

Feasible reasons for Estonian results in PISA-survey



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Outline of the Presentation

- Introduction
- Reasons for Estonian PISA results
- Feasible reasons – looking back at reforms and initiatives of the last 10 – 15 years
- New initiatives in the field of education

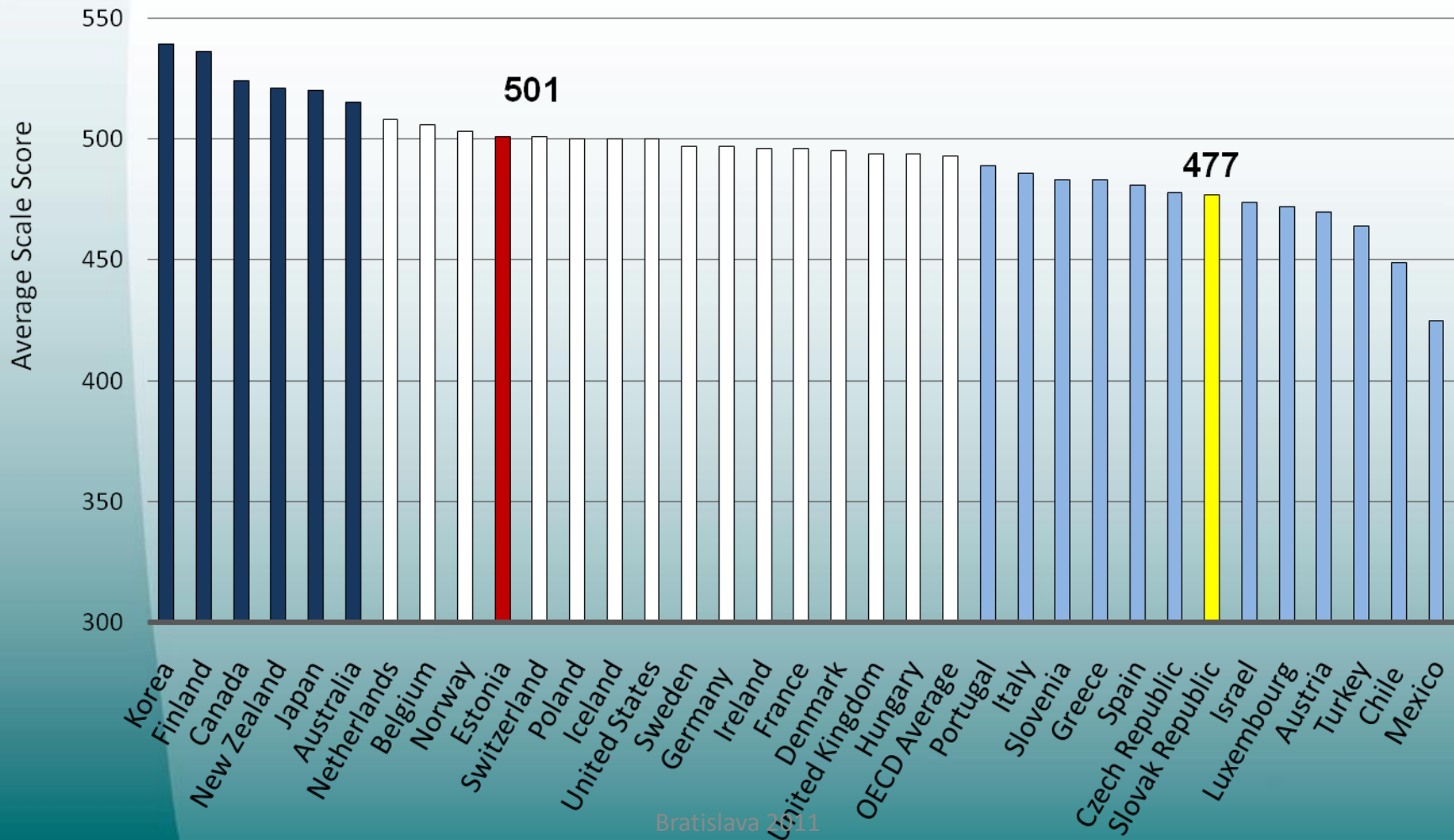


PISA 2009 - reading

All countries	Among the OECD countries	In Europe
1. Shanghai-China	1. Korea	1. Finland
2. Korea	2. Finland	2. Netherlands
3. Finland	3. Canada	3. Belgium
4. Hongkong-China	4. New-Zealand	4. Norway
5. Singapore	5. Japan	5. Estonia
6. Canada	6. Australia	6. Switzerland
7. New-Zealand	7. Netherlands	7. Poland
8. Japan	8. Belgium	8. Iceland
9. Australia	9. Norway	9. Liechtenstein
10. Netherlands	10. Estonia	10. Sweden
11. Belgium	11. Switzerland	11. Germany
12. Norway	12. Poland	12. Ireland
13. Estonia	13. Iceland	13. France

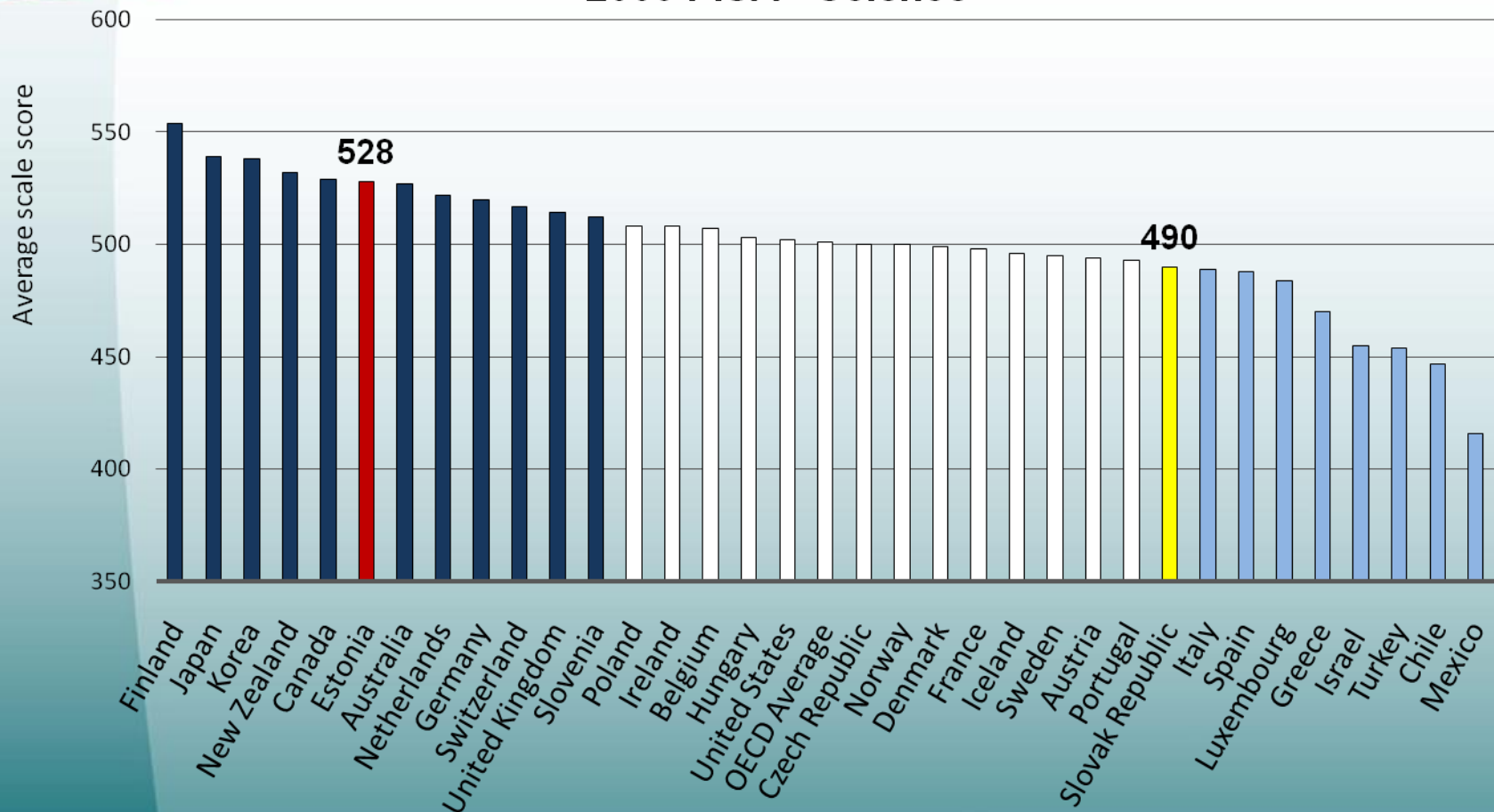
Estonian results PISA 2009 among OECD countries

2009 PISA - Reading



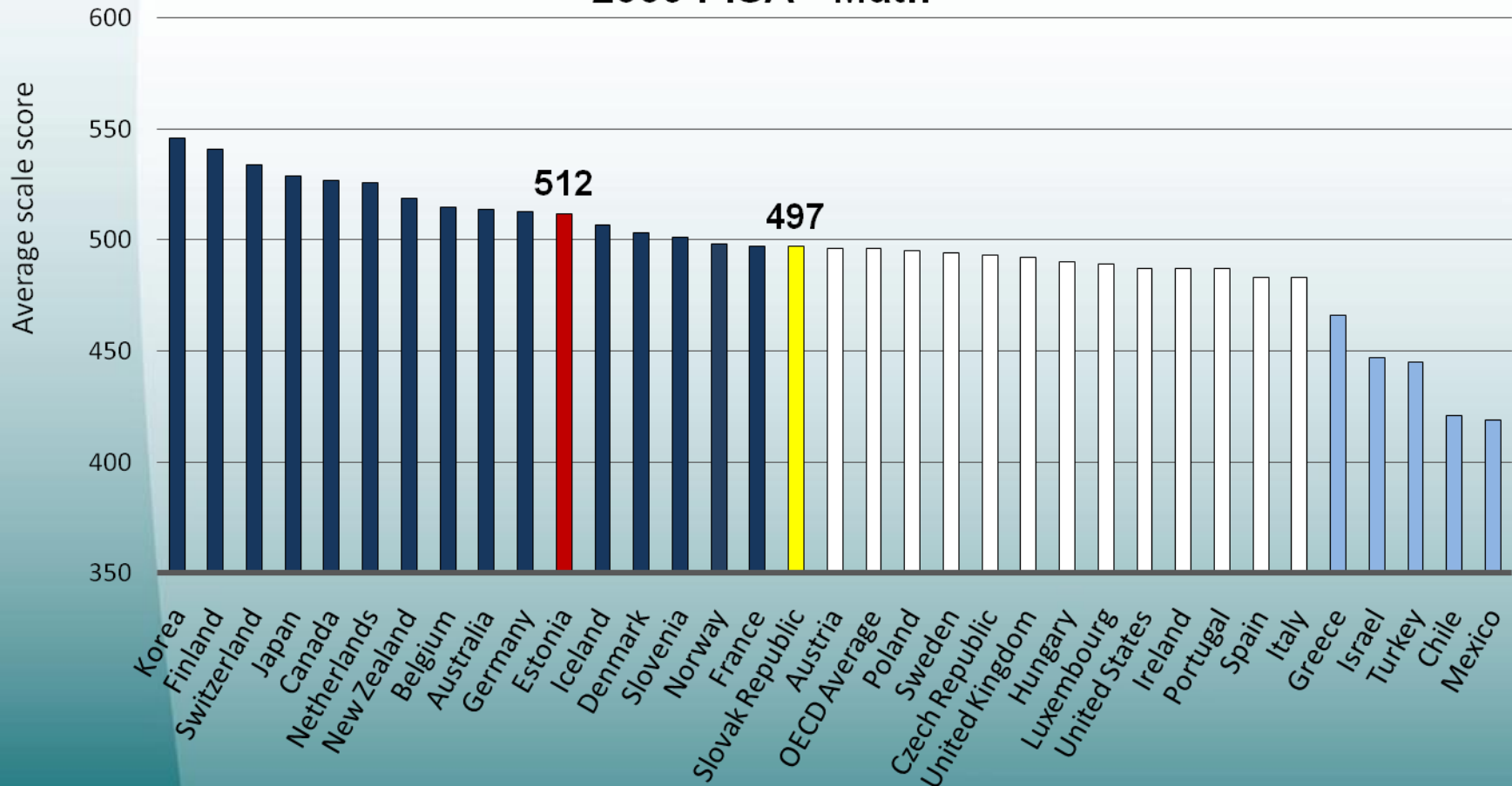
Estonian results PISA 2009 among OECD countries

2009 PISA - Science



Estonian results PISA 2009 among OECD countries

2009 PISA - Math





Slovak Republic / Estonia



- **Total area:** 49 035 km²
- **Population:** 2010 estimate 5,429,763
- **GPD:** 2010 estimate
 - total \$120.758 billion
 - **per capita \$22,267**
- Number of children of compulsory school age (6-15 years old) was 584 362
(10.8 % of the total population - as of 31.12.2008)

- **Total area:** 45 228 km²
- **Population:** 2010 estimate 1,340,021
- **GPD:** 2009 estimate
 - total \$24.004 billion
 - **per capita \$17,908**
- Number of children of compulsory school age (7-16 years old) was 127 062
(9,5% of the total population - as of 1.01.2010)

Feasible reasons

for Estonian PISA results

- 1686 - start of a public school system (compulsory for boys and girls)
- 1840 - 1st kindergarten
- 1905 - 1st Estonian-language kindergarten
- 1969 - free study books
- The parents' education



The main feasible reasons for Estonian PISA results



- Basic school (grades 1-9) is a comprehensive school
- Decentralized educational system:
 - Schools are autonomous and head teachers have rather big rights to arrange school's everyday life.
 - Teachers are free to use teaching methods and textbooks of their choice.

Clear qualification requirements

for teachers

Requirements for teachers' education:

- ☐ The initial training of teachers is at Master's study level.
- ☐ Requirements for teachers in-service training - 160 hours within five years.

Supporting the teachers:

- ☐ Supporting the novice teachers - the induction year
- ☐ The state guarantees 3 per cent of the salary fund for teachers' professional training.
- ☐ "Beginners'" allowance

National standards

- ❑ The national curriculum (1996, 2002, 2010) corresponds to contemporary requirements.
- ❑ Each school compiles its own curricula, which are based on national curricula.

2010:

- ❑ 2 separate curricula – The National Curriculum for Basic Schools and The National Curriculum for Upper Secondary Schools
- ❑ The transversal key competences:
 - social and civic competencies
 - learning to learn
 - sense of initiative and entrepreneurship
 - mathematical competence,
 - self-management

Supporting students

The support systems for children with social problems and for children/students with special educational needs:

- ☐ Flexible learning possibilities
- ☐ Social supports
- ☐ Supplementary pedagogical guidance outside the classroom (special teachers, social pedagogues, psychologist etc.)
- ☐ Boarding school facilities for students who have social problem



Haridus- ja Teadusministeerium

Developing children in pre-schools (kindergartens)

- ❑ Higher educational requirements to pre-primary teachers.
 - ✓ Bachelor's degree
 - ✓ Bachelor's /Master's study
- ❑ High participation in pre-primary schools –
~ 93 % of children at the age of six.
- ❑ National curriculum of Pre-Primary Education
- ❑ Support of parents – pre-primary education is financed partially from the state budget



On-going initiatives regarding the evaluation of schools

- Assessment of students' study results
- From external evaluation to internal evaluation
- The Estonian Education Information System (EHIS)
- Launching an advisory system for internal evaluation of educational institutions
- Working out web-based well-being surveys of students, parents and teachers

On-going initiatives

regarding counselling

Developing of Educational Counselling System

Purpose:

- ❑ To create academic advice centres on the county level to prevent students from dropping out of school

Target groups:

- ❑ Students with special educational needs, parents, providers of counselling service, teachers, local government officials.



On-going initiatives regarding assessment of students



Preparing transmission to electronical students' assesement at the end of the basic school:

- “bank” of high level sample problems and exercises
- support of e-learning in classrooms (courses for teachers etc.)
- electronical administration of examinations

On-going initiatives regarding awarding

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Creating a functioning recognition (awarding) system of schools and kindergartens.

Two purposes:

- ☐ to recognize the good work;
- ☐ to find and share the best practises of schools and kindergartens.

Awards:

- ☐ Supporter of students' development
- ☐ Friend of education
- ☐ Leadership and management
- ☐ MST (math, science and technology)
- ☐ Award of Estonian citizenship



The “main keys” for understanding Estonian PISA results

- Historical background of Estonian education and parents' attitude towards education
- Decentralized educational system and comprehensive schools – schools are relatively autonomous institutions
- Teacher training has adapted new approaches and understood the needs of modern society
- Clear standards – the national curricula

Future challenges

- Reduction of the **dropout rate** and support for children with **special educational needs** (including talented children).
- Achievement of a **safe** school environment.
- Greater **competence** and increased **interest** in the **math, sciences** and **technology** education
- Support for students whose native language is **not Estonian** and who have **different cultural backgrounds**.
- Utilisation of **information technology** resources in studies.

D'akujem!