

ESTONIA presentation, 2014

**Cooperation to
strengthen the
citizens math skills
in the context of
sustainable
development and
welfare**



NORDPLUS
Adult

Why math is needed?

- Mathematical skills are needed for specialists, who work in engineering, economics, IT and others

Business

Mathematical skills are needed for business,
founded on knowledge and innovations
according to Europe Strategy

We need to know...

- How mathematical skills level influences to economical and social development of country?
- How the country politics create conditions for the youth and adults to learn mathematics?

European Union

- Competence in mathematics is identified as key competence at EU level for personal fulfilment, active citizenship and social literacy in knowledge society of 21st century

Questionnaire

- For investigation of situation with mathematics along adults it is created the questionnaire to conduct separately in Estonia, Latvia and Lithuania

Baltic cooperation

- Baltic cooperation is to exchange information in mathematics field and think about future

Project work and investigations

- Europe requirements for mathematics skills
- Europe documents
- Estonia politics in mathematics education
- Estonia processes, that concern mathematics
- Conduction of questionnaire
- Interviews, seminars according to the project

Analysis and conclusions

- According to the project investigation are prepared analysis and conclusions

Education in Estonia

- During 20 years education reforms are continued
- Education programs depend on political party or coalition, that is in majority of Parliament
- These factors influence to education quality, what universities say about

About mathematics in Estonia

- From 2007 the state math exam is cancelled
- From 2014 the state math exam is done as obligatory again
- From 2010 year it is done new math program in grammar school – narrow and wide courses, that differ each other by teach hours and context volume
- Narrow – 8x35 hours, wide – 14x35 hours

Mathematics study books

- New study books for mathematics does not means higher quality
- On the contrary students consider, that mathematics study books are not understanding and not clear for studying

matemaatika

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MATEMAATIKA

12. klassile



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MATEMAATIKA

10. KLASSILE

 KOLIBRI

 KOLIBRI

Economical crisis

- Economical crisis shows, that there are need strong skills in exact subjects
- Thinking ability is needed for innovations
- Mathematical skills should be improved in Estonia in Europe generally

Changes in Estonia math politics

- Some changes are seen from 2014 years
- From 2014 years universities consider math exam results from future students
- Many university researchers say in media about mathematics role in study, work and life

Mathematics and Engineering

- Estonia President says about math and engineering importance
- Eesti Energia large enterprise general director says about role of engineers
- Estonia media says and writes about mathematics

The project results

- The project results will be at the end of the project
- Questionnaire results
- Investigation conclusions
- New thinking

Benefits of the project

- Cooperation between Baltic countries
- Common work to value mathematics skills in society
- New information and new experience
- Common work to promote mathematics needs to society

About future

- We hope to continue our cooperation with Latvia and Lithuania partners in fields of mathematics

Thank you!

- Thank you our partners from Latvia and Lithuania for good cooperation in this project!