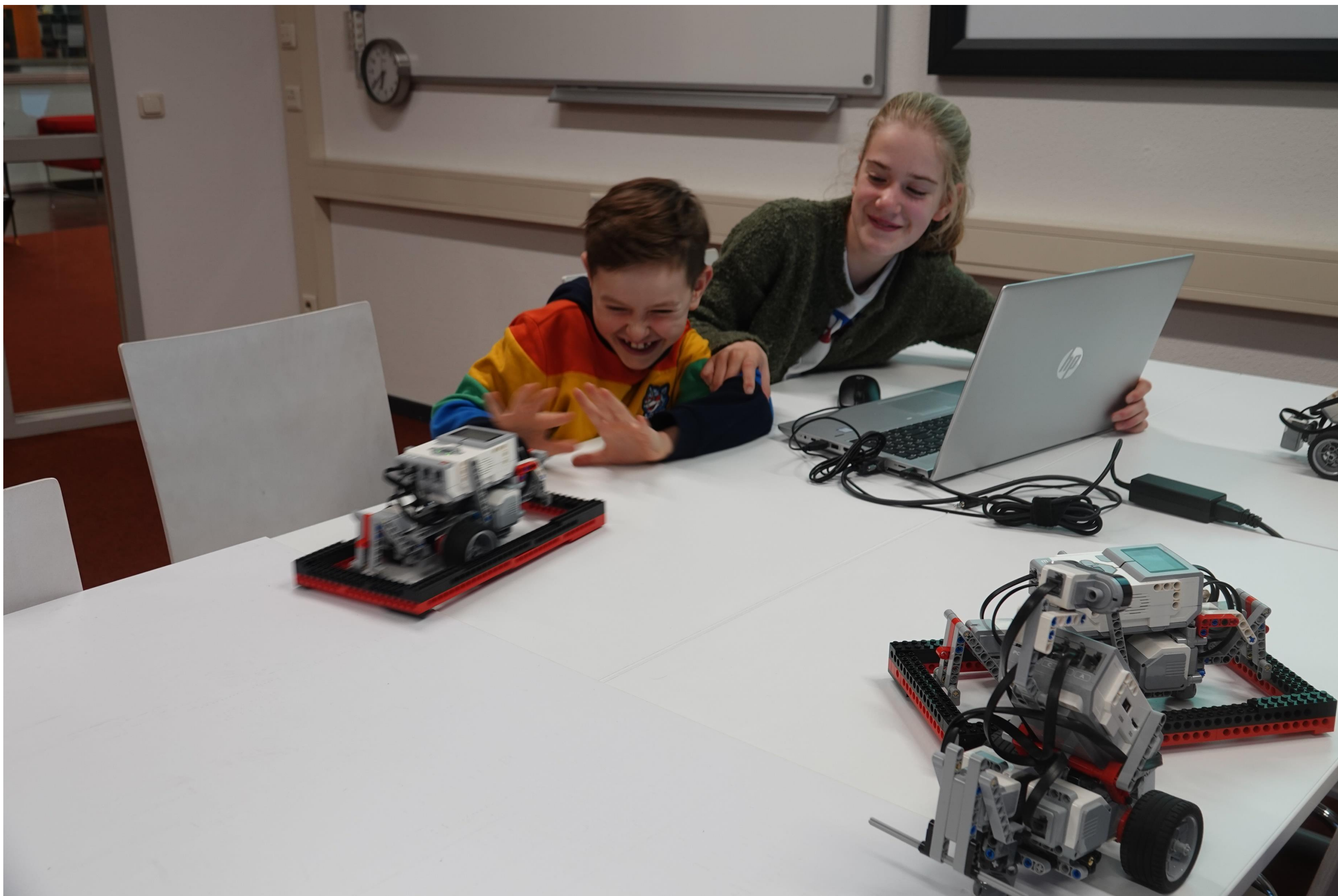# Research Group Educational Robotics, Computational Thinking & STEAM-learning

Nardie Fanchamps PhD - Assistant Professor - Open Universiteit
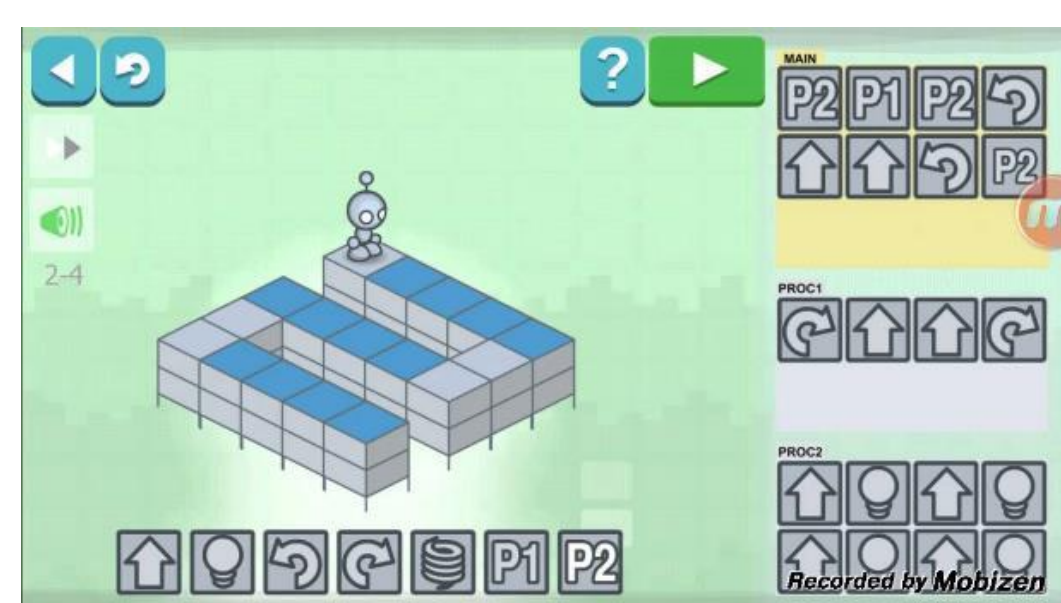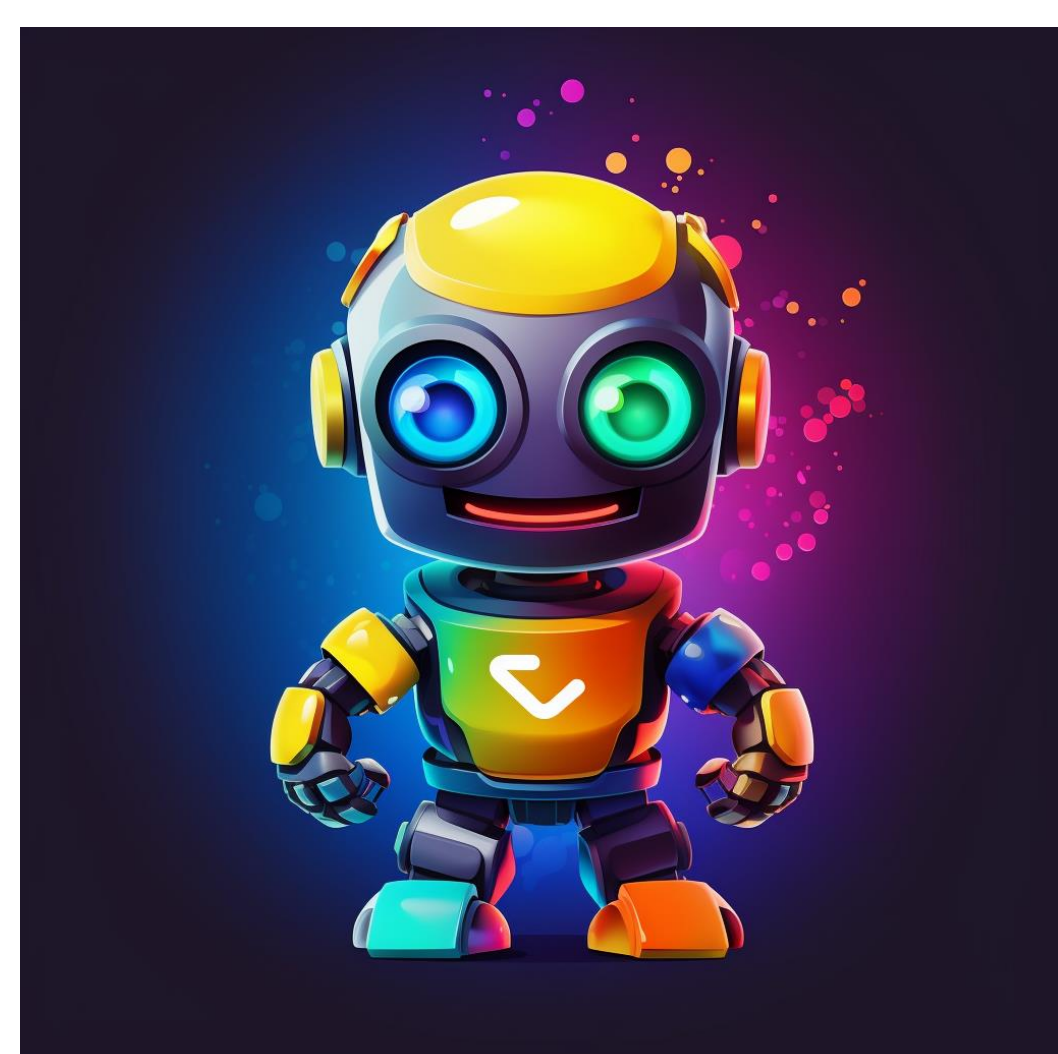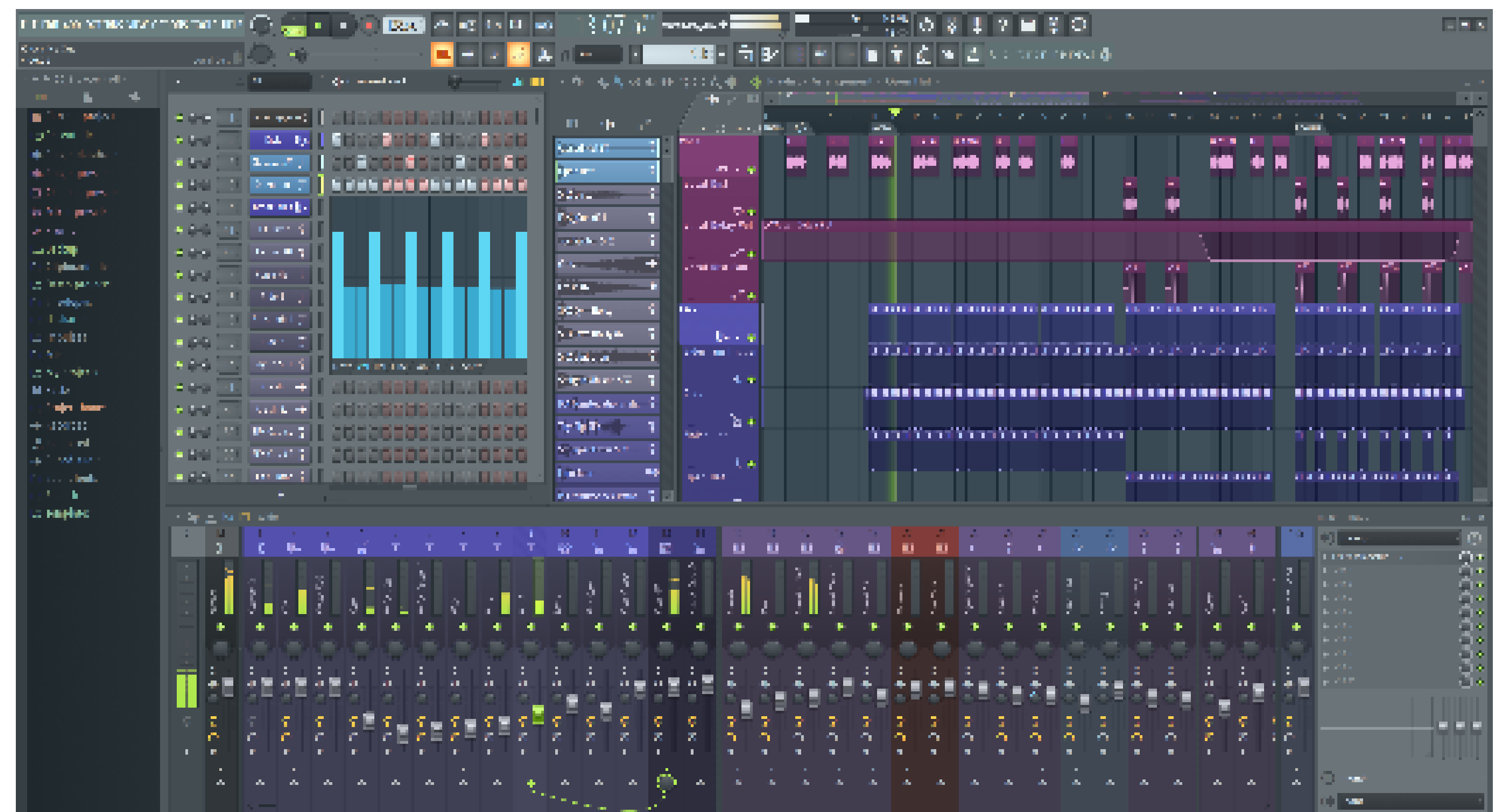Educational Sciences -
Technology Enhanced Learning Innovations

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"To understand more about the impact and possibilities that robots can have on our society"!

ER research categories:
- Educational robotics, focusing on the use of robotics as tools to foster CT and STEAM, to obtain generic & specific skills, and to acquire strategies for learning in other school subjects.
- Telepresence robotics, focusing on enabling teleoperated, interactive presence and forms of hybrid learning.
- Social robotics, focusing on embodied (humanoid, zoomorphic robots, etc.), (semi)autonomous support for teaching, learning and support, and social assistive robots.
- Educational robotics as a purpose and a means for artificial intelligence (AI) for learning and teaching, for advancing CT and usage in the STEAM-domain.

Our aim:

To demonstrate the added value of integrating educational robotics in education, for (further) teacher professionalization, to further sharpen and refine the definition of computational thinking, to develop and validate new assessment tools that can demonstrate development on CT through a different kind of sensory perception, and to further facilitate STEAM-learning through inquiry-based and design-based learning.

Outline:

A solid foundation for the research group was already established, a multitude of initiatives have already been completed, and several research and professionalization projects are now in place. Furthermore, also through participation in a multitude of national and international cooperation initiatives, links to professorships, courses, institutes, expert groups and special interest groups.

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