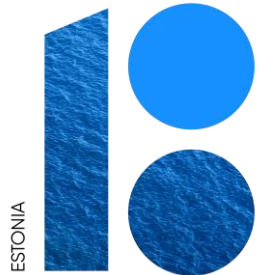


# Key success factors in the development of education in Estonia

Triin Noorkõiv

26 April 2017



# PISA 2015

Indicator	LT	LV	EE	FI	OECD average
<b>Science score*</b>	<b>475</b>	<b>490</b>	<b>534</b>	<b>531</b>	<b>493</b>
low performers (%)	24.7	17,2	8.8	11.5	21.2
top performers (%)	4.2	3.8	13.5	14.3	7.7
<b>Mathematics score</b>	<b>478</b>	<b>482</b>	<b>520</b>	<b>511</b>	<b>490</b>
low performers (%)	25.4	21.4	11.2	13.6	22.9
top performers (%)	6.9	5.2	14.2	11.7	10.8
<b>Reading score</b>	<b>472</b>	<b>488</b>	<b>519</b>	<b>526</b>	<b>493</b>
low performers (%)	25.1	17.7	10.6	11.1	20.0
top performers (%)	4.4	4.3	11.0	13.7	8.4
<b>Students attending government or public schools (%)</b>	<b>97.7</b>	<b>98.0</b>	<b>95.8</b>	<b>95.5</b>	<b>83.5</b>

*\*41 score points ~ one year of formal schooling*

# PISA 2015

Indicator	LT	LV	EE	FI	OECD average
Average time per week spent in <b>regular lessons</b> (hrs)	24.7	25.2	25.4	24.2	26.9
Average time per week spent <b>studying after school</b> (hrs)	18.5	18.2	17.4	11.9	17.1
<b>Student-teacher</b> ratio in the school	10.39	10.09	11.88	10.3	13.06
<b>Cumulative expenditure per student</b> aged 6 to 15 by educational institutions (equivalent USD using PPPs)	48 389	59 899	63 858	101 527	

# PISA 2015

Indicator: Students who..	LT	LV	EE	FI	OECD average
..agreed/strongly agreed <b>parents are interested</b> in their school activities (%)	93.8	92.5	91.7	96.4	93.5
..agreed/strongly agreed <b>parents support them</b> when they are facing difficulties at school (%)	88.0	86.2	86.9	90.9	90.6
..reported <b>being bullied</b> at least a few times a month (%)	16.4	30.6	20.2	16.9	18.7
..agreed/strongly agreed that they <b>feel like they belong</b> at school (%)	54.5	78.6	78.0	80.3	73.0
..who are <b>very satisfied with life</b> (%)	47.6	31.5	37.0	44.4	34.1

# PISA 2015

Indicator	LT	LV	EE	FI	OECD average
<b>Top performers</b> in all subjects (%)	1.8	1.5	6.1	6.0	3.7
<b>Low performers</b> in all subjects (%)	15.3	10.5	4.7	6.3	13.0
Students who agreed/strongly agreed that they <b>want to be one of the best students in their class</b> (%)	63.5	58.6	51.1	40.8	59.2
Students who expect to complete a <b>university degree</b> (%)	53.6	24.7	42.8	27.1	44.2
Students who agreed/strongly agreed that they <b>get very tense when they study</b> (%)	42.6	27.1	27.5	17.8	36.6

# PISA 2015

Indicator	LT	LV	EE	FI	OECD average
<b>Girls expecting to work in science-related professional and technical occupations at age 30 (%)</b>	25.4	21.5	20.3	18.7	23.9
Students who reported that they <b>exercise or practice sports</b> before or after school (%)	80.2	76.3	72.1	69.6	69.8

# PISA 2015

Indicator	LT	LV	EE	FI	OECD average
<b>Fully certified</b> teachers (%)	99.4	72.5	89.9	95.2	84.1
<b>Science teachers with a university degree and a major in science</b> (%)	94.5	79.0	75.5	86.6	73.8
Teachers <b>attended a programme of professional development</b> in the previous three months (%)	66.4	49.7	56.6	51.6	50.9
Mean index of <b>school autonomy</b> (% of tasks for which the schools have considerable responsibility)	91.1	84.1	88.2	74.7	71.3

# Some highlights\* of the Journey - 1990ies

Key words: opening up to cooperation with the west, de-ideologisation, decentralisation and autonomy, capacity and leadership building; institutional infrastructure forecast and planning

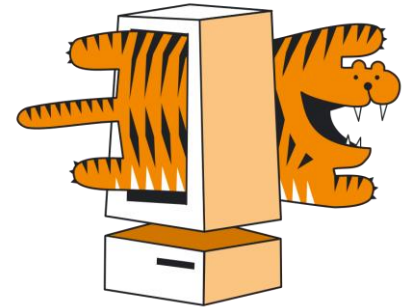
- 1990** Avatud Eesti Fond - Open Estonia Foundation - kickstarting various educational initiatives /[link](#)
- 1991** Junior Achievement /[link](#)
- 1992** YFU - Youth For Understanding /[link](#)
- 1993** Ühendus Omanäoline Kool - Schools of Distinction Association /[link](#)
- 1994** Hea algus - A Good Beginning /[link](#)

*\*Hereon with respect to all others that are not mentioned because of the prioritisation or limited information of the presenter*



# Some highlights of the Journey - 1990ies

- 1995** Eesti Haridusfoorum - Estonian Education Forum /[link](#)
- 1996** The first national curriculum after independence, based on social-constructivist principles, including general competences
- Tiigrihüpe - Tiger's Leap /[link](#)
- 1997** External evaluation system of study results



# Some highlights of the Journey - 2000s

**2000** First language immersion classrooms opened

Robotex [/link](#)

**2001**



**Vaata Maailma**  
Look@World Foundation

[/link](#)

Eesti Avatud Noortekeskuste Ühendus - Association of Estonian Open Youth Centres [/link](#)

Eetikakeskus - Centre of Ethics, University of Tartu [/link](#)

**2002** eKool - eSchool management tool [/link](#)

**2004** Eesti Hariduse Infosüsteem - Estonian Education Info System [/link](#)

# Some highlights of the Journey - 2000s

- 2005** Sustainable Estonia 21 strategy with the vision of Estonia as a knowledge society /[link](#)
  - Ettevõtlik Kool - Enterprising School /[link](#)
  - Teadusbuss - Science Bus /[link](#)
- 2006** School's internal assessment, decreasing role of external evaluation of schools
  - First PISA
  - Free school lunch for basic school students
- 2007** Mondo /[link](#)

# Some highlights of the Journey - 2000s

**2007** Noored Kooli - Youth to School /[link](#)

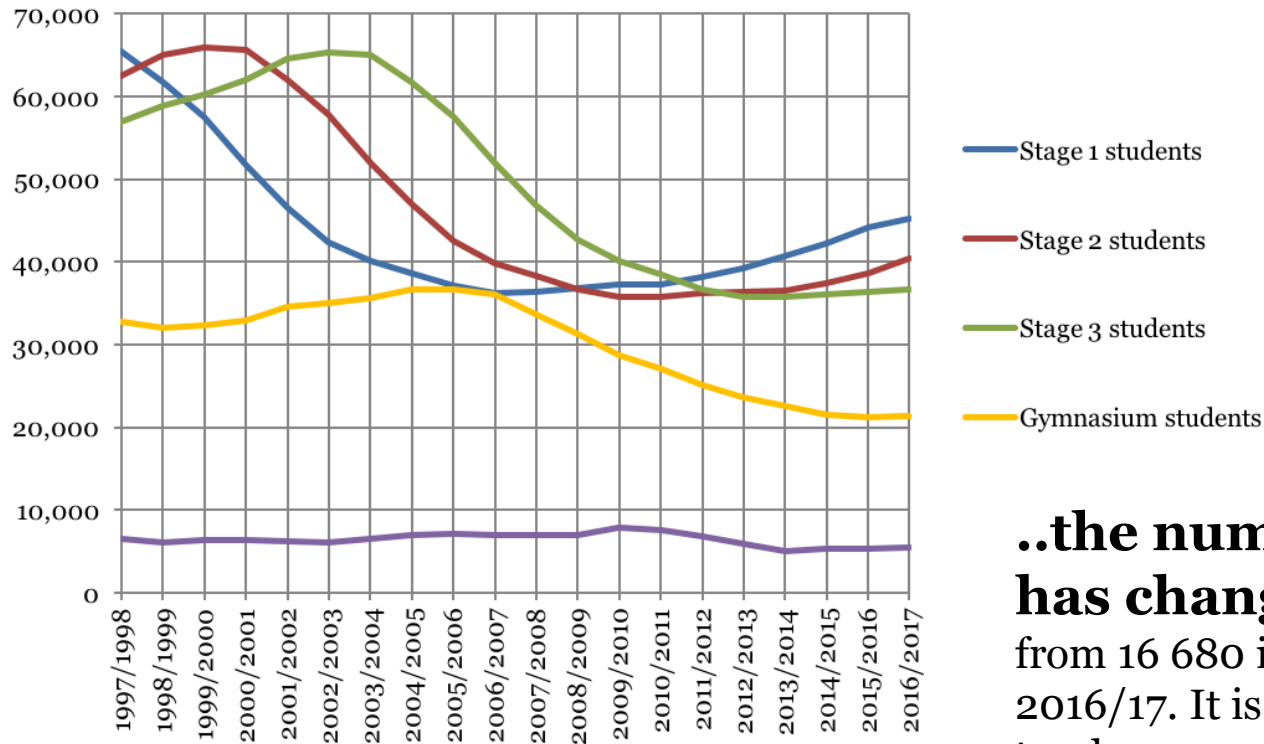
Tagasi Kooli - Back to School /[link](#)

**2009** The work on long term education strategy started /[link](#)

# Some highlights of the Journey - 2010ns

- 2010** Kindergartens and schools free of bullying [/link](#)
- 2011** Five key challenges for Estonian education – the project for Lifelong learning strategy 2020
- AHHAA Teaduskeskus - Science Centre, followed and preceded by several other museums and cultural, environmental etc institutions offering valuable and highly attractive educational content and formats [/link](#)
- Rakett 69 - Rocket 69 - a highly popular students' science competition on national TV running until now [/link](#)
- 2012** The first 'new wave' state gymnasium opened under the strategy of having state-run gymnasiums in each county centre [/link](#)
- Kiusamisvaba Kool - school-based anti-bullying program [/link](#)

# While the number of students has changed dramatically..



Drop from 224 086 to 149 161 students.

In 2016/17, there was **67%** of the number of students 10 years earlier.

**..the number of teachers has changed little:**

from 16 680 in 1997/98 to 14 581 in 2016/17. It is **87%** of the number of teachers 10 years earlier.

# Some highlights of the Journey - 2010ns

**2013**

Huvitav Kool - Interesting School - an initiative by the Ministry of Education and Research to engage stakeholders in school development /[link](#) and an [intro clip](#)

Haridussilm - Education Eye - education data sharing with public by the Ministry of Education and Research /[link](#)

ProgeTiiger - pilot project with 21 schools begins with programming for the 1<sup>st</sup> grade students /[link](#)

Education Innovation Centre, Tallinn University /[link](#)

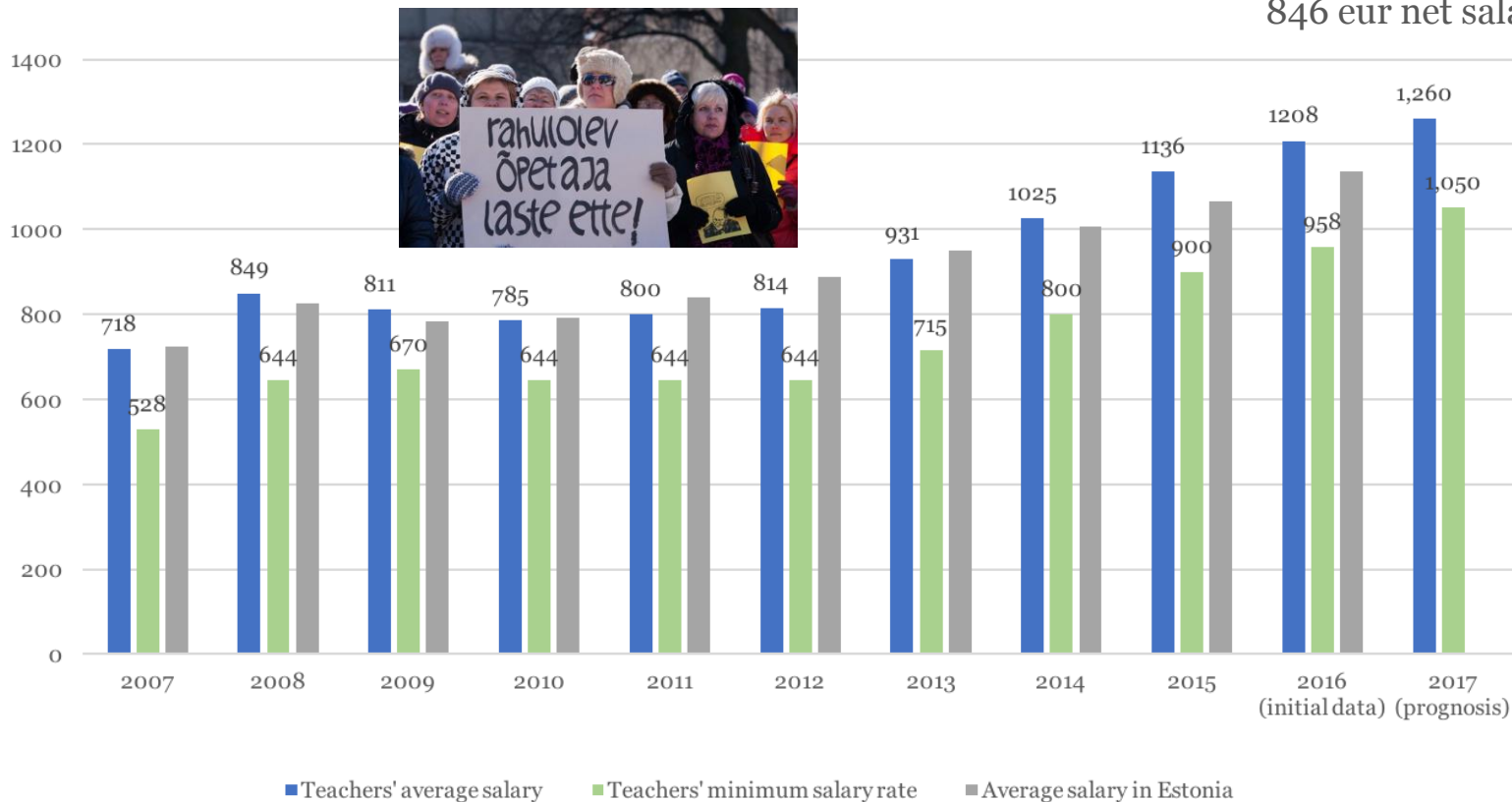
First publicly broadcasted on national TV Teacher of the Year Gala, a yearly tradition ever since



# Teachers' salary\* on the rise

\* Gross salary, eur

1,050 eur gross salary ~  
846 eur net salary





# Some highlights of the Journey - 2010ns

- 2013** New professional standards for teachers and school leaders:
- Requirements for school director: master's degree + leadership and management competences
  - Requirements for teacher: master's degree + teacher qualification
- + Teacher's job scope is a “whole”, not tied to a specific number of lessons; it is up to the school leader and teacher to agree

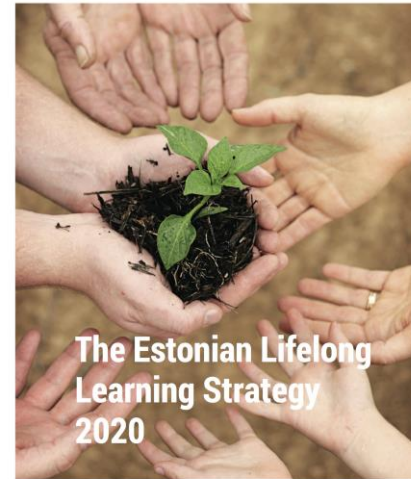
**2014** Lifelong learning strategy 2020 /[link](#)

Centre of Educational Innovation, University of Tartu /[link](#)

**2016** E-koolikott - E-schoolbag - educational resources' portal /[link](#)

Measuring satisfaction in education

**2017** The concept of Bully Free Education



# Lifelong learning strategy 2014-20

1. Change in the **approach to learning**

*What is it to be learned? How learning looks like? How is it assessed? What is the role of learners and teachers? Who should be involved?*

2. Competent and motivated **teachers and school leadership**

*Recognising teachers and school leaders as key stakeholders, looking deeper at their performance, focusing on the preparation of newcomers and succession*

# Lifelong learning strategy 2014-20

3. Concordance of **lifelong learning** opportunities with the **needs of the labour market**  
*The relevance and connectedness of learning with labour market and growth areas, established flows of information and feedback to system and individuals*
4. A **digital focus** in lifelong learning  
*Enabling more learning: making use of ICT opportunities, digital competences to all*

# Lifelong learning strategy 2014-20

5. **Equal opportunities and increased participation** in lifelong learning  
*Focus on overcoming social, linguistic, gender-related, economic and regional barriers - (infra)structure, systems, support services*

# Key Ideas In Short

## Comprehensive education

- Free support structures for students with special needs
- Free school lunch (and breakfast in some schools)
- Free study materials
- Free medical help
- Free transportation

## Autonomy

## Contribution and involvement of different stakeholders

## Strategy and continuous work on improvement

What has brought us here  
will not take us further.



Toomas Hendrik Ilves  
President of Estonia 2006-2016

*24 February 2014  
Independence Day speech*

# The 7 Challenges\*

1. **Youth with low level education** (basic or below): 11%
2. **Attractiveness of teacher profession:** half of the teachers are >50, competition to teacher training: 0.9, the skills of teacher training students are below other students (PIAAC)
3. **Choices after basic education:** depend on gender, region, mother tongue
4. **Participation of adults in lifelong learning:** 12%
5. **The level of Estonian language of non-native Estonian speakers at the end of basic education:** 67% reach B1 or higher, 64% reach B1

# The 7 Challenges\*

- 6. Gender gap in education:** peaking at 66% of university graduates being female and 34% male. The challenge is that gender equality is currently not recognised as a real challenge in education.
- 7. Equal access to quality education:** efficient governance of school network while the number of students in basic school decreases and in highly varied proportions (depending on the county, 5-39%).

**And more challenges:** increasingly unpredictable developments globally and locally



# What might be a changing role for school and what policies are needed?

Might there be motivation to work together on it?

Contact

Triin Noorkõiv

[triin.noorkoiv@gmail.com](mailto:triin.noorkoiv@gmail.com)

