

Possibilities of Latvian Students to Achieve High Scores in Math in OECD PISA Study

Linda Mihno

Latvijas Universitāte
Pedagoģijas, psiholoģijas un
mākslas fakultāte



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Percentage of students at highest level of proficiency on the mathematics scale

Year	Latvia	Estonia	OECD average
2003	8	-	15
2012	8	15	13

OECD data base

Research goal:

- Based on the OECD PISA data to clarify the possible factors high student achievement

Research question:

- What are the possible factors that provide students with a solid track record a higher proportion of the OECD PISA?

Base

- Latvia's PISA 2003 data - 15 years old students (2013)
- Latvia's PISA 2012 data - 15 years old students (2030)

Method

- Linear regression:
 - Group 1 - students, which score in mathematics scale over than 600
 - Group 2 - students, which score in mathematics scale between 500 and 600

Year	Students with high achievements scored by the OECD PISA	Students with high achievements, the limit of 600 points	Students with achievement between 500 and 600 points
2003	7,9	8,7	34,4
2012	8,0	8,9	35,9

Results

Index	2003 Exp(B)	2012 Exp(B)
<i>Highest educational level of parents</i>	1,214	1,351
<i>Anxiety in mathematics</i>	1,218	1,376
<i>Attitudes toward computers</i>	,875	,789

Conclusions and recommendations

- Good education has become a basic requirement for all citizens, which means that the need to change public attitudes towards education.
- To improve student achievement in mathematics, it is necessary for students to be responsible for their achievements
- Improving ICT skills to benefit the learning

Thanks!