Master the teacher is responsible for determining the learning objectives to be achieved and their assessment, monitoring the eduScrum process and facilitating the learning process of the individual students of the Student teams; such as referring to subject matter, answering questions and referring to examples. In addition, the teacher is also responsible for encouraging cross-team collaboration. Exactly how this is done differs

enormously across organizations, student teams and individuals.

The teacher:

1. determines WHAT and WHY to learn
2. monitors and improves the quality of the academic learning outcomes
3. tests and assesses the academic learning outcomes and monitors personal development
4. has different roles

1. Determine WHAT and WHY to learn

The teacher is closest to the output and accountability side of education and is therefore responsible for measurable educational outcomes; such as test results, transition results, exam results. The teacher ensures that the various stakeholders are satisfied with the academic results: students, parents, board, inspection of education.

That is why the responsibility for WHAT and WHY is to be shared and agreed by the teacher and the students. In order to monitor the quality of the learning outcomes, the teacher will determine the Celebration Criteria prior to a period, such as the minimum score for tests, forms of presentation and their size, etc.

2. Monitor, test and improve the quality of the academic learning results.

In addition to determining what is being learned, the teacher will also have to monitor, test and improve the quality of the learning outcomes. For this he has Celebration Criteria at his disposal, which are the requirements the assignments or projects must meet.

Celebration Criteria

To be able to monitor the quality of what has been learned, the teacher uses a number of Celebration Criteria that are established in advance and shared with the student team. These Celebration Criteria consist of, for example, requirements for the tests, forms of presentation and their scope, rubrics, but also deadlines and other preconditions for the work to be delivered. The team is responsible for ensuring that the Celebration Criteria are met. The team members set up tasks and activities themselves to ensure that the Celebration Criteria can be met. The students can also add their own Celebration Criteria to their own project and / or product. Similar to when teachers and students co-construct a rubric.

3. Testing professional results and assessing personal development

As a teacher you evaluate, on behalf of the stakeholders (parents, school management and students), the quality of the academic outcomes and personal development. The teacher tests and assesses both the individual students (for example with a test, written paper, presentation, project artifact) and the teams (for example by evaluating a team assignment).
The teacher is the only person responsible for the content of the program.

The content of the program includes:

- Initially explaining eduScrum to the students
- Setting the sprint objectives; in other words what are the learning objectives of the sprint in question.
- Establishing and explaining the Celebration Criteria; Clearly explain what the criteria are that determine whether a learning objective has been achieved so that the teams can work independently (experiments, papers, presentations, etc.).
- Facilitating the student team; In addition to clear learning objectives and Celebration Criteria, it also provides references to lesson and background material and is available for questions.
- Ensuring that the eduScrum process is followed.

With projects, students have the freedom to set their own learning objectives within the curriculum. They determine their own why, how and what. In that case, the teacher still remains responsible for the final Celebration Criteria, but the relationship with main goals and attainment targets is freer.

The teacher is a coach and a serving leader for the student teams. The teacher is also responsible for propagating the eduScrum philosophy. The teacher makes sure that eduScrum is correctly understood and executed and therefore focuses on the way of working and collaboration of all student teams in a class. He or she does the following:

- Explains what eduScrum is, its importance and how it works.
- Ensures a good team composition based on additional qualities.
- Ensures that the eduScrum process is followed by the teams adhering to the eduScrum theory and rules.
- If necessary, takes over the process by giving extra explanations, demonstrations, positive feedback and the like.
- Stimulates a positive learning environment by encouraging fun, energy and involvement (can be transferred or shared to team captain).

• Protects the team from external disturbances (can be transferred or shared to team captain).
• Encourages teams to deal with disruptions and difficulties quickly and independently. Disruptions or difficulties that are too great for the teams to pick up independently are picked up by the teacher (can be transferred or shared to the team captain).

The teacher is also responsible for coaching and supervising the students who play the role of team captain within their team. The teacher also encourages cross-team collaboration, after all the teams can learn a lot from each other's mistakes and successes.

The student team

The student team consists of independent students who do the work together in order to achieve the set learning objectives at the end of the sprint in accordance with the Celebration Criteria. The members are jointly, as a team, responsible for meeting the Celebration Criteria.

The student teams are structured and provided with powers by the teacher so that they can organize and manage their own work. This greatly improves effectiveness and efficiency, but also the learning experience and personal growth (being effective is doing the right things. Being efficient is doing things well).

Student teams have the following characteristics:

• They are self-organizing. Nobody (not even the teacher) tells the student team how to achieve the learning objectives.

• The Student teams are multidisciplinary, with all the necessary skills and personal development areas to be able to achieve the learning objectives as a team and to be able to develop themselves personally;

• Student team members may have specific skills or focus areas, but responsibility lies with the student team as a whole;

• The team members can decide for themselves whether they want to use their qualities or develop new areas;

• The student team monitors its progress and quality level itself, among other things, based on the Celebration Criteria and the work agreements (Definition of Doing & Definition of Fun).

Student team size

The optimal team size is small enough to remain workable and large enough to deliver significant work. The rule of thumb is: teams of four or five members. Less than three

students of team members means that interaction decreases and skills are insufficiently represented. Larger than six members in the team requires too much coordination. Large teams generate too much complexity to be controlled by an empirical process.

The team captain

Within the student team, one of the members plays the role of team captain. The team captain is not the boss and also a working member of the team. He or she ensures that the team can perform optimally - but without being above the team, they are first and foremost an equal team member.

Within eduScrum, the team captain is a more limited role than the role of Scrum Master within Scrum. This is because different tasks and responsibilities that would be part of the Scrum Master role are assigned to the teacher. As team captains have more experience, they can take on more responsibilities from the teacher, which means that the teacher's total responsibilities gradually decrease.

The role of team captain is fulfilled during the team formation at the start of the first sprint. The team captain is designated by the teacher or chosen by the students. Then, depending of the process used for team formation, the team captains choose their team members based on complementary qualities.

Within the student team, the team captain is responsible for the "Flap". The “Flap” is the visual board that makes the work and agreements of the team visible. The team captain ensures that the "Flap" is available when needed and that it has been updated. However, the final work is the responsibility of the entire team. In addition, the team captain provides support to the teacher and the student team.

The interpretation of the team captain role is in principle the responsibility of the teacher. However, as teams get better, more responsibilities can be delegated to the team captain.

Team captain support to the teacher

The team captain supports the teacher in various ways, including:

- making progress transparent;
- making the "Flap" available;
- and ensure that it is updated.
- Facilitating eduScrum ceremonies when requested or required.

Team captain support to the student team

The team captain supports the team in various ways, including:

- initiating the removal of impediments in the progress of the team;
- making the progress transparent by making the “Flap” available and ensuring that it is updated.
- ensuring that eduScrum is performed correctly (initiating and facilitating eduScrum ceremonies, performing the ceremonies correctly and using the instruments correctly.
- initiating cross-team collaboration.

eduScrum Ceremonies

Prescribed ceremonies are used within eduScrum to create regularity and predictability. eduScrum uses timeboxes during ceremonies, so that every event is limited to a maximum duration. This ensures that the time is used efficiently.

Unlike the sprint itself, which is a container for all other ceremonies, every event in eduScrum is a formal opportunity to review and adjust something. These ceremonies are specifically designed to enable critical transparency, inspection and adapt. Failure to carry out one of these ceremonies results in a reduction in transparency and is a missed opportunity for review (inspect) and adjustment.

The sprint

The heart of eduScrum is a sprint, a composite set of learning materials that ensure that the learning objectives are achieved. A sprint can be a context-rich lesson series, a project, a chapter from a book and so on. In general, a sprint will coincide with the length of a semester or period, although this is not a requirement.

A sprint has a pre-set time box (period) of approximately seven weeks. That depends also on then school and class schedule When a longer sprint length is used, it becomes more difficult for student teams to oversee complexity and to plan well.

Some teams, especially recently started teams, have difficulty planning the entire sprint ahead. They can then plan outlines at the start of the sprint and supplement the planning in more detail during the sprint.

The sprint starts with a sprint planning meeting and team formation. The teams decide for themselves what they will do during this period. The student teams always determine HOW themselves.

The sprint consists of:

- Sprint planning meeting including team formation
- Stand-up, at the start of each lesson
- Executing assignments and tasks
- Sprint review
- Sprint retrospective and personal reflection

During the sprint:

- The composition of the student team remains the same;

- The assignment remains the same.
- May the quality be clarified and renegotiated between teacher and student team as more is learned.

The sprint ends with a retrospective by checking the completed work and determining improvement actions. Interim reviews take place to adjust and improve their part of work (if necessary). During the sprint, the teacher regularly checks whether the teams are still on course with regard to the intended results. In some cases, an additional fixed and recurring appointment is made for this within the sprint. As in Scrum, we have the motto "test within the sprint" within eduScrum, which we call reviews. The teacher regularly emphasizes that the work delivered must be tested by the team itself. The student teams may devise all sorts of methods at their own discretion to do this by, for example, hearing each other, coming up with questions, games and quizzes. During the sprint the teacher keeps an overview of the progress of the teams. For this he uses the Run Up Chart and the "Flap".

Abort a sprint

Unlike traditional Scrum, a sprint cannot be aborted within eduScrum. It is, however, possible that extra assignments (scope) are provided to still achieve the desired result. This, just like breaking a sprint, will only happen in exceptional cases. As a teacher you can also insert central explanation moments in order to achieve the desired result. This is possible for all teams centrally or per individual student team.

Sprint planning meeting

The sprint planning meeting is held at the start of the sprint. This meeting consists of 3 parts, namely; Team formation, Learning objectives and Work planning.

Team formation

In addition to the Scrum Ceremonies, eduScrum also has two extra ceremonies, one of which is team formation. Within eduScrum, careful team formation based on qualities and skills is a precondition for better learning performance. The work that needs to be done is diverse and assumes that the team must have as many qualities, knowledge and skills as possible

The following criteria are important to arrive at a good composition of teams:

- qualities of team members are complementary

- balanced gender distribution
- teams could be change for each assignment
- composition based on friendship is undesirable

At the team formation ceremony, the team captain is first designated by the teacher or chosen by the class. They then choose a team of people with additional qualities. The team formation ceremony is part of the timebox "sprint planning".

Learning objective

The learning objective gives the student team the necessary flexibility with regard to what is delivered in the sprint. The teacher indicates what he expects from the team at the end of the sprint; the learning objective is therefore mainly subject-specific and forms part of the core objectives as formulated by the government.

While working, the student team keeps an eye on the learning objective. Assignments and tasks are performed to achieve the learning objective. If the work turns out to be different from what the student team expected, they will work together with the teacher to restructure the tasks and assignments in such a way that the learning objective can still be achieved.

The learning objective is part of the core objectives and can therefore be seen as a milestone in the progress of the students (teams).

Work planning

The work to be performed during a sprint is planned during the sprint planning meeting. Making this plan is a joint effort by the entire student team.

First of all, the teacher offers an overview of the assignment, the number of lessons, how many lessons a sprint lasts, when the central moments are, submission date, assessment models and the like. He therefore sets out the framework within which the students can exercise their ownership and draw up their planning.

The sprint planning meeting is a meeting within a timebox of two hours for a sprint of approximately 2 months. This timebox also applies to shorter sprints.

The sprint planning meeting answers the following questions respectively:

- What is expected from the student team in the next sprint; what is the learning objective, which subject matter is treated, what are the Celebration Criteria and which planning dependencies are there?
- What needs to be done to achieve the learning objective, in which order and by whom?

The teacher presents the learning objective (s) to the student team and explains this so

that the entire student team has a good idea of what is expected of them during this sprint. The learning objectives must be explained in such a way that the student team can work out the learning objectives independently in a joint planning session for the coming sprint.

After the teacher has explained the learning objectives, it is up to the student team to map the required work. The team is primarily responsible for the scope of tasks and components.

As soon as it is known what needs to be done, the student team starts to organize the tasks and parts chronologically based on the teacher's own insight and Celebration Criteria.

Once all tasks and assignments have been arranged chronologically, the first subdivision of activities can take place. Only a first start is given during this planning session. After all, the process of reviews and adjustment leads to constant new insights and possibly also adjustments in the planning and work distribution.

At the end of the sprint planning meeting, the student team should be able to explain to the teacher how they intend, as a self-organizing team, to achieve the learning goal and achieve the expected increment (assignments and tasks).

Run up Chart

With the Run Up Chart you can see the progress of work planning. The Run Up Chart is a graph with the number of available lessons on the horizontal axis, and the amount of work on the vertical. To estimate the total amount of work the teams goes through a process called “planning poker”. In this process the team discusses each task and assigns a number of points to each task depending on the scope of the task. After assigning points to each task, all points are added up and the total amount of work is known. The team will now draw the Run Up Chart. The total number of points is on the Y-axis, the available lessons, meetings, weeks, etc. comes on the X axis. A line can be drawn to the end of the Sprint, when all the work is done. Dividing the total amount of points by the available lessons gives the team and indication of how much work they have to do in each lesson; the Velocity. Now the team knows how many points they need to score for each lesson to be ready on time.

During the stand up meeting at the beginning of a lesson tasks are declared “Done”, the Run Up Chart is updated, and it becomes clear to the team and teacher whether they are still on course with the progress of the work.

Stand up

The stand up is a five minute timeboxed event for the student team to synchronize activities and make a plan for the next meeting. The stand up takes place every class

meeting at the beginning of the meeting. This is done by check the work since the last stand up and predicting which work can be done until the next stand up.

The stand up is held at every meeting and at the same time, namely at the beginning, to reduce complexity and create regularity. During the meeting, each student team member explains the following:

- What have I done to help the team since the last lesson?
- What am I going to do this lesson to help the team?
- What are the obstacles that stand in the way of me or the team?

The student team uses the stand up to assess and monitor progress towards the learning objective, to reschedule the work and to make working arrangements. The stand up increases the likelihood that the student team achieves the learning goal with the best possible result. The student team must be able to explain to the teacher how they will work together as a self-organizing team to achieve the learning objective and what the work will be in the remainder of the sprint.

The team captain ensures that the student team holds the meeting, but the student team itself is responsible for carrying out the stand up. The team captain helps the student team to keep the stand up within the five-minute timebox.

Stand-ups improve communication, identify and remove developmental obstacles, highlight and promote rapid decision making and improve the student team's level of knowledge regarding the project. This is a very important meeting.

Sprint review

The sprint reviews take place repeatedly during the entire sprint to keep the teams focused on the quality of the work they have to deliver at the end. In the meantime, the teams present what they have achieved during the entire assignment. These results are compared with the learning objectives. The form depends on the learning objective (s) and Celebration Criteria.

During the sprint it is important to apply review (inspect) and adjustment as often as possible, but not so often that the learning process is affected by this. In general it can be said that the more often you apply review moments and adjustment, the greater the chance of success. When reviews takes place and how it will be assessed, it is determined in advance with the student team at the start of the sprint (during sprint planning). This review moments helps the teams to assess where they stand with regard to the progress of the learning objectives to be achieved and to obtain as much feedback as possible on their interim results.

Sprint retrospective

The sprint retrospective is the moment for the student team where they look back on their delivered work and their personal and team development. The sprint retrospective is carried out as soon as possible after they have completed their final assignment and the figures for the final assignment are known. The retrospective must be carried out with sufficient depth so that the team as well as the individual members can use it to draw up a plan to improve themselves during the next sprint. Any delay of the retrospective is a potential missed opportunity to implement improvements for the teams and students in the subsequent sprint.

The purpose of the retrospective sprint is to:

- Looking back (review) how the last sprint went with regard to people, relationships, processes and tools;
- Identify and organize things that went well and potential improvements; and,
- Create a plan to implement improvements to the way the student team does its work.

The sprint retrospective consists of three parts;

1. the student evaluates the methodologies and methods used by the team and identifies points for improvement;

2. the student then evaluates his students' teammates on the basis of skills and points for improvement; and does this for himself.

3. and evaluate what they shouldn’t do anymore.

As a result, the students learn to learn effectively and efficiently together. The retrospective is therefore a very important and essential part of eduScrum and should certainly not be missing in the eduScrum process. This takes place after the entire assignment has been done.

The student team answers the following four questions both individually and collectively:

- what went well?
- What can or must be improved?
- What should we no longer do?
- Which positive actions will we take with us to the next sprint?

Personal reflection

Students get a lot of feedback from the retrospective. For example, they learn how other

people think about their work. Often that is good, and that is nice, then they are happy to get started. But they also learn to look critically at their own actions, where they can improve themselves. With this feedback they can get started doing something better next time!

Retrospective and personal reflection enable teams to work better together. They are hugely important steps in a process of constant improvement (Kaizen). In the beginning the student gets a lot of freedom to fill in review, retrospective and personal reflection. The teacher will coach to grow further in this. This way the eduScrum process not only gets better and better, but the student and even the teacher and also grow as a team player and as a person.

eduScrum artifact

The artifacts of eduScrum represent work or value in various ways that are valuable for providing transparency for review (inspection) and adaptation. The artifacts that eduScrum defines are specifically designed for maximum transparency of key information needed to ensure that student teams can successfully achieve a "Ready" learning goal.

Content of the assignment

The content of the assignment consists of different stories. Each story has learning objectives, Celebration Criteria and work forms that are in line with the core objectives as formulated by the government.

The "stories" are sub-topics that you have to do in the sprint, such as: making assignments, watching a movie, doing experiments, writing a report or preparing a presentation. Keep in mind who you are doing that for. That is often the teacher, but with a presentation or report it can also be 'the class' or 'your grandma' (making a report or a presentation for your grandma can be very nice, because you want to explain it very easily but still well). Every disorder leads to a number of tasks that you want to do. You determine which tasks that are exactly during the "planning meeting" (one of the ceremonies). Tasks are written on post-its and teams sometimes have 150 of them in the work stock (one or more A4 sheets on which they are stuck). In the planning meeting you are going to "play points" with which you assign a weight to each task. This way you not only know what you are going to do, but you also have an idea of how much effort that requires.

The teacher is responsible for the content and availability.

In contrast to Scrum, where the assignment is never complete, eduScrum knows the core objectives and the learning objectives in advance. The attainment targets are fixed, the learning objectives can vary but are often also known. However, the work forms will be constantly adjusted on the basis of advancing insight based on the "inspect & adapt" principle of Scrum. The assignment is dynamic in terms of working methods: it is constantly changing to make clear what the students need to work together effectively and to understand the subject matter.

The assignment is ordered on the basis of the learning program, the learning objectives and stories must be in line with the umbrella learning program imposed by the government.

The "Flap" (eduScrum Board)

The "Flap" is an overview of all tasks that are required to achieve the learning goal. This overview is a collection of stories, Celebration Criteria, work agreements, tasks, Run Up Chart and impediments that the student teams will complete for the sprint. The "Flap" is a chronological representation of time. The tasks move based on their status of: "To Do”, "Busy" and "Done".

In addition, the "Flap" provides insight into the planning. It shows exactly where the student team is with regard to ready and remaining work. The "Flap" is therefore a prediction whether the team will achieve the stated learning objectives. The "Flap" must be constantly updated so that it always gives an "up to date" status of the student team's progress. This update is done at least after every stand up.

Another feature of the "Flap" is that it should promote the transparency of progress. This means that the "Flap" must be visible to all student teams during every meeting.

The "Flap" is a plan with sufficient detail so that changes in progress can be understood in the stand up. The student team adjusts the "Flap" during the sprint and it develops during the sprint. The "Flap" can therefore be revised at any time based on progressive insight.

If new work is needed, the student team adds it to the "Flap". This already takes into account the number of work points that are given in advance when planning. If parts of the plan prove unnecessary, they will be removed. Only the student team itself can update its "Flap" during a sprint. The "Flap" is a very visible, real-time view of the work that the student team plans to do during the sprint, and it belongs exclusively to the student team.

Check sprint progress

At any time during the sprint, the total amount of work remaining for the sprint on the “Flap” can be inventoried. The student team keeps this overview at least for every stand up. The student team, together with the teacher, predicts the likelihood of achieving the learning objective based on the status of the tasks still open. By keeping track of the remaining amount of work during the sprint, the student team can monitor its progress.

Learning objective

The learning goal is the total of all the stories that the teams have to complete during a sprint. At the end of a sprint, the learning objective must be "Ready", which means that it must meet the pre-established Celebration Criteria, aiming for a score that is equal to understanding the learning objective.

The same definition helps the student team to determine how they plan and organize their work during the sprint planning meeting. The goal of every sprint is to achieve the

best possible learning objectives and tasks that meet the Celebration Criteria of the assignment.

Important questions to check whether the task has been performed correctly

- How can you test whether you are really ready?
- What exactly is ready, what criteria apply to it?
- But also: when is it not ready?

The student teams are responsible for drawing up their working arrangements. They write this down in the "Definition of Doing" and the "Definition of Fun". The learning process can be adjusted by the retrospective based on the outcome. In this way new insights can be integrated into the process to achieve better results.

Definition of Doing

Definition of Doing are actually work agreements within the team. How are you going to ensure that the work is really finished? This is something of the team itself, but it is obvious to take a good look at the Celebration Criteria.

Teams write agreements at the DoD such as: 'if everyone understands the work done (for example: learned, summarized, overheard)', 'created work is discussed or checked with all team members',' everyone learns at least one week in advance for tests, "the report meets the requirements stated in the book," or "each team member has a grade of 6.7 or higher (or a B+ or higher)."

Definition of Fun

An addition to the "Definition of Doing" is the "Definition of Fun". Fun is an important driver for students and is therefore a precondition for better learning performance. Think of "laughing together," "working nicely," "giving and receiving trust," "giving positive feedback," "listening to soft, fun music," "bringing something to eat." Pupils should therefore also indicate what they need to have fun while doing what they do. Needing can best be understood here in the broad sense of the word, what must be there to work pleasantly. Often the outcome of a retrospective provides starting points for the "Definition of Fun". This list is also a 'living document' and can be supplemented or changed frequently.

Conclusion

The eduScrum guide is free and is offered online. The roles, artifacts, ceremonies and rules of eduScrum are fixed. Although it is possible to implement parts of eduScrum, the resulting result is not an eduScrum. eduScrum only exists as a whole and functions well

as a container for other techniques, methods and practices.

This guide will be updated regularly based on advancing insight.

Recognition

People behind eduScrum “We have great confidence in young people. We are convinced that they want and can do more than they and many adults think. eduScrum creates a working atmosphere that allows students to get the best out of themselves and their team. That makes education really worthwhile for all involved!”

Many ideas for improving eduScrum come from the students themselves. We implement their ideas and creativity.

The eduScrum team

For more information also check the website of eduScrum: www.eduScrum.nl