



September 2023

# Improving the provision of digital skills in education and training (20/09/2023)



## Organiser

Tallinn University, Estonia.

## Guests

- **Mart Laanpere**, professor of mathematics and computing education in the School of Digital Technologies, Tallinn University, Estonia
- **Angela Jafarova**, Co-founder of EdTech startup Datorium, Latvia
- **Karl Saamuel Hollman**, musician, a sound engineer and law student in TalTech university Tallinn, Estonia. experimental science didactics", Spain
- **Aleksandra Jaworska**, Analytics and Business Communication student at University of Bielsko-Biała, Poland.

## Webinar

The webinar embarked on a profound journey through the realms of digital education and skills development, unfolding in several captivating segments, each offering unique insights and perspectives.

### Section 1: Setting the Stage

The journey begins with an insightful discussion led by Mart Soonik and Kristof Fenyvesi, who unveil the roadmap for an upcoming show dedicated to digital education and skills development. They introduce the distinguished guests who will accompany them on this educational voyage, emphasising the pivotal importance of considering the learners' perspective and digital connectivity in the realm of education. In this segment, the speakers also challenge the prevalent myth of "digital natives" and advocate for the acquisition of specific digital skills.

Kristof Fenyvesi adds depth to the narrative by introducing two webinar guests, Karl Saamuel Hollman from Estonia and Alexandra Jaworska from Poland. These two individuals bring fresh perspectives to the table, enriching the conversation. The dialogue takes a crucial turn as they delve into the significance of gender diversity in digital education. Additionally, they introduce two more distinguished guests, Mart Laanpere from Estonia, celebrated as a leader in informatics education, and Angela Jafarova from Latvia, the driving force behind coding education programs targeting girls.

Towards the conclusion of this segment, the speakers emphasize the paramount importance of continually enhancing digital skills, especially in the face of ever-evolving technologies. They extend an open invitation to the viewers, encouraging active participation by posing questions during the show. This sets the stage for a dynamic and interactive exploration of digital education's multifaceted aspects.

### Section 2: Perspectives from Learners

In this segment, the spotlight shifts to the perspectives of Karl and Alexandra. Karl, a law student with a fervent interest in music and sound engineering, shares his experiences from Tal Tech University in Estonia. He sheds light on the institution's progressive approach to digital skills education, highlighting a compulsory IT course for all students and a digital-first approach to assignments. He passionately underscores the vital role played by dedicated educators in igniting students' interest in digital skills.

Alexandra, hailing from Poland, is pursuing studies in analytics and communication. She offers a glimpse into her university's adoption of Microsoft Teams for communication and collaboration. Alexandra underscores the pressing need for introducing programming education at an earlier stage in the educational journey. The conversation takes an intriguing turn as they explore the potential benefits of commencing digital education during the formative years of schooling. The speakers delve into the role of gamification in enhancing learning and emphasize the practical development of skills.

Both guests engage in a thought-provoking discussion on the integration of digital tools within their respective fields of study. Karl envisions the use of AI chatbots in law, while Alexandra underscores the utility of technology in the realm of business analytics. The discussion further unfolds as they contemplate the transformative potential of a digital education hackathon, where collaboration, social skills, and global communication can unite students in a quest for knowledge and innovation.

### **Section 3: Insights from Experts**

This segment introduces two seasoned experts, Mart Laanpere and Angela Jafarova, who bring invaluable perspectives to the webinar. Mart Laanpere, a professor of mathematics and computing education, takes the audience on a journey through his extensive career, starting as a teacher in 1989 to his current role. He reflects on his substantial contributions to the development of informatics curricula and textbooks, underlining the importance of educational materials in shaping the future of technology education.

Angela Jafarova, a co-founder of a tech startup Datorium and a passionate advocate for challenging gender stereotypes, shares her experiences. She has been at the forefront of promoting IT education for girls and women. Angela emphasises the imperative to break down stereotypes and create safe learning environments, especially for girls eager to explore the world of technology. Additionally, she offers insights into her tech startup's innovative solution for assessing student engagement in online courses.

The dialogue deepens as they delve into the critical subject of coding skills as a modern essential language. Mart Laanpere explores the diverse approaches to technology education across various European countries. Angela underscores the significance of gamification and the need for a secure environment for girls to embrace coding, drawing from her experience with the "Pigtails" girls' coding course.

The segment concludes with a forward-looking discussion on the future of digital tools in education. The speakers ponder the challenges and opportunities that lie ahead and the potential for collaboration in developing innovative educational technology solutions. Their wisdom casts a guiding light on the evolving landscape of technology education.

### **Segment 4: Evolving Digital Skills Acquisition**

In this segment, the spotlight returns to Mart Laanpere and Angela Jafarova as they share profound insights into how European youth keep their digital skills updated. Mart emphasises that young Europeans often acquire digital skills independently, surpassing formal education systems due to the rapid pace of technological change. He advocates for schools to focus on providing generic readiness skills, including digital competence, entrepreneurial competence, learning-to-learn skills, and computational thinking.

Angela resonates with Mart's assessment and accentuates the adaptability of young people to technology. She champions the direct approach to teaching digital skills, particularly for older students

who are already familiar with technology. The discussion unveils the formidable challenges faced by educators in keeping pace with the rapid evolution of technology.

Both experts concur on the vital importance of collaboration between educators and practitioners immersed in the world of digital tools. The conversation culminates with a focus on the upcoming Digital Education Hackathon, where innovation is anticipated to flourish. Mart Laanpere eagerly anticipates being surprised by the ingenious ideas from participants, while Angela encourages diverse teams to think creatively and tackle real-world problems using technology.

This segment underscores the ever-evolving nature of digital skills acquisition and the urgent need for a flexible and adaptive approach in education to keep pace with the relentless advancement of technology.

### **Segment 5: Ask Me Anything**

In this final segment of the webinar, Kristof Fenyvesi introduces the Ask Me Anything session, a platform for viewers to engage actively. A diverse panel of participants, including Angela Jafarova from Latvia, Professor Mark Laanpere from Estonia, Alexandra Jaworska from Poland, and Karl Saamuel Hollman, a law student, takes center stage.

The discussion pivots to the implementation of virtual reality (VR) and augmented reality (AR) in the field of law and legal education. Karl suggests the utilization of VR simulations for courtroom practice and even competition against AI. Angela shares her own VR experience in repairing an electrical system within a subway station, underscoring the vast potential of VR and AR across various fields.

The conversation then turns to the future of education, with Alexandra proposing a balanced 50/50 combination of online and in-person learning, allowing students to choose their preferred mode. The intriguing question of whether teachers could be replaced by artificial intelligence emerges. Alexandra, driven by her experiences, emphasises the irreplaceable role of human connection in education.

Karl lends his voice to the discussion, expressing a preference for in-person learning and highlighting the profound value of human interaction between lecturers and students. Angela contributes her perspective on engaging students through visual materials, interactive tools, and fostering active participation.

The dialogue transcends borders as it explores the challenges and opportunities of integrating digital skills into education systems in different countries, with a strong emphasis on collaboration and adaptability.

In closing, this segment epitomises the evolving landscape of education, the indispensable role of technology, and the necessity of adapting to meet the diverse needs of students in the digital age. It encapsulates the essence of the entire webinar, where voices from across the globe converge to envision the future of education in the digital era.