

Agile based learning

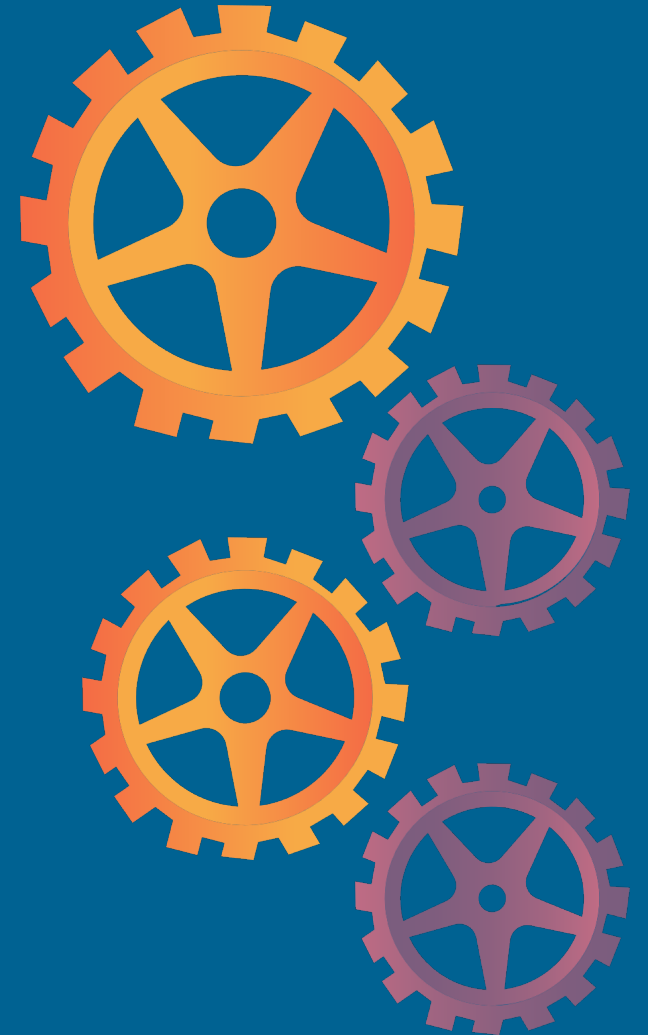
Prof. Panos Fitsilis (fitsilis@uth.gr)
University of Thessaly



Agenda

- What is agile based learning?
- Manifesto for agile learning
- Principles of agile based learning
- Practices of agile based learning

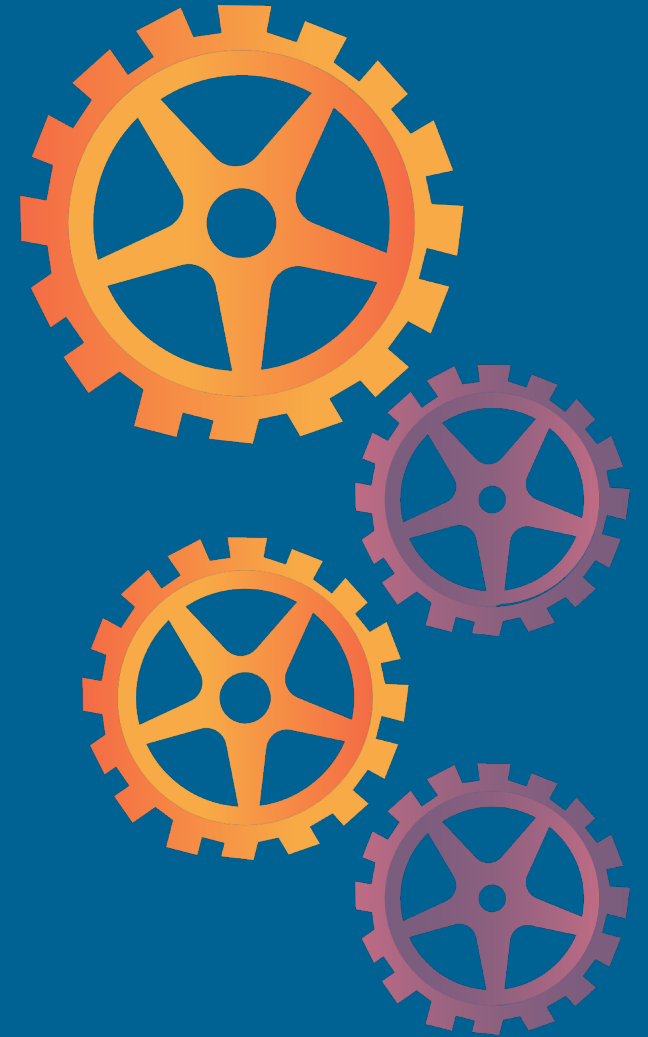
Note: *This is an introductory module. The presented concepts are elaborated in other Agile2Learn modules.*



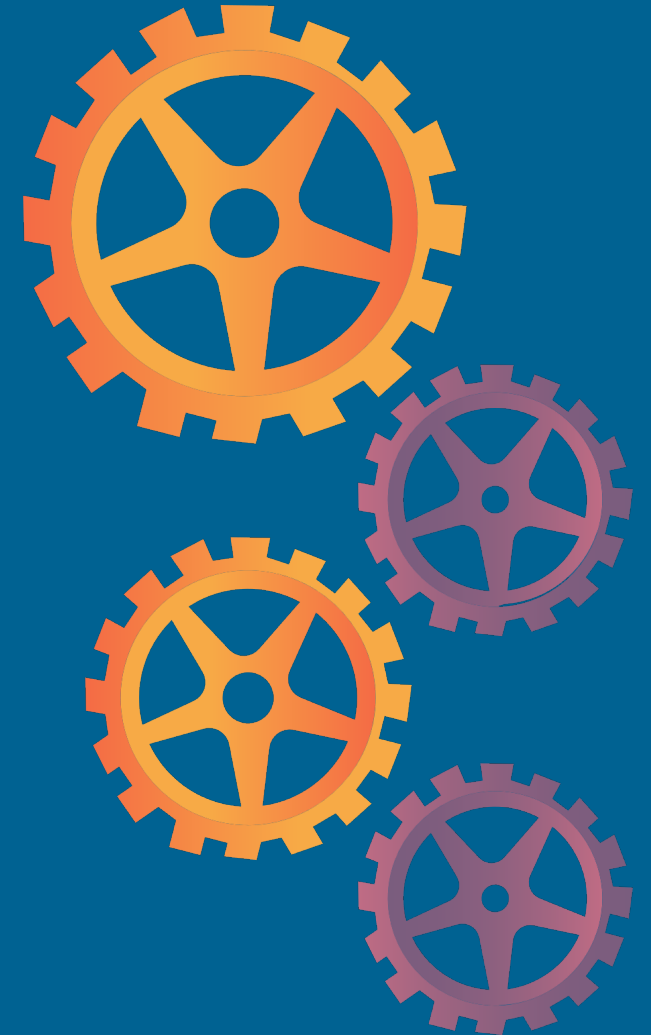
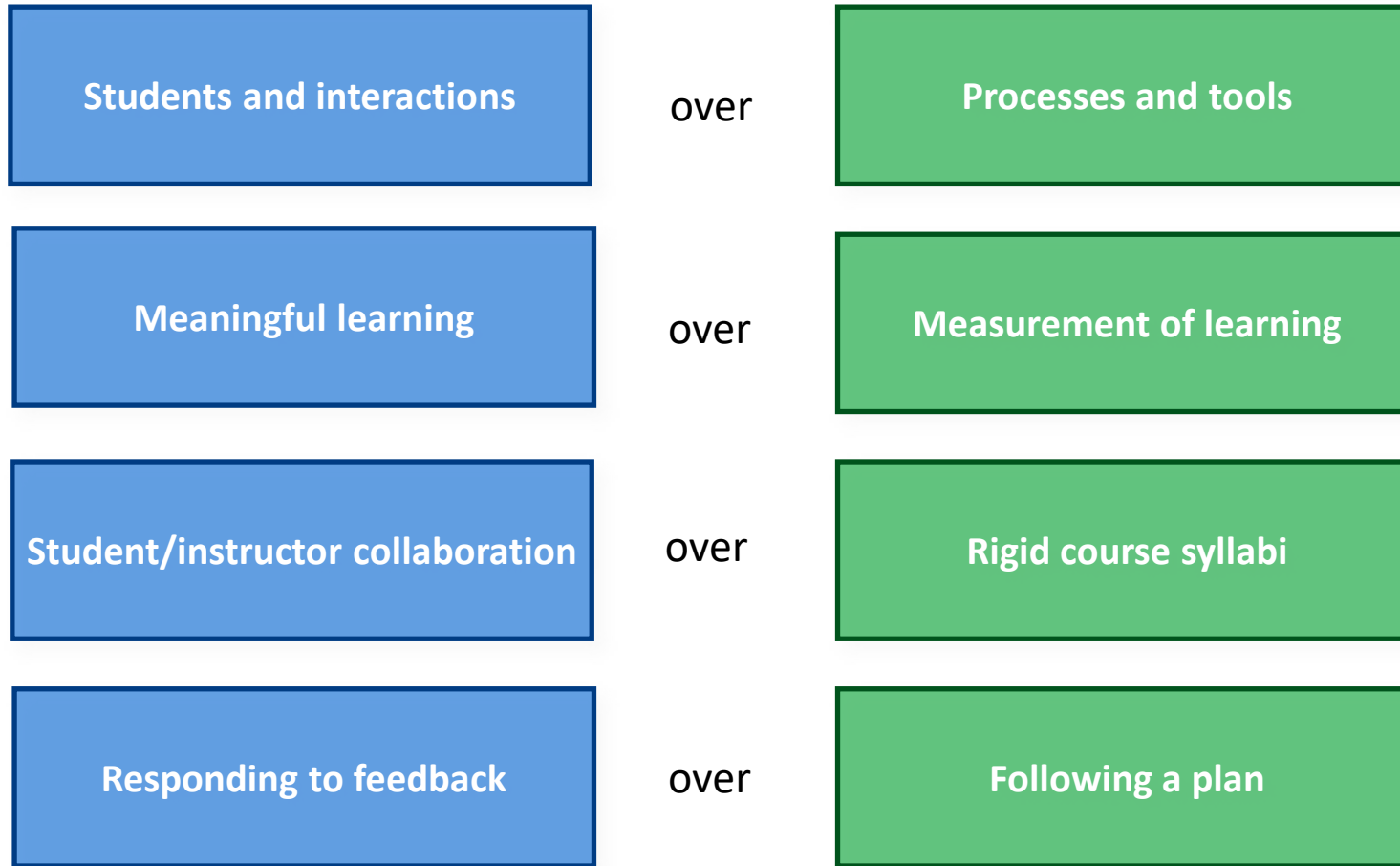
What is agile based learning?

It refers to a **learning environment and learning design that is highly responsive, adaptive and iterative.**

Agile Learning is based on taking incremental steps, constant review and using an iterative design process, where trial and error, learning and doing occur.



The Agile Manifesto



Principles over agile learning manifesto- (1)

1. High priority to prepare the student to be self-organized, continuously delivering course components that reflect competence

2 The instructor and students can adapt to changes at any time to facilitate learning and better develop marketable skills

3 Working deliverables from the students over short time periods allowing for frequent feedback

4 Iterative interaction between the instructor and students (or student groups)

5 Give students the environment and support necessary to be successful

6 Allow for direct face-to-face interaction with students or student groups



Principles over agile learning manifesto (2)

7 Working deliverables (e.g., models, software, project deliverables, presentations) are the primary measure of student progress

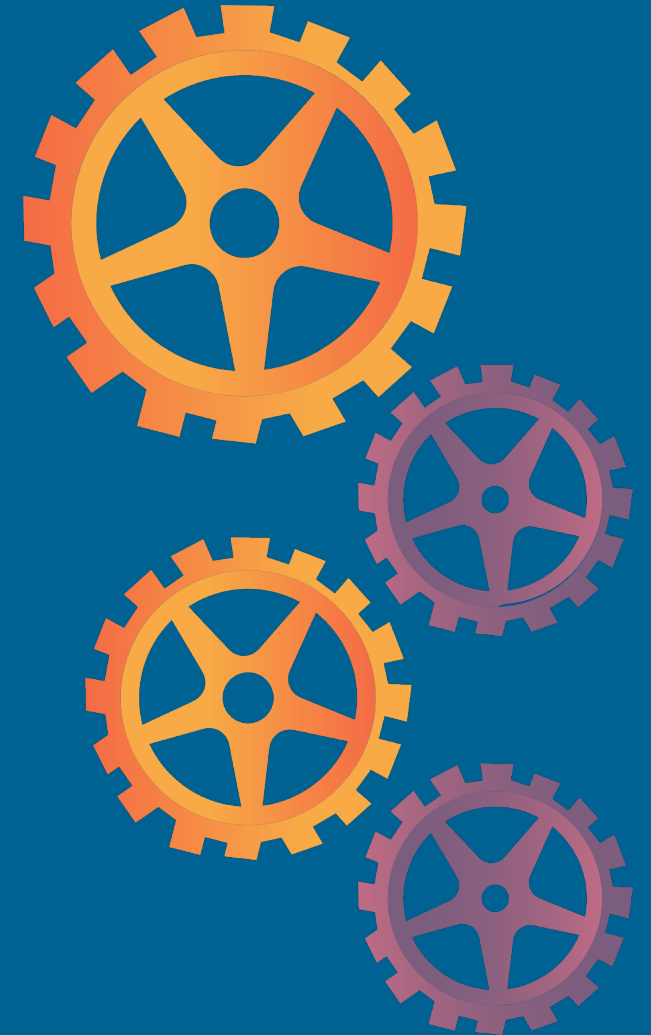
8 The cooperative learning environment is the basis for teaching the skills needed for life-long learning

9 Continuous attention to technical excellence and good design enhances learning.

10 Understanding the problem and solving it simply and clearly is essential

11 Student groups and teams should self-organize, but all should participate equally in the effort

12 At regular intervals, the students and instructor reflect and offer feedback on how to be more effective, then the stakeholders adjust accordingly to be more efficient



Agile learning practices (1)

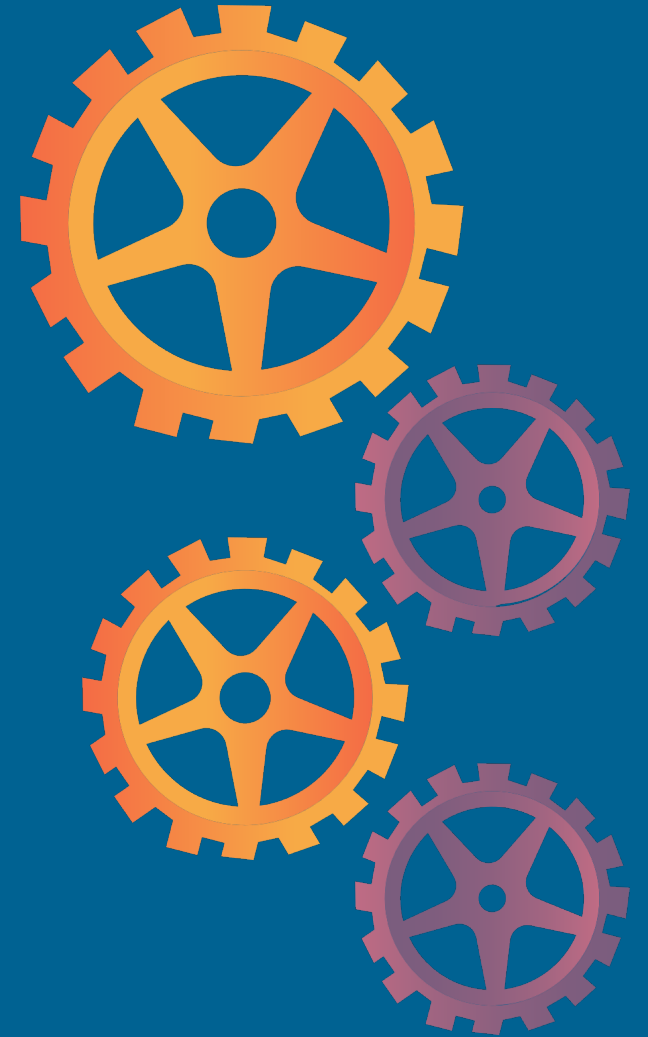
Inspire, don't
lecture

*Employ active
learning, or
learning from
experience*

Link explaining to
doing

Elicit reflection

*Promote
communication*



Agile learning practices (2)

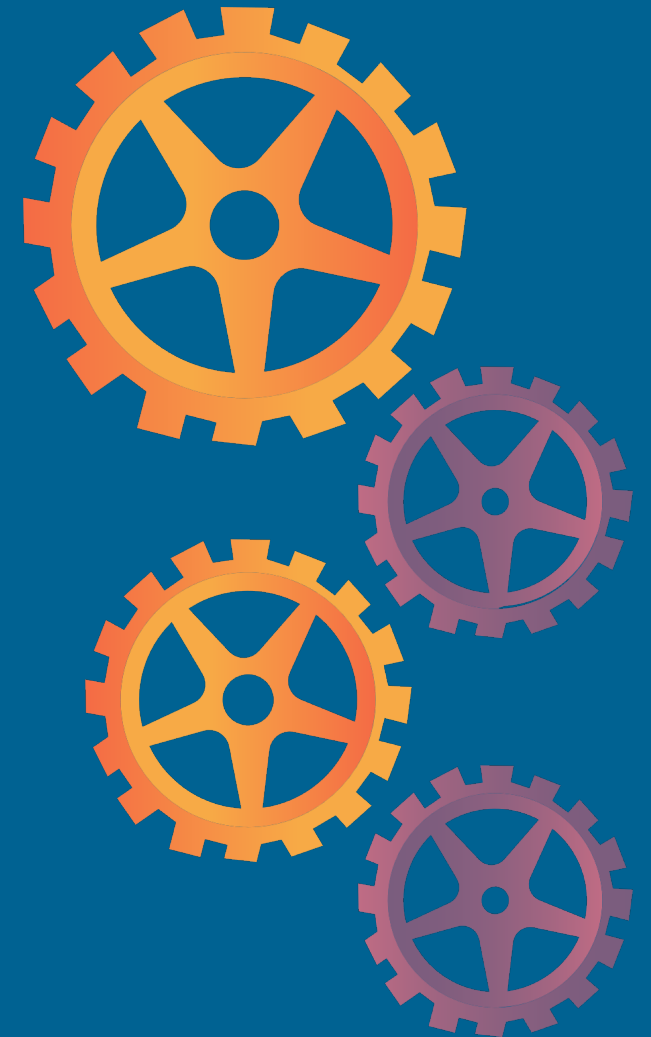
Establish diverse teams

Assign roles to team members

Manage time

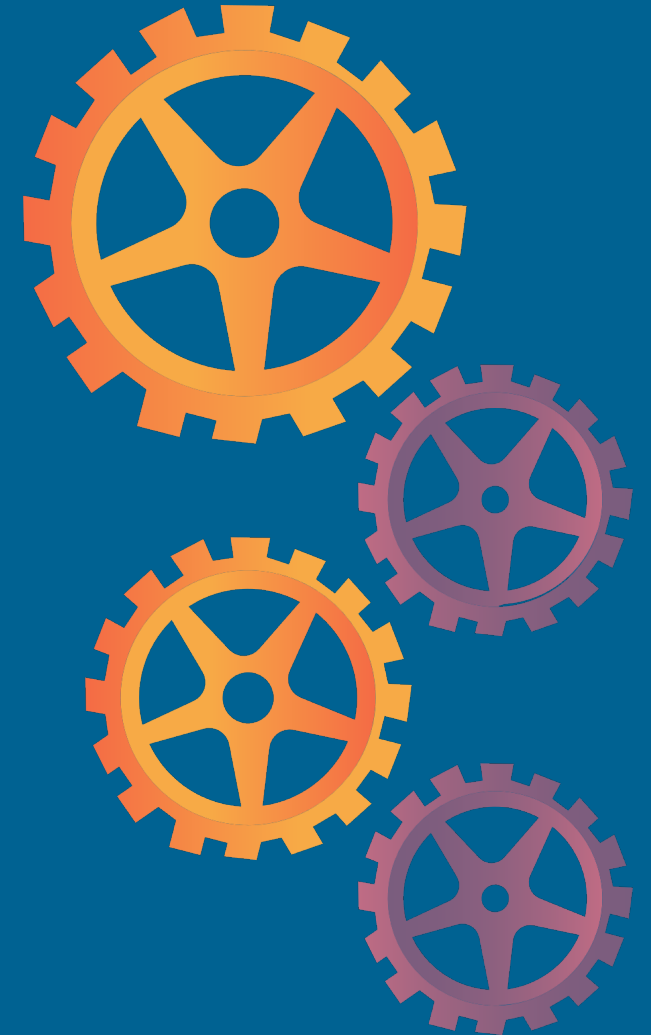
Use metaphors and analogies (i.e., other concept-worlds)

Foster awareness of abstraction levels



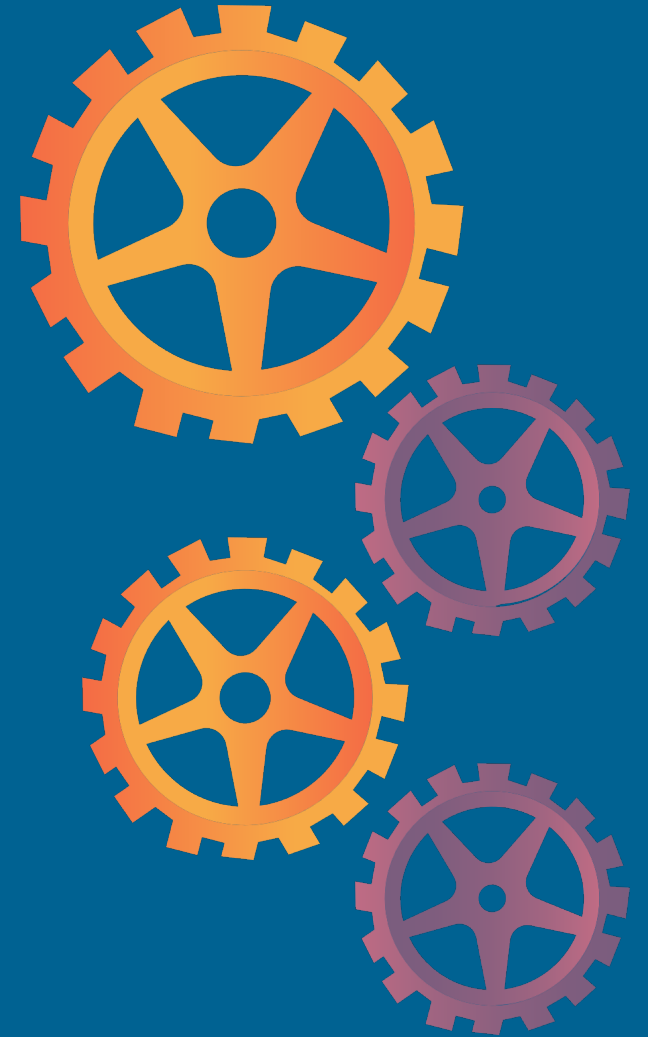
The teacher at eduScrum

- A hybrid role of Product Owner and eduScrum-Master
 - The goal to turn this over to the student team captain
- As Product Owner and eduScrum-Master the teacher is responsible
 - To determine WHAT and WHY to learn
 - To monitor and improves the quality of the academic learning outcomes
 - To tests and assesses the academic learning outcomes and monitors personal development
 - Celebration criteria
 - Tests, presentations, deadlines



Teacher special role

- As a teacher you evaluate, on behalf of the stakeholders (parents, school management and students), the quality of the academic outcomes and personal development.
- Teacher assess
 - Individual students
 - Teams



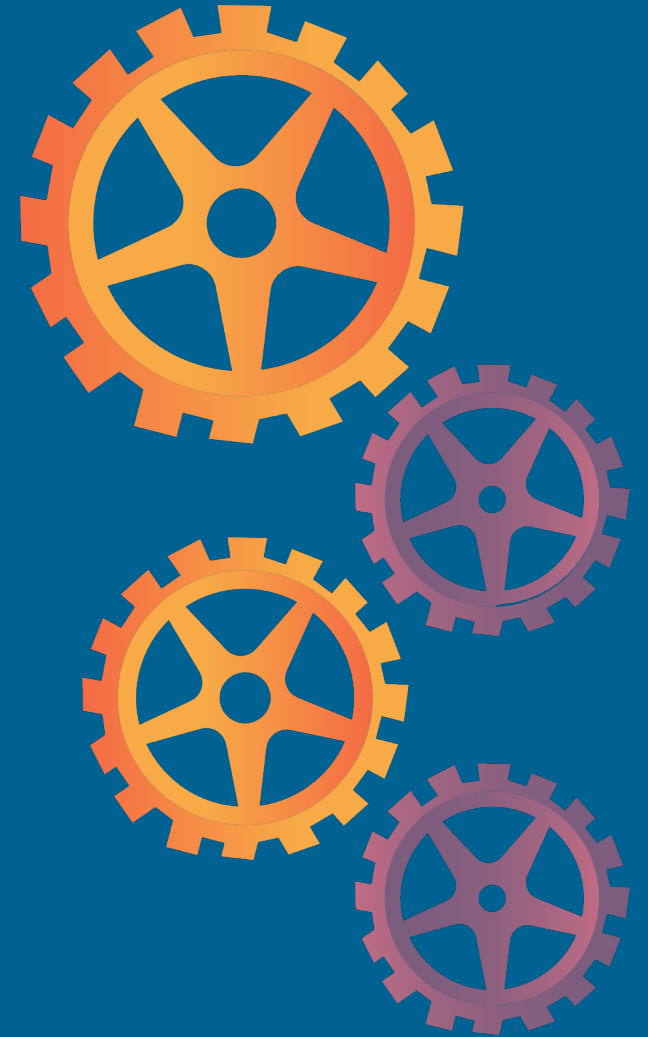
Teacher as facilitator and expert

- Explain agile principles and eduScrum to the students
- Setting product (project objectives)
- Defines number of iterations (sprints)
- Setting the sprint objectives;
 - in other words what are the learning objectives of the sprint in question (every week, every month, etc.)
 - 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**
- Provides study material
- Ensuring that the eduScrum process is followed.



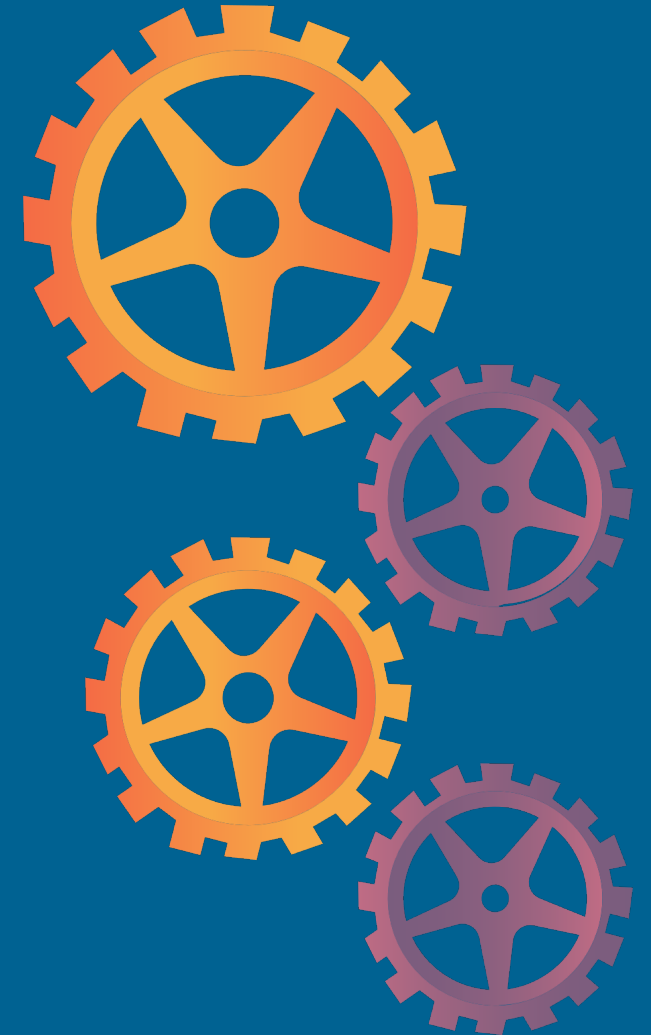
Question for discussion #1

- Which of the above teacher's tasks are already applied in your work?



Student team

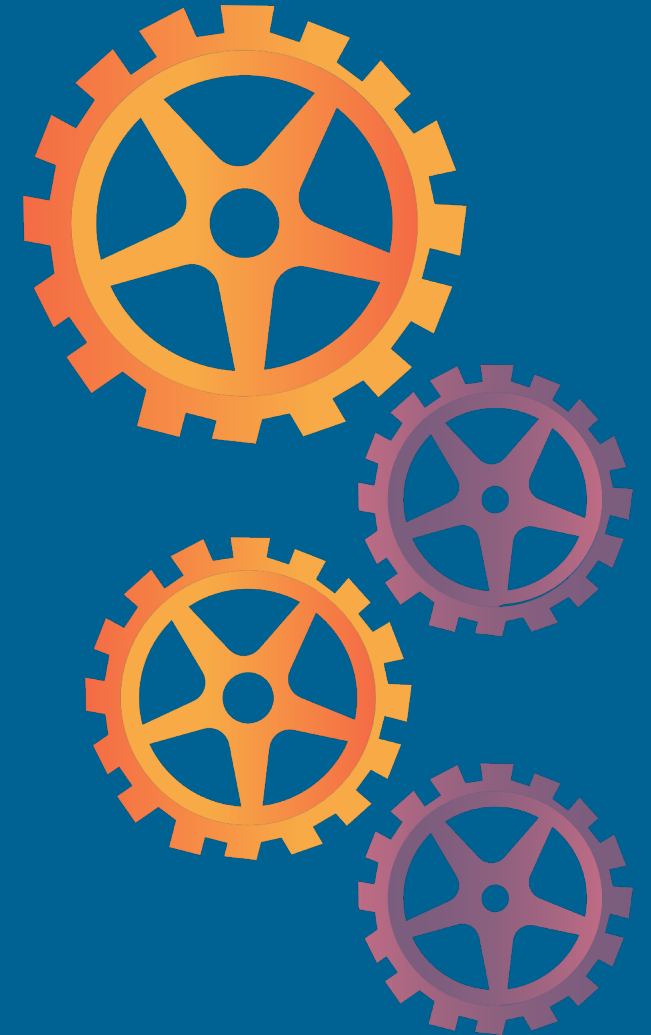
- Teams are self-organizing. Nobody (not even the teacher) tells the student team how to achieve the learning objectives.
- Team may add learning objectives if needed
- The team is multidisciplinary, and team members may have specific skills or focus areas
- The team is responsible as a whole
- The team monitors its progress itself, using the Celebration Criteria
- Team size smaller than regular agile teams
 - three is the minimum
 - Five is the maximum





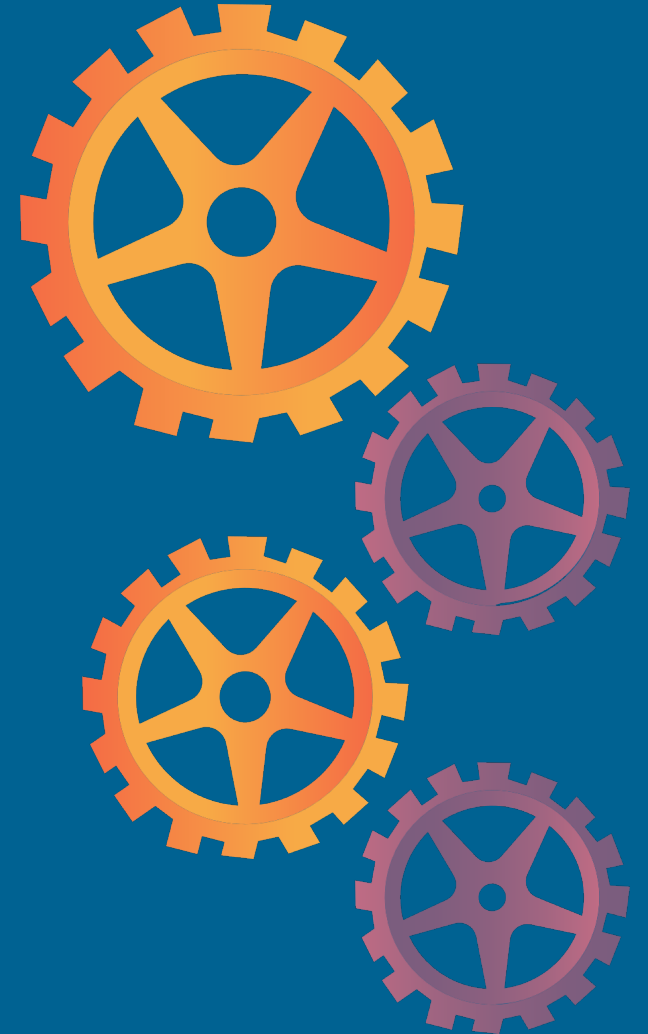
The team captain

- One team member is the team captain (scrum master)
- Initially this role is played by the teacher
- Selected by the team or by the teacher during the first sprint
- Team captain is responsible for Flap
 - Flap is a version of a Kanban board



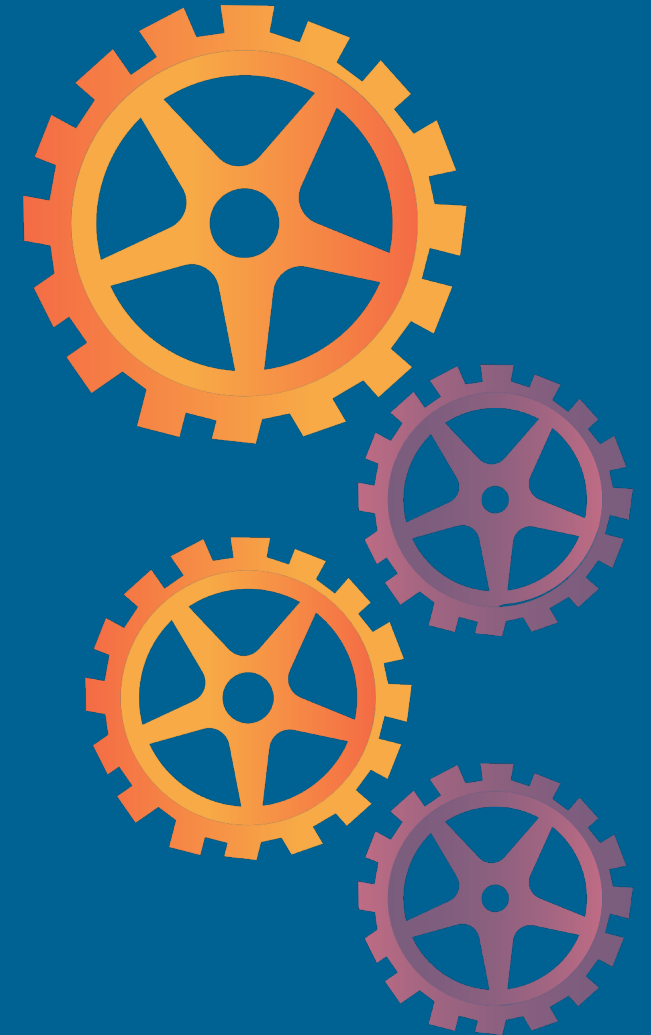
How to establish Agile Learning Culture

- **Identify and involve every stakeholder.** As each stakeholder has a different perspective, you'll be able to collate their ideas and feedback, helping you create something that everyone want and is interest about.
- **Encourage peer learning.** Its is easier to learn by teammate rather than a teacher.
- **Make learning continuous.** In continuous learning, an Agile learner acquires new skills and knowledge on an ongoing basis.
- **Break it down into bite-sized chunks.** Instead of using extensive learning courses, give people small packs that will help them learn something new quickly
- **Make time for inspection and reflection.**
- **Appreciate learning.** Appreciate team members for achieving a milestone or performing well in a course



References

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- Parsons, D., & MacCallum, K. (2019). Agile and lean concepts for teaching and learning. *Agile and Lean Concepts for Teaching and Learning*. Springer Singapore. <https://doi.org/10.1007/978-981-13-2751-3>.
- Agile Manifesto for Teaching and Learning. https://f.hubspotusercontent40.net/hubfs/5726799/LearnLife_August2021/Pdf/EJ1157450.pdf



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Thank you.

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