

TALLINN

A trailblazer city in digital education

Tallinn is the capital of Estonia. Situated on a bay in the North-Western part of Estonia, on the shore of the Gulf of Finland of the Baltic Sea, Tallinn has a population of 437,811 (as of 2022), about one third of the entire population of Estonia, who live in the eight district of the city. Tallinn is also the main financial, industrial, and cultural centre of Estonia, the old part of the city is a UNESCO World Heritage site.

Tallinn combines a small-scale urban environment with technological and mobility infrastructure, and is a Smart City, recognised as one of the world's most technologically oriented cities.

The governance of education

It is important to point out that local governments play a key role in governing and funding school education in Estonia, where education constitutes the single largest local government expenditure and has consistently accounted for between 35% and 38% of all local spend in the last 10 years (OECD data).

With the mission of shaping Tallinn's educational policy, developing the learning environment and creating conditions for successful study and educational activity by providing support to pupils, parents and institutions, the City of Tallinn also devotes an important city's budget to financing the educational institutions across the urban area. The Tallinn Education Department manages the educational policy and administration of early childhood, general, vocational and extra-curricular education in the city's municipal educational institutions, including:

- 125 pre-school institutions (4 nurseries, 121 kindergartens)
- 57 general education schools (1 kindergarten-basic school, 12 basic schools, 42 upper secondary schools, 2 adult upper secondary schools)
- 10 hobby schools
- 1 vocational school (Kopli Vocational School)
- Tallinn Study Counseling Center
- Tallinn Teachers' House

Approximately 21.500 children attend Tallinn kindergartens, 46.200 students attend municipal general education schools, and 7.900 students attend municipal hobby schools.

Educational strategy vis a vis digitalisation

Digital solutions and the increasing level of digital competence have improved the accessibility, diversity and efficiency of Estonian education. Across the country, general education schools and vocational schools have a high-level digital infrastructure.

The Estonian Education Development Plan 2021–2035 states that “in a rapidly changing world, the education system must ensure equal opportunities for all people to receive quality education, regardless of social or cultural background, age, gender, etc.” The Ministry of Education and Research highlights the need to continue the development of digital competences and support the diversification of learning, including through digital solutions. In this plan, the role of local authorities is crucial to ensure a wide range of high-quality learning opportunities, accessibility and high-quality learning environments, including an optimal network of educational institutions.



Digital education initiatives in tallinn

The **EduInnoLab** project is a city-funded initiative that has been promoting competence building in digital skills for both students and teachers since 2018. Its goal is to implement innovative learning methods and share knowledge. The main activities consist of running the educational innovation labs/ studios in different locations. In this initiative, various educational institutions and companies work together as a network, including the competence centres at schools and kindergartens focusing on different fields of digital innovation in education. Currently there are two types of innovation labs: **EduInnoLab 1.0** which comprises two Lego Innovation Studios, one Aeroschool, two Makeblock Studios, one Augmented Reality Studio, two Robogardens and **EduInnoLab 2.0**, the Centre for Design Thinking, Visualisation Laboratory, Science Engineering, Owl Robo Academy.

The **Smart Month project** started in April 2017 and runs annually with the coordination of the Tallinn Education Department. During the Smart Month, lessons, workshops and contests are organised throughout the city by Tallinn schools and kindergartens to share their experiences and methods, to get new innovative ideas and methods on digital learning, coding, robotics, virtual reality, etc. The Smart Month initiative supports innovation of the educational institutions and fosters creativity, entrepreneurship, experimentations and promotes new engaging ways of learning.

Educational Festival IduEDU: initiated and coordinated by the Tallinn Education Department, together with HITSA (Information Technology Foundation for Education), the company eKool (eSchool), Tallinn University and Startup Estonia (a government initiative), the Festival was organised for the first time in 2018. It aimed to bring together teachers, school principals and education experts in 100 workshops and companies to share educational innovation practices, services and equipment and to develop discussions on promoting quality education in the city.



We have asked Kadri Ausmaa and Tiit Tammela of the City of Tallinn about their experience in boosting digital innovation in the educational system of the city. Here's what they had to say.

1. What has been the approach to digital and innovative education in Tallinn

In the last five years we have realised that the use of various information technology tools is greater in schools where there is an educational technologist and these schools who have them are more motivated. The task of the educational technologist is to coordinate activities in the field of digital learning, finding new innovative solutions such as new digital tools etc, developing, advising and supporting the school staff and students in using the tools and opportunities of the digital age in the learning process. Regarding the need and the approach to digital and innovative education, Tallinn Education Department has found the funds to finance Education Technologist positions in schools. Innovations are supported by projects such as EduInnoLab, Educational Festival IduEDU, robotics tools in kindergartens. Five years ago, we acquired robotics tools for each kindergarten to offer basic robotics training.

2. What have you learned, what works and what doesn't?

We have learned that just by bringing tools and devices to kindergartens and schools is not enough. There must be support when you bring new devices and tools so that these will be taken into use whether it is providing training to teachers or something else which would help it. We have to think about what to do next and how to use it. Since we have acquired robotics tools for each kindergarten to offer basic robotics training now, we can insist for the kindergartens to use them.

3. If you had to give some piece of advice to other cities in Europe about the digital transformation in education, what would it be?

Cities should have education digital strategy plans which would regulate what would describe the most important principles and development directions in the organisation and development of the field of ICT of the municipal educational institutions of the City. That should be the basis of planning and doing things. In innovation it is important that not all questions need to be answered, sometimes it is important that you need to try and test what works and what doesn't.



The URBACT On Board transfer network in Tallinn

Between 2018 and 2021, the City of Tallinn was a partner in the URBACT III On Board Transfer Network (<https://urbact.eu/onboard>), where six European cities worked together to develop their local education strategies and to create an educational innovation network to support it.

In the course of the On Board project, a good practice of Viladecans, Spain was analysed in order to adapt its success story according to the needs of Tallinn. The

Tallinn Board of Education involved various schools, kindergartens and youth centres in the project. The common goal was to innovate educational practices and promote youth entrepreneurial spirit and skills for the cooperation between educational institutions and the community. Based on this experience, Tallinn led the URBACT National Practice Transfer Initiative to share the On Board approach with other Estonian small- and medium sized cities on education, digitalisation and innovation.

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<https://www.tallinn.ee/en/haridus/tallinn-education-department>

<https://urbact.eu/networks/board>

<http://onboard.dev.netsenselabs.es/tallinn/>

