Digital transformation of education in Estonia

Policies and measures to support transformation

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strategic approach to digital education

Key enabling condition for Estonian Education 2035

- + digital solutions as tools for educational innovation that enable the differentiated and personalised learning
- + educators are familiar with trends, opportunities, risks and methodologies related to new technologies, and apply the technologies in a purposeful way

essential

- + population 1,3 mln
- + 300 000 learners in formal education, 26 000 teachers
- + internet is a social right
- + 99% of services are online
- + Estonians trust e-solutions

electronic ID

The strongest identity

- + every Estonian has an electronic ID
- + digital signature since 2002
- + HarID for education
 - OpenID Connect/OAuth standard,
 MIT open source software licence
- + e-Residency

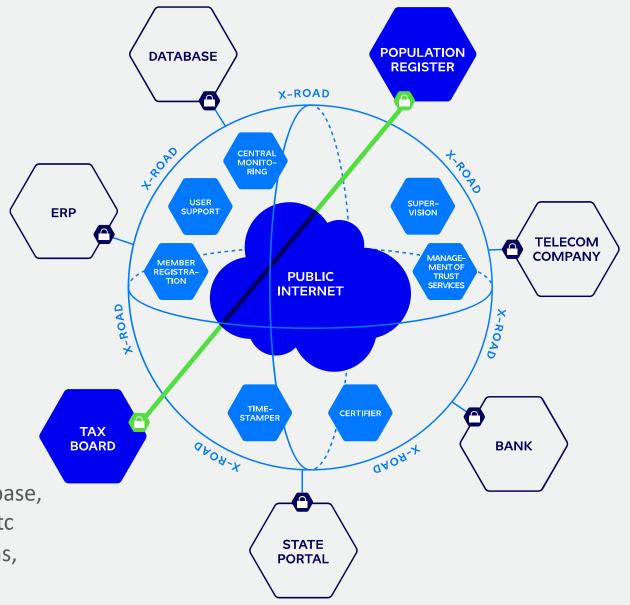


exchange

Security and interoperability

+ Main partners outside education: population database, health board, social insurance, credit institutions etc

+ In education: admission, LMS, EMS, tests and exams, digital learning materials



education technology

Clear and honest principles

- + once-only
- + digital first
- + user centred approach
- + disclosing the data
- + open source code
- + focus on governance and collaboration

Over 20 digital solutions covering five functional domains

Learning management and digital learning resources (e-schoolbag, assessment tools, planning tools etc)

Learning administration (entry, graduation, scheduling, transitions, internships etc)

School management and governance tools (ID, AD, webpage, e-shop, accounting, records and documents management, strategic planning)

Data services(national registers, statistics, reports, digital credentials, data governance system)

Other services (quality assessment, single digital portal, digital solutions for project management and administrative activities)

rethinking

- + access to education
- + equity and equality in and through education
- + role of a teacher
- + educational content
- + assessment ...

digital infrastructure for personalised learning

- + digital solutions as tools for educational innovation that enable the diversification and personalisation of education
- + a systematic approach to the introduction of new solutions

Roadmap for implementation of personalised learning concept at school level

and design

Preconditions:

- Learning outcomes graph
- Learning resources linked to learning outcomes graph
- Dashboard for planning learning outcomes and pathways to achieve the goals for teachers and students

Organisation of self-driven independent learning

Preconditions:

- Access to quality learning resources relevant and ability to use the resources in purposeful way
- Digitalising the traditional learning activities (digital imprints)
- Students' dashboard for navigating the personalised learning pathways

Preconditions:

- Contemporary approach to learning targeting at developing the 21st century skills
- Teachers´ dashboard for navigating the personalised learning pathways

Preconditions:

- Collecting data digital imprints on everyday learning activities
- Learning analytics dashboards for students and teachers

Collaborative learning spaces

Data-driven learning process analysis and design

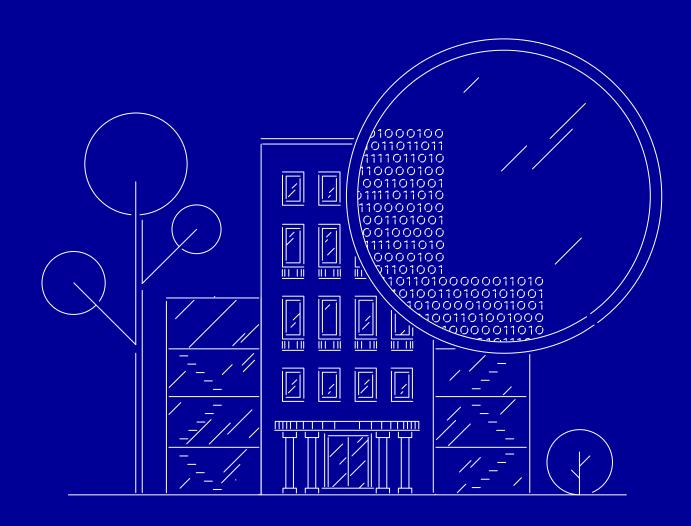
a digital focus in lifelong learning — a strategic goal

the digital content development skills in all age groups create equal opportunities for all learners and conditions for increased competitiveness

- + digital competence as a key competence in curriculum
- + ICT basic skills for all
- + ICT related subjects available for all (coding, robotics 3D design and 3D printing)
- + a digital solution for the management of individual educational paths and careers and assessment of skills

policy measures

- + Digital infrastructure support schemes
- + Collaborative networks and co-creation spaces for boosting innovation
- + Investments in digital learning resources and eservices
- + Investments in skills and education technology
- + Investments in research and research uptake
- + Data governance regulations and open data
- + E-services marketplace principles



cooperation with EdTech

fastest growth in sector







- + sophisticated ecosystem
- + 2021 50% growth
- + governance of educational data, collaboration with research institutions

Thank you!