

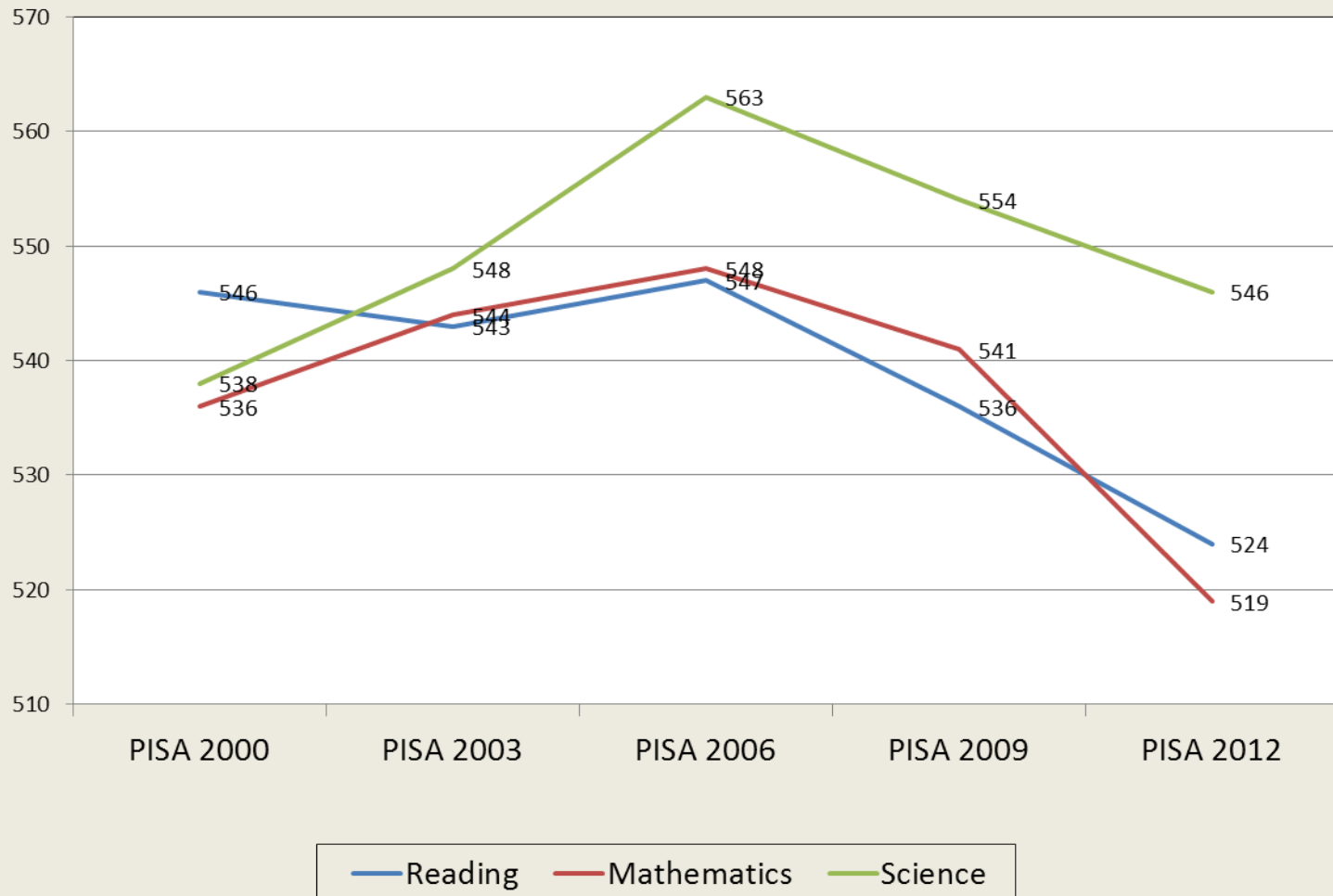
# PISA and reforms in education

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**International Symposium on PISA  
November 17, 2014  
Tokyo, Japan**



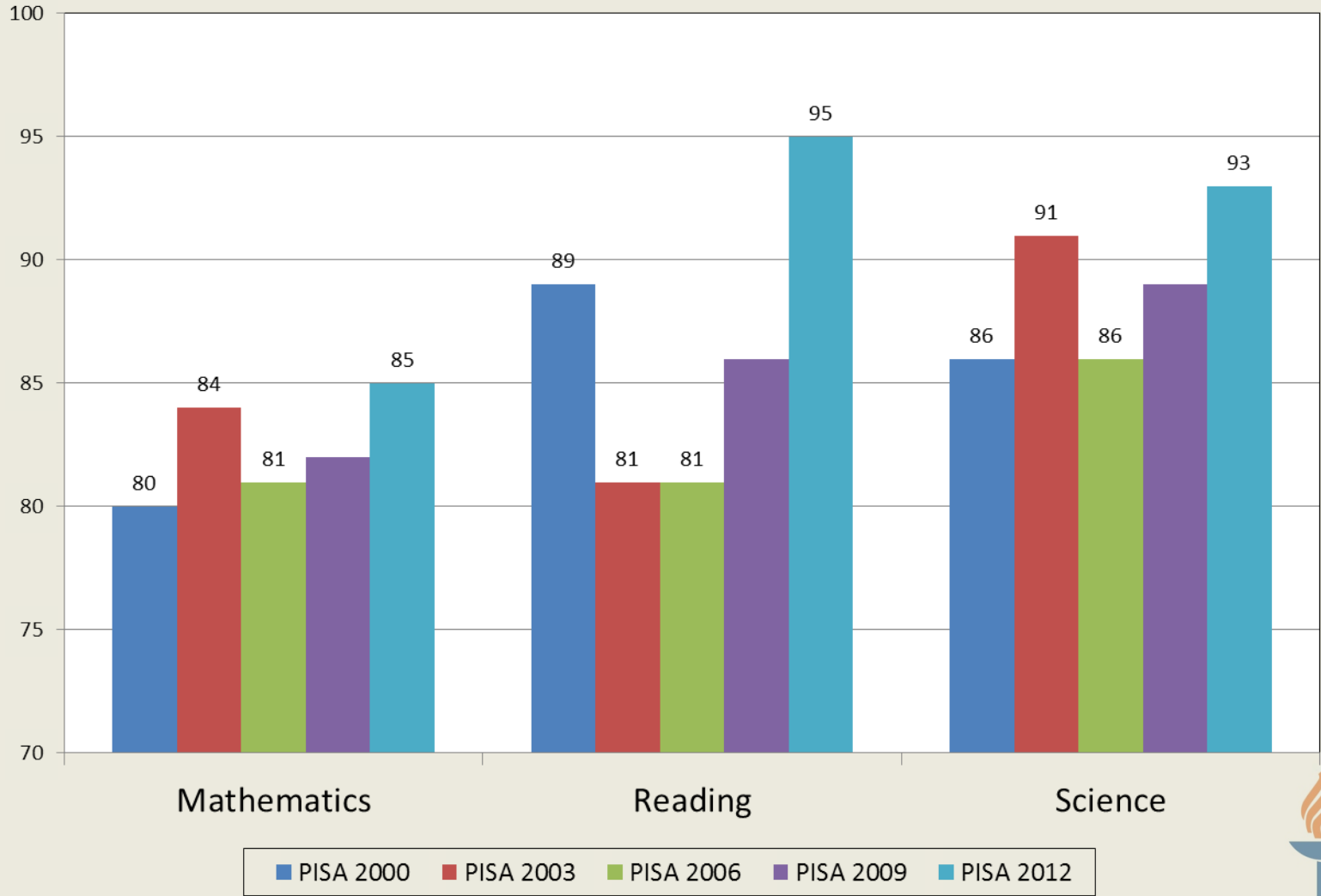
## AVERAGES OF THE THREE DOMAINS



1934 2009

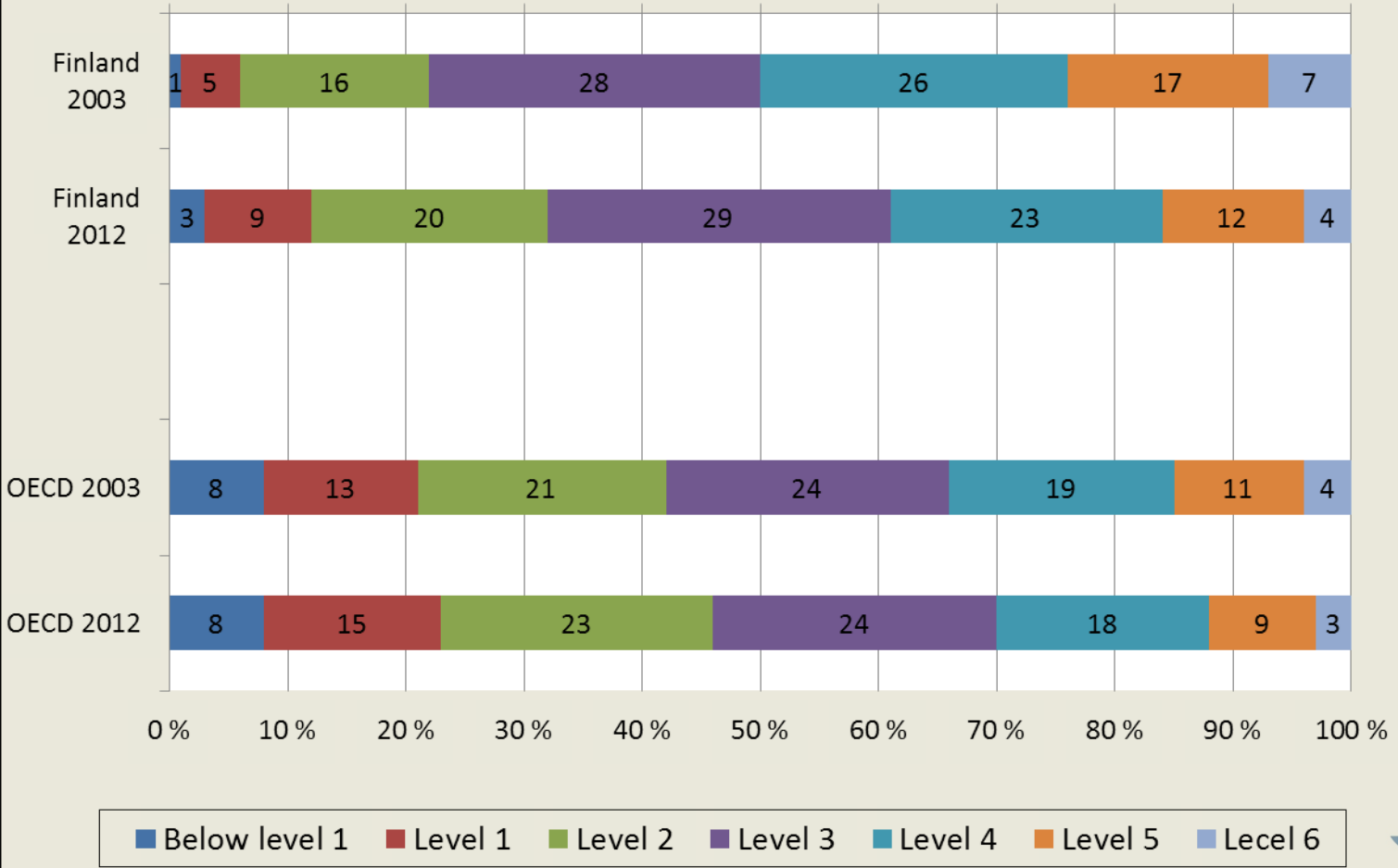
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# STANDARD DEVIATIONS



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### STUDENTS AT EACH LEVEL OF MATHEMATICS PROFICIENCY (%)



# IMPACT OF SOCIO-ECONOMIC BACKGROUND 2003 AND 2012



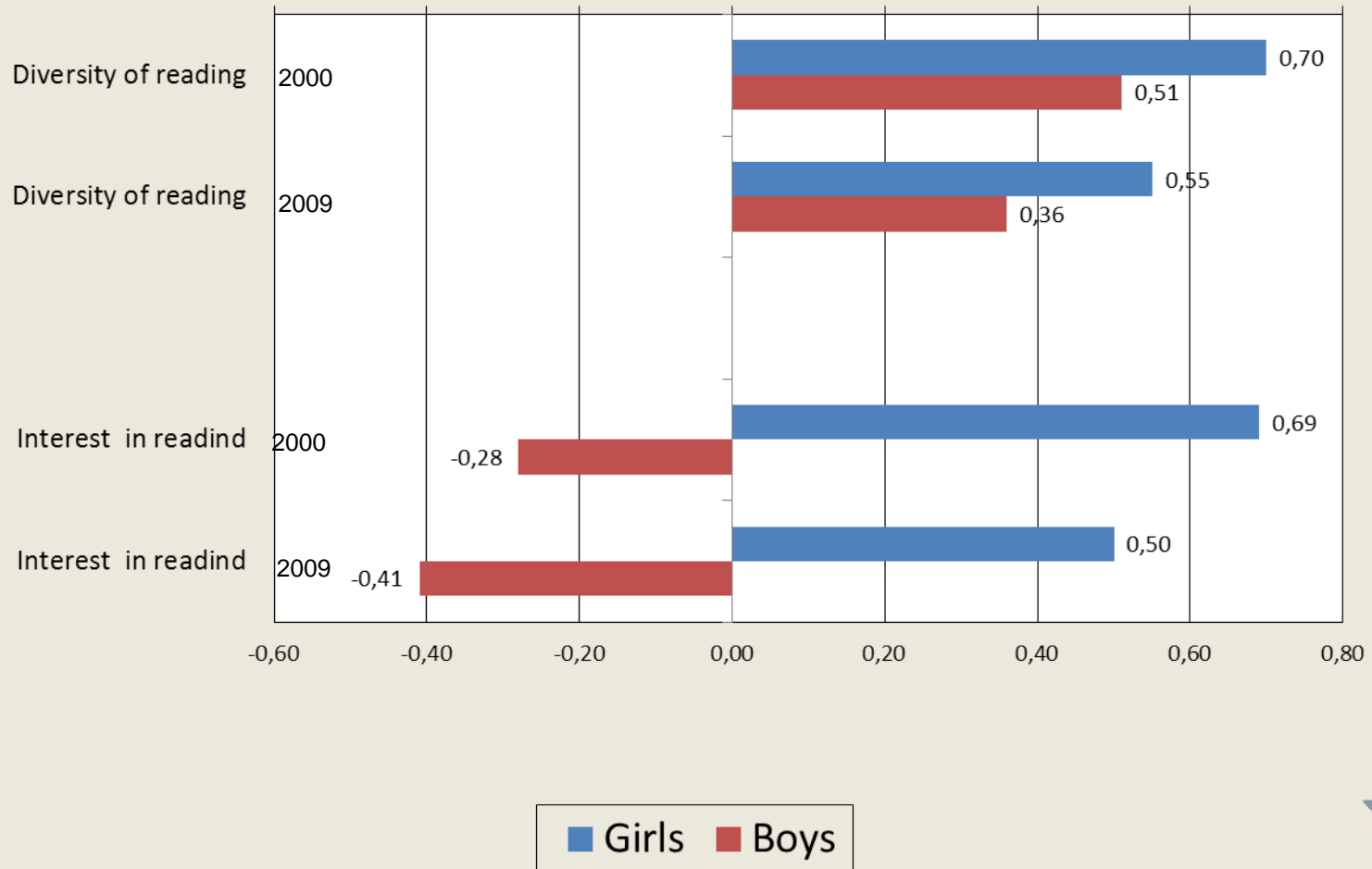
PISA 2003

PISA 2012

■ Finland ■ OECD



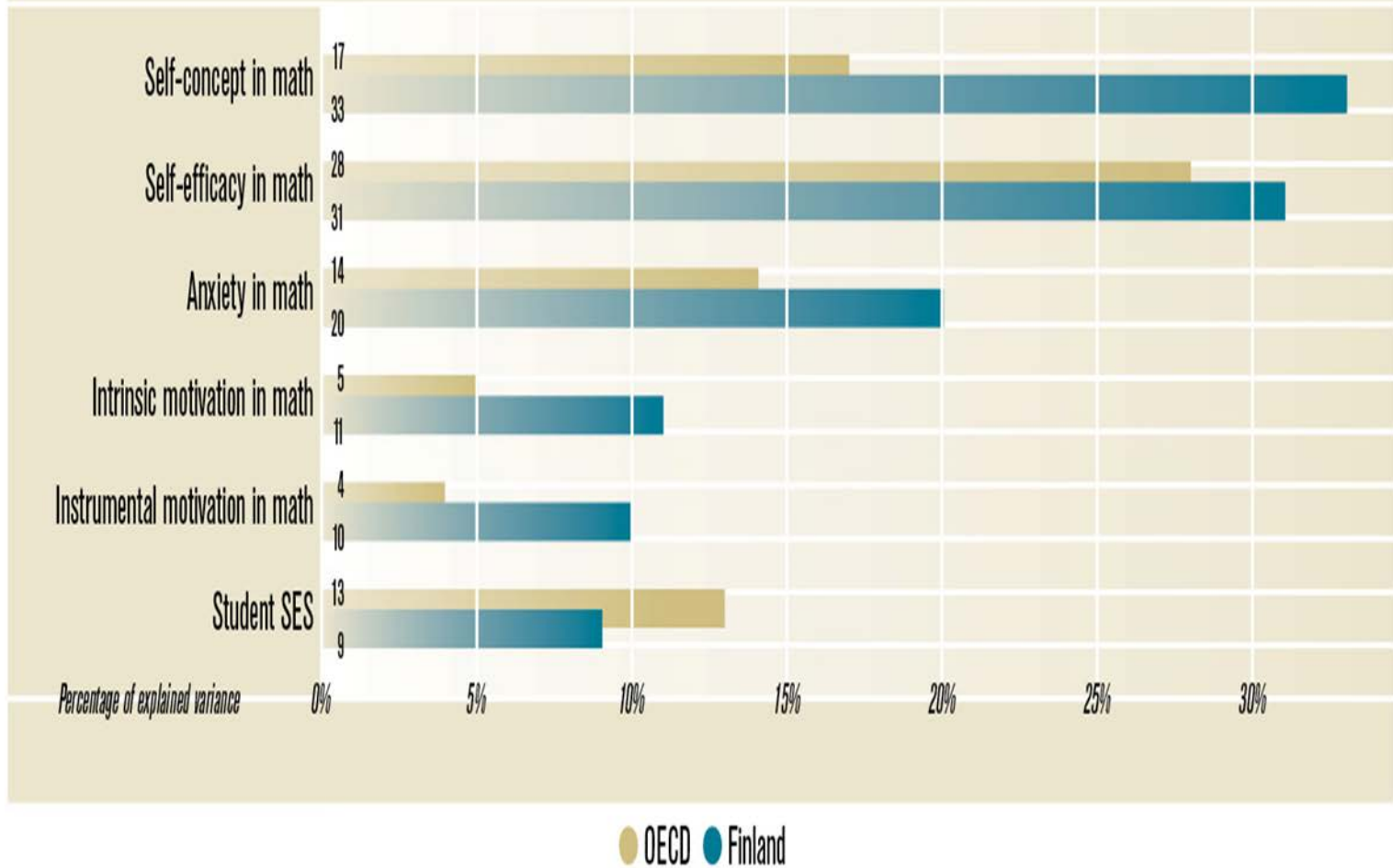
## CHANGES IN DIVERSITY AND INTEREST IN READING



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## BACKGROUND FACTORS EXPLAINING VARIANCE IN STUDENTS' MATHEMATICS PERFORMANCE IN FINLAND AND OECD



# Education policy and values

- High standards and equity
- Free education for all
- Positive discrimination in funding
- No national testing or inspection
- No tracking during compulsory education
- High quality teachers and teacher education
- Pedagogical differentiation
- Supporting students with special needs
- Students' well-being





# Reforms under way

## 1. Reform of the National core curriculum

- Values of education
- Key competencies of the 21st century
  - New learning environments
  - Students' well being
- Phenomenon-based learning
  - Activating collaboration
  - By August 2016



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## 2. Future primary and secondary school

- ❑ Why decline in PISA?
- ❑ Gender differences
- ❑ Motivation, self-confidence and well-being
- ❑ Collaborative and engaging working in the project
- ❑ Two expert groups
  - ✓ Competency, learning and societal development
  - ✓ Motivation and teaching



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### 3. Joy of Reading

- ❑ a three-year national project to encourage students to read more
- ❑ funded by the Ministry of Education and Culture,
- ❑ implemented by the University of Oulu, Faculties of Humanities and Education
- ❑ the target group is comprised of 6-16-year-old children and youths, teachers, library professionals and parents

# The goals of the Joy of Reading-programme

- ❑ **create an operating model** for improving children's and youths' reading and writing skills
- ❑ **enhance teachers' and librarians' awareness, competence, and methods** for supporting children's and youths' interest in reading and writing and their media education
- ❑ **boost children's and youths' interest** in and skills needed for well-rounded reading and writing
- ❑ **reinforce children's and youths' use of various texts and media contents** and promote their **access** to information and content (information management and media literacy)

# September 1, 2014: LUMA Finland programme launched



## 4. LUMA Finland programme

- ❑ Why: declining results in students' performance, interest and motivation
- ❑ low appeal of natural science, technology and mathematics studies and careers
- ❑ new methods and resources to inspire and engage 6-16 year-olds towards STEM
- ❑ develop inquiry-based learning, ICT in education, career opportunities and skills and core competencies in a knowledge-based society
- ❑ research to design and implement new teaching methods, learning environments and materials for schools
- ❑ student-centered approach with the aim of providing hands-on experiences about research and science
- ❑ networking schools with universities (teacher education)



## 5. Developing cloud services for all schools

- Pedagogical use of technology
- New learning environments
- Electronic materials
- Teacher competencies and motivation
- Students' motivation and expertise
- U of Jyväskylä: PedaNet Network



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## 6. Teachers' professional development

- Innovative new solutions
- Continuum between initial and in-service TE
- Personal developmental plans
- Schools as communities
- Leadership in education
- Peer mentoring
- ICT, pedagogy and collaborative learning



6. Inclusive education

7. Preventing bullying and violence in schools

