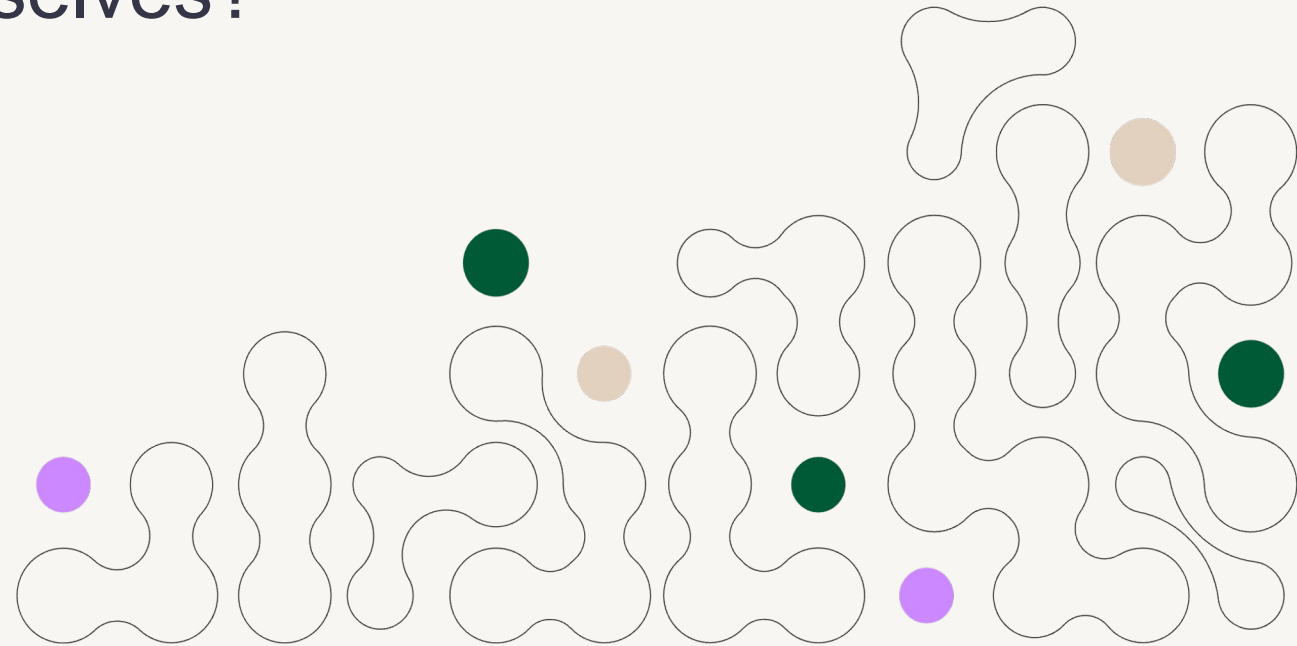


What happens when an entire country decides that AI should transform not only the use of technology in schools, but teaching and learning themselves?

Maia Boltovsky

September 9, 2026



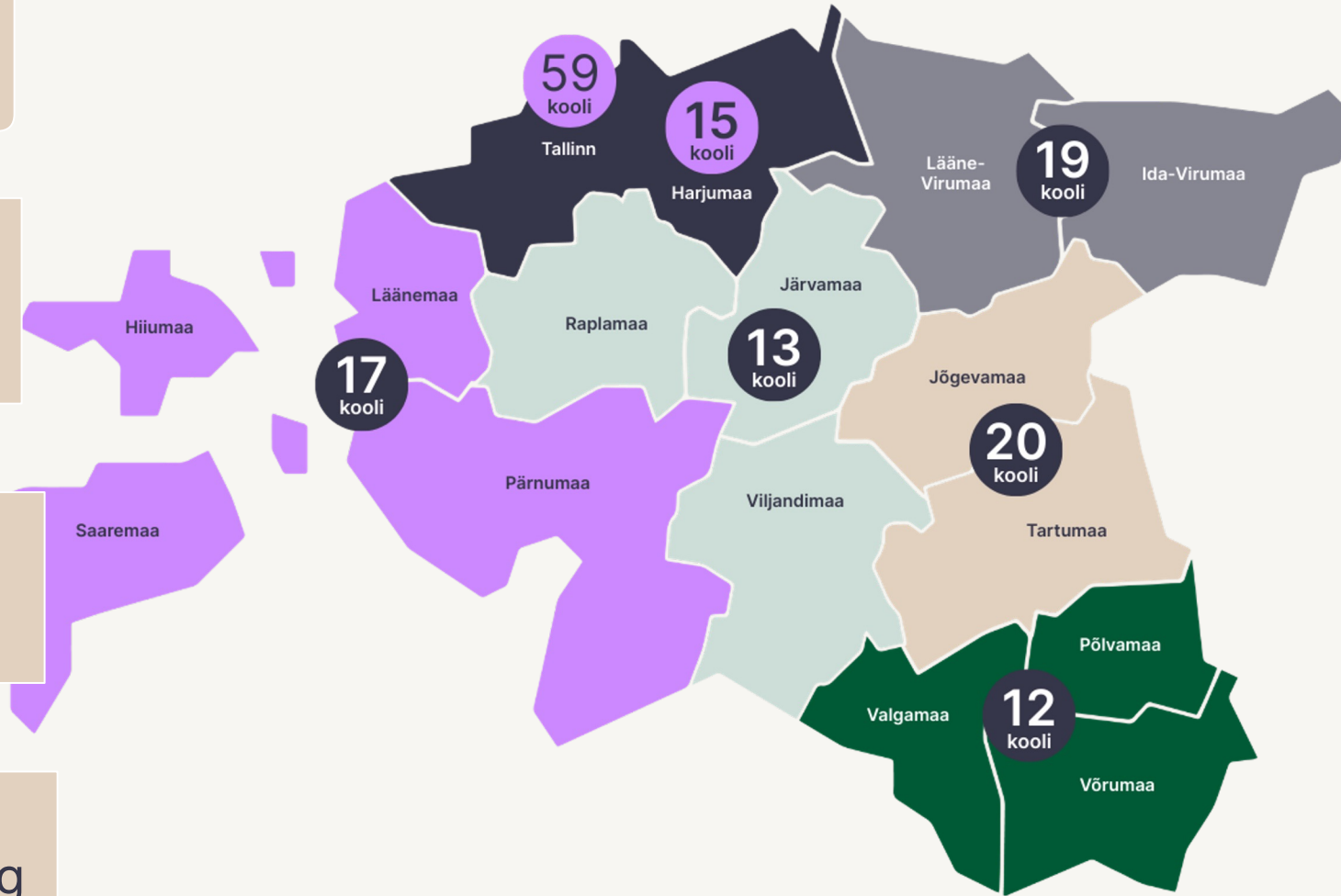
AI Leap in Estonia, 2025-2026

154 out of 156 schools

4,700 upper-secondary teachers

20,000 students in grades 10–11

100 schools have professional learning communities



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Student engagement with AI tools in learning, January–February 2024



ORIGINAL RESEARCH article

Front. Educ., 02 October 2025

Sec. Digital Education

Volume 10 - 2025 | <https://doi.org/10.3389/feduc.2025.1688092>

Student engagement with AI tools in learning: evidence from a large-scale Estonian survey



Mikk Granström *



Piret Oppi

School of Educational Sciences, Tallinn University, Tallinn, Estonia

 **Article metrics** **18** Citations **17,8k** Views **1,9k** Downloads [View details](#)

- 15,631 lower- and upper-secondary students responded.
- 74.2% of lower-secondary students used AI when studying.
- 90.2% of upper-secondary students used AI.
- 69% used ChatGPT — the preferred model at the time.
- Students used AI to solve homework problems, generate ideas, check facts and summarise topics.

[Granström, M., & Oppi, P. \(2025\). Student engagement with AI tools in learning: evidence from a large-scale Estonian survey. In Frontiers in Education \(Vol. 10, p. 1688092\).](#)



*“It is not about using AI the most,
but about learning to use it the
smartest.”*

*President Alar Karis
Initiator of the AI Leap*



Teachers' readiness to use AI in education, November–December 2024



ORIGINAL RESEARCH article

Front. Educ., 19 June 2025

Sec. Digital Education

Volume 10 - 2025 | <https://doi.org/10.3389/educ.2025.1622240>

Assessing teachers' readiness and perceived usefulness of AI in education: an Estonian perspective



Mikk Granström *



Piret Oppi

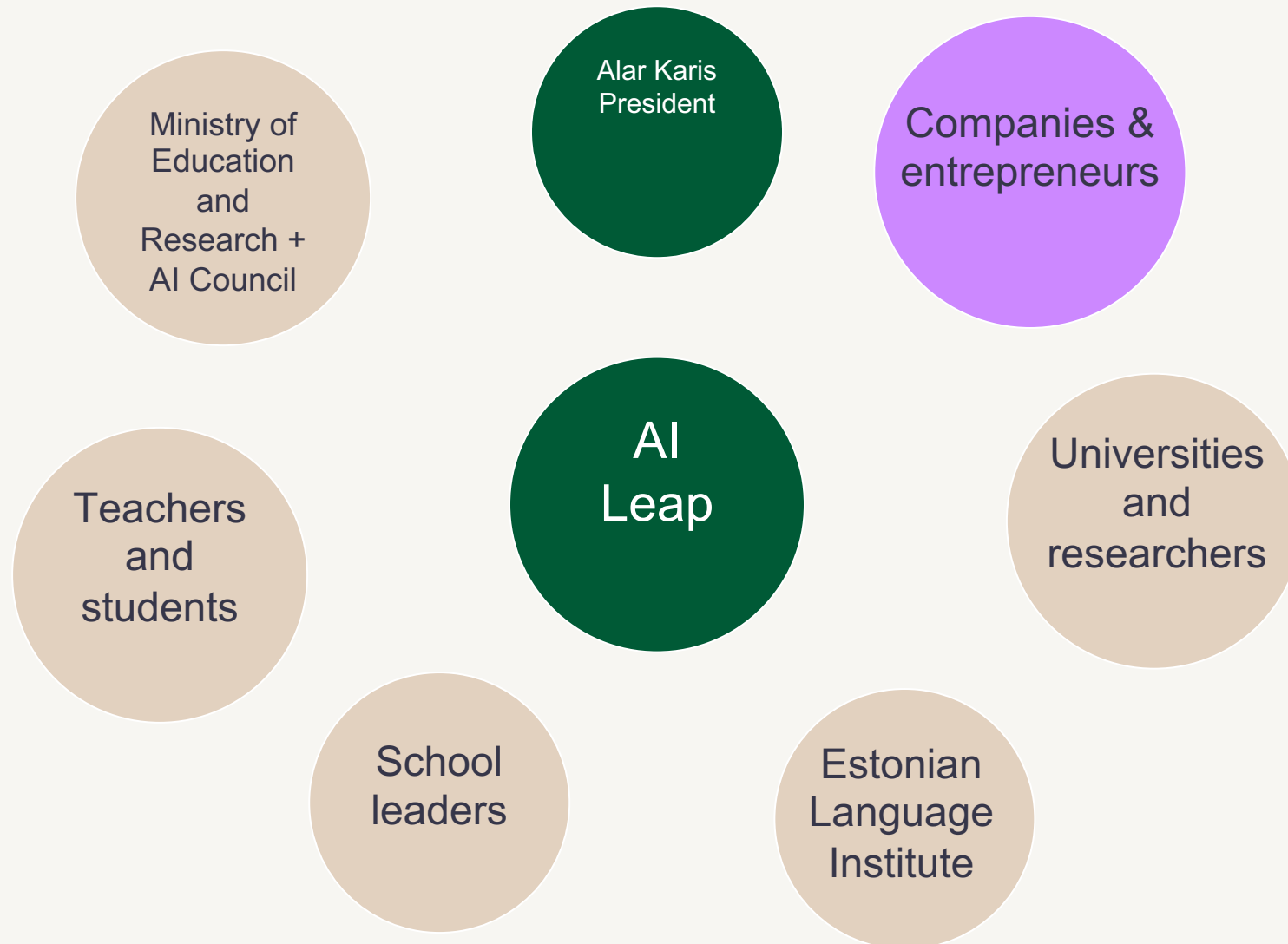
School of Educational Sciences, Tallinn University, Tallinn, Estonia

 **Article metrics** 47 Citations 15,6k Views 4,2k Downloads [View details](#)

- 3,848 teachers from 133 schools participated.
- 53% said they used AI tools in their work.
- 47% had never used a single AI tool.
- AI use was more common among lower-secondary teachers — about 66% — while only about half of upper-secondary teachers reported using AI.

[Granström, M., & Oppi, P. \(2025\). Assessing Teachers' Readiness and Perceived Usefulness of AI in Education: An Estonian Perspective. In Frontiers in Education \(Vol. 10, p. 1622240\).](#)

One national effort, many contributors



What if we choose not to address AI in education?



- We will not make the most of what AI can offer education.
- Delegating thinking can weaken learning and critical thinking thus becoming more vulnerable to misinformation and manipulation.
- Inequality can deepen.



Teachers and schools needed support

PROBLEM

AI use was spreading faster than shared teaching practice, learning habits and school agreements.



RESPONSE

Build a national learning system around AI literacy, critical thinking and teacher collaboration.

AI Leap was designed as a national learning programme — not a tool rollout.



PROBLEM

Teachers and schools needed support to rethink learning, teaching, assessment and the smart use of AI.



RESPONSE

Work with teachers, students, researchers, technology partners and policy-makers — at national scale.

The limits of existing AI tools

PROBLEM

Most tools are designed to maximise productivity and provide ready-made answers. They are not designed to support understanding, reasoning or learning.



RESPONSE

Develop learning-supportive AI with neuroscientists and education researchers — while measuring learning and tracking impact.

The teacher is not the bottleneck. The teacher is the multiplier

Each school selected
2 teacher leaders

Monthly regional
seminars
led by field experts

- * Changes in teacher work
- * Changes in teaching practices
- * School-level agreements on the use of AI
- * Student learning and well-being

Learning and teaching
in the age of AI
(motivation, learning
skills, assessment)

AI literacy
(prompting, assistants,
learning applications,
ethics)

School-level learning communities'
monthly meetings

Student programs

41

student-focused
events

1,762

young people

≈950

world-café
participants

Across Estonia, students
discussed AI and
learning • relationships • creativity
• social-media behaviour •
the view of the future

The first signs of change are visible in teacher practice



Spring 2026 teacher survey

Teachers using AI in teaching



95.9%

Schools with a professional learning community



67.1%

Estimated weekly time saved

1.8 h

What changed in schools?

Teacher survey

fall 2025

→

spring 2026

Homework

65.6%

→

71.4%

Feedback

43.2%

→

47.6%

Assessment

28.5%

→

30.7%

80.2% agreed students may
delegate some thinking to AI

From programme activity to learning outcomes

University of Tartu
Jaan Aru

Stanford
+ OpenAI

The study is coordinated by the Ministry of Education and Research and led by Jaan Aru at the University of Tartu.

9,000+
students
consented

100
upper-secondary
schools

At the centre of the evaluation:

Autonomous motivation

Learning-related beliefs

Task persistence

Learning strategies

Self-regulation

Prior knowledge activation

Conceptual change

AI literacy

No teacher should have to navigate AI alone



2025/26 PILOT YEAR

4,700 teachers
20,000 students in grades
10–11
154 schools
67% with active learning
communities
National research launched

2026/27 SCALE

+10,000 tenth-grade students
+18,000 vocational students
+2,100 vocational teachers

Up to **+15,000** teachers in
grades 5–9

2027/28 SYSTEM CHANGE

AI use embedded in
education
Long-term impact
research
Validated practices for
the national system
Open model for other
countries
Ministry ownership and
lasting funding



Real Intelligence First, Artificial Intelligence Second.

Thank you

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<https://tihupe.ee/en/>

