MEET OUR TEAMS

Tallinn University
The School of Digital Technologies
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Tallinn University's mission is to support the sustainable development of Estonia through high-quality research and study, education of intellectuals, public discussion and promotion of academic partnership. By developing research carried out in Estonian language and for the development of Estonia, the University has integrated into the European education and research area, and contributes to the development of Estonia as a country with a smart economy and an astute organisation of society.

According to the TU Academic Charter, the University's basic values are openness, quality, professionalism and unity. Tallinn University plays a leading role in promoting and developing an intelligent lifestyle in Estonia, thus supporting both Estonia's sustainability and the self-actualisation of individuals. The University develops five knowledge-based focus fields: educational innovation, digital and media culture, cultural competences, healthy and sustainable lifestyle, and society and open governance.

How does TEACH4EDU4 project fit into this mission?

TEACH4EDU4 project activities are designed to enable the creation of the environment for implementation of new learning and teaching approaches in computer science and related disciplines in line with the developments in Industry 4.0. The aim and activities of the project are closely related to the two main focus areas of Tallinn University – educational innovation and digital and media culture. Over the past decade, higher education has been influenced by a variety of technological and social trends related to digitalization which have led in turn to several forms of innovative pedagogical practices using technologies. This project enables to explore some of these developments and practices in greater detail and develop new innovative learning scenarios in order to respond to the rapid changes in the society and on the labour market, and therefore better respond and adapt for new social tasks.

What is your role in the TEACH4EDU4 project?

The School of Digital Technologies of Tallinn University is involved in all intellectual outputs (IO) of the project and is a leader of the IO4: Guidebook on the use of learning data to create evidence-based learning design decisions. The aim of the Guidebook is to support teachers and educators in making evidence based learning design decisions and to support them in evaluating the effects of these decisions. The development of the Guidebook and Learning Analytics (LA) dashboards will be organized around the following questions: How to capture and systematize learning design data? What are the appropriate metrics to track and measure expected LA ("footprint") of each of learning activities defined in accordance to learning design models that lead to achievement of learning outcomes? What are the necessary functionalities of teacher's and student's dashboards? What is the deviation of expected results and students' real behaviour in joint courses? How to use LA to refine and redesign learning activities according to learning analytics results? How to make it actionable?

What is the most exciting aspect of taking part in TEACH4EDU4?

The School of Digital Technologies of Tallinn University has a long experience in the field of educational innovation and digital competences, and we have been and are currently working on several projects on these topics. We are very excited to be able to combine the experience gained in a number of projects and to develop new approaches and perspectives for innovative teaching and learning scenarios. Another exciting aspect is the networking of new partner universities involved in the project, with which there was no previous cooperation experience.

In your opinion, which of the competences expected by the Industry 4.0 do you find most important?

There is a vast literature that reviews the competencies needed in Industry 4.0. Competencies that refer to the ability to use and interact with modern technologies are most often referred to. In addition to technological competencies, methodological competencies (e.g., creativity, analytical skills, problem-solving, decision-making, research skills), social (e.g., communication skills, networking skills, ability to work in a team, ability to compromise and cooperate, leadership skills) and personal competencies (e.g., flexibility, motivation to learn, ambiguity tolerance, sustainability mindset, ability to work under pressure) are highlighted. However, there is no consensus regarding the competencies needed for sufficient work in Industry 4.0 environments. I consider it necessary to use the above-mentioned competencies in an integrated way, rather than emphasizing the importance of one or the other.

How can we can make students more engaged and motivated to develop these competences?

The starting point should be understanding student needs and expectations, developing engaging activities, building a sense of community, employing interactions, discussion and reflections, and providing tools, tips and hints for achieving these competencies.

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