



Tradition *versus* Innovation in Education?

The Estonian Case



Hello!

I am Heli Mattisen

Director

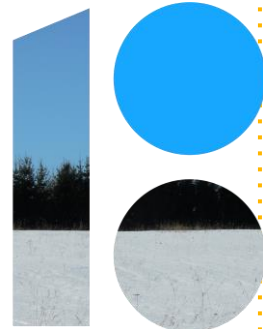
Estonian Quality Agency for Higher and Vocational
Education

Estonia in numbers

- Population is 1,3 million
- 30 people per km²
- 100 years of the Republic of Estonia
- 2 out of 3 people live in towns
- Literacy rate is 98,5%
- Every Estonian speaks 2-3 foreign languages
- Basic education the best in Europe and in the top 3 globally



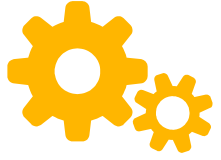
EESTI VABARIIK





Tradition or
Innovation?

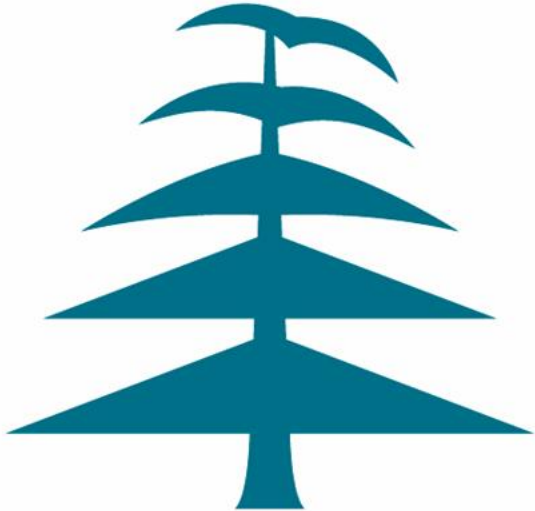
Which way to go?



innovation



innovation



tradition

The tree of education

innovation

innovation



tradition





More **start-up companies** per capita than any other country in Europe.

innovation

innovation



tradition



Skype.

Transferwise.

Toggl.

Taxify.



Internet access is
a human right.



Highly developed
digital society. **e-**
Estonia.

innovation

innovation



tradition



Electronic ID-card

- Access to all government services
- Digitally signed documents
- Travel document
- Health insurance card



E-residency

- No citizenship
- Set up a company online
- Access to Estonian bank services
- 17 000 new e-residents and 1 500 new companies in 5 years



E-taxation

- 95% of all local taxes
- User information securely stored online
- Pre-filled forms
- Review and click "send"
- 3 minutes on average



E-health

- For each individual
- Medical case notes, test results and x-rays
- Accessible for doctors from anywhere
- Informed decisions
- Digital prescriptions



Online voting

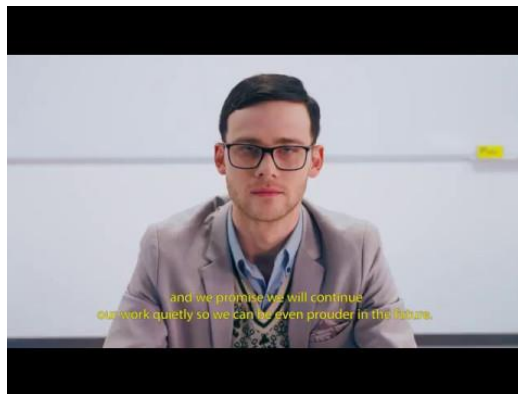
- Since 2005 (first in the world)
- Secure and anonymous
- Various elections
- 3 minutes
- Votes from all around the world

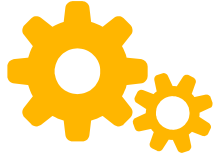
innovation

innovation



tradition





Is **technology**
the innovation
in education?



*Technology can amplify
great teaching, but great
technology will never
replace poor teaching.*



What is **innovation** in **education**?

Define or share your experiences with the person next to you. 2 minutes.
Share with the rest of us.



The **teachers**
from around
the **world** say...



*Innovation in education involves constant collaboration with colleagues: a total last-minute re-do of a teacher's lesson plan, because there was something else out there that he or she just had to try, a change in the direction of a class because **the students are driving the instruction.***



Innovation in education happens when educators ask, "How can I make this real, relevant, interesting, student-centred and personalized?"



*Innovation in education is about more than just technology. It's about how you can use technology to **empower students to become lifelong learners who are agents of change.***



**Innovation aims to
create additional
value for learning
and development.**



**Students are
unique individuals.**

**Individualized
innovation?**



Given the uncertainties that accompany all change, **teachers will always favour the status quo.**





We need to

- Invest in capacity development
- Invest in change-management skills
- Develop sound evidence
- Back it all up with sustainable financing



A SMALL DETOUR

Conference “Tradition and Innovation in Education” (Estonia, 2015)

1. New ways still need testing and getting used to.
2. The outcomes will be visible after several years, but we expect to see working solutions and results right away.
3. Educational changes are like human experiments.

The big challenge of education is to be cautious while being directed towards an uncertain future.





The actual educational innovation today is not finding out what needs to change. It is **putting what we know into action.**



Estonian Lifelong Learning Strategy 2020

Putting words into action.



The strong Estonian premise



Education is highly valued in Estonia and considered a cornerstone for individual and national success



Teachers and schools have great autonomy in implementing curricula and teaching



The socio-economic background has a low impact on students' results



Comparative international studies show that learners acquire good basic skills



Vision 2020

Learning is a lifestyle.

Let's notice development opportunities and let's look for clever solutions.

Responsibility

People understand that learning and self-development are their own choice and responsibility.

Needs

Studies are based on the learner's interests and capabilities, support his development and meet actual labour market needs.

Opportunities

The lifelong learning system offers good-quality, modern & flexible study opportunities that account for a learner's special needs



The **5 Main Goals** of Lifelong Learning Strategy 2020

1. A change in the approach to learning.
2. Competent and motivated teachers and school leadership.
3. The compatibility of lifelong learning with the real needs of the job market.
4. A digital turn in lifelong learning
5. Equal opportunities for lifelong learning and increased participation.



Main Challenges for Schools and Teachers



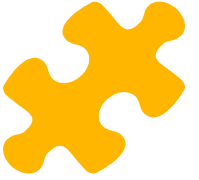
Everybody should find (be offered) the most appropriate learning opportunities.



Radical change in learning and teaching approaches and assessment methodologies

But all
that is
nothing
new.





Universities and schools as partners in collaborative learning.

Establishing educational innovation centres.



2 universities

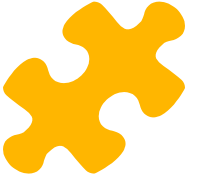
Teacher education and educational research

2 competence centres

Networks of teachers, researchers and professors

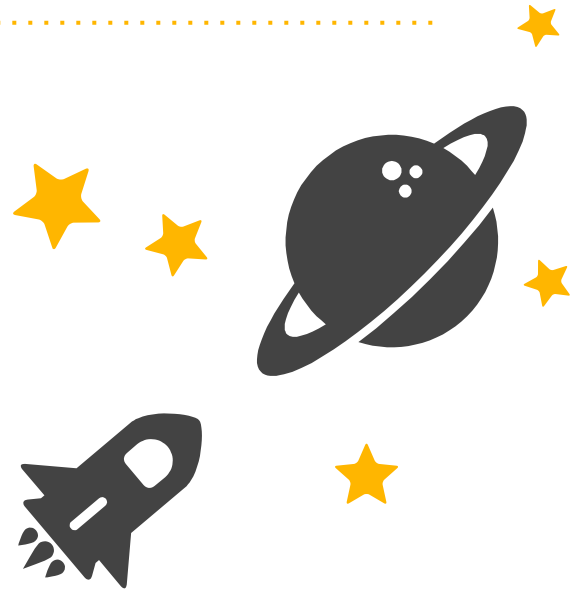
New approach to learning

Developing, collecting, testing and sharing



**Innovation can't be
imported or exported.**
It is context-dependent.

Best practices from Estonia



Developing innovative learning scenarios

1

Developing

University lecturers, researchers and students develop innovative learning scenarios

2

Testing

Data is collected and analyzed as school teachers and students test the scenarios

3

Co-creating

Teachers and lecturers come together to develop, implement and test long-term scenarios

4

Sharing

Teachers share practices within their schools and networks and new practices are implemented into teacher training

Identifying development needs

1

Measuring

University researchers and researching students conduct and analyze the results of school culture surveys

2

Interpreting

School leaders and researchers come together as a group and individually to put results into context

3

Identifying

With the help of trainers and researchers, schools identify their own pressing development needs

4

Resolving

School leaders, researchers and trainers define the best solution - experience exchange, in-service training, project etc

Partnering for school development

1

Mapping

University experts focus on mapping a school's learning, teaching and organizational culture

2

Coaching

University experts and other partnering professionals coach the school as they implement and organizational change

3

Action research

The process of change management is monitored and analyzed

4

Sharing

A model for school development (Future School) is piloted, tested, updated and shared

Building partnerships

A

Interdisciplinary
LIFE projects
for all university
students

B

Experience sharing
seminars for teachers,
school leaders and
lecturers

C

Hackathons and living
labs for generating
ideas and developing
solutions



Results so far

- Overview of the reality of schools and their needs
- A trusting working relationship between schools and universities
- A growing common understanding about the future of education



Changing the approach to learning is a holistic approach towards innovation in education.

Goals. Ways. Relationships. Implementation.



The three **directions** of educational change

Constructivist approach

Learning is individual, active
and takes place in a context.

Collaborative learning

Learning to work together
towards a shared goal.

Autonomy

Moving towards the increased freedom of action of the school, teachers and learners.



Innovation in education happens when the student is empowered to be the innovator of his own learning.



Gracias!

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