Ministry of
Education and Science
Republic of Latvia

DATA ON STUDENT LEARNING FOR EVIDENCE-BASED POLICY MAKING: LATVIA'S CASE STUDY

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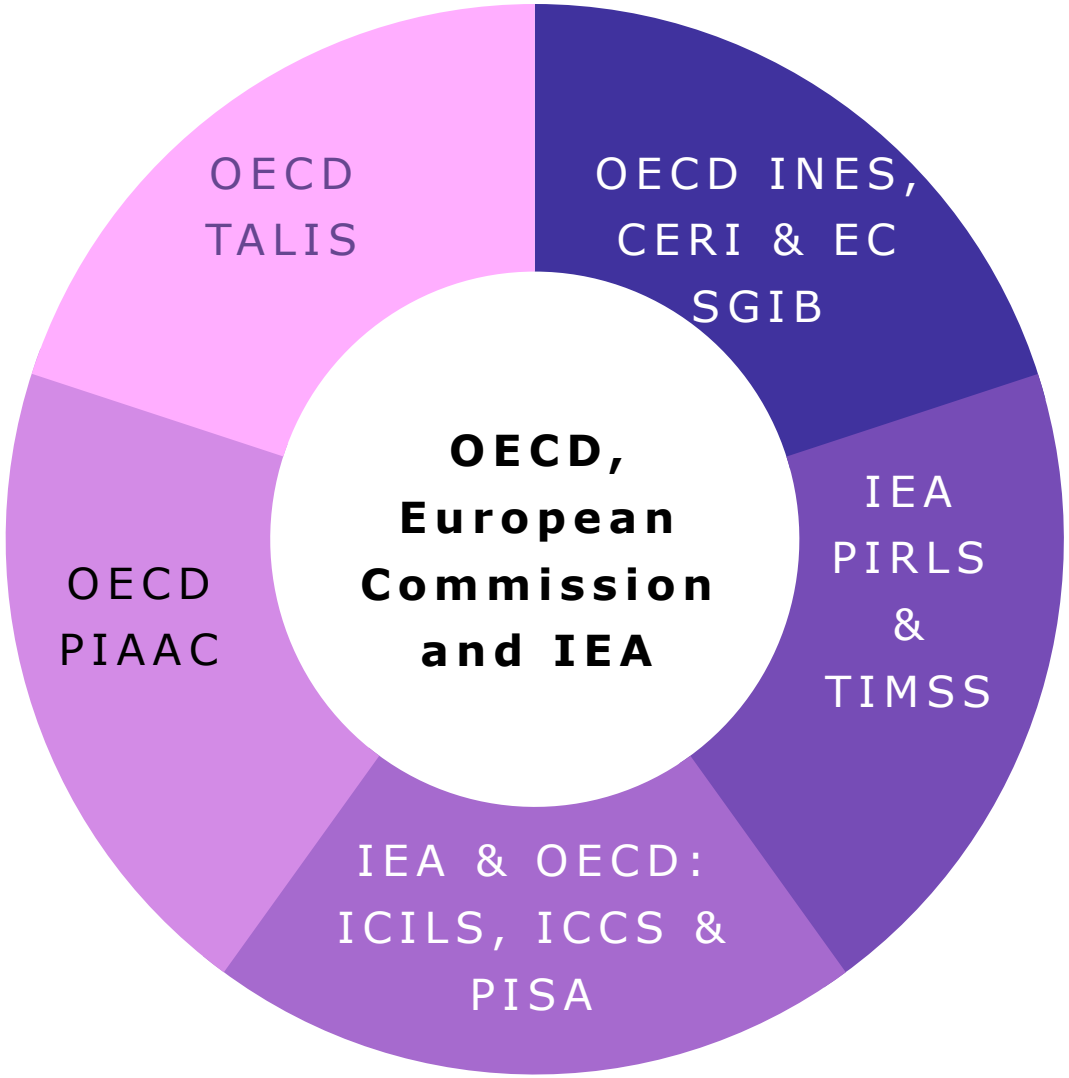
Latvia's portfolio in international comparative research, providing insights on:

- teachers and school leadership,
- adult learners,
- students - key skills (reading, mathematics, science) in various age groups (Grade 4, Grade 8-9)
- students - other important skills: digital skills, civic competence,
- performance of the education system in general,
- other research and trends in education



INTERNATIONAL ASSESSMENT DATA **TO SET AND MONITOR EDUCATIONAL POLICY GOALS**

International assessment data used as a reference in key national strategy document: **National Development Plan of Latvia 2021-2027**

PERFORMANCE INDICATORS

Name of the Indicator	Base value	Most recent value	Target 2024	Target 2027
Share of 15-24 y. young adults who are not involved in education or labour market (NEET) (%)	7.8 (2018)	8.6 (2023)	**7**	**6**
Share of upper-secondary students in general education and vocational education and training programmes (%)	61.14/38.86 (2018/2019)	41.68 (2023)	**55/45**	**50/50**
Adults aged 25-64 who have participated in formal or non-formal education/training in the last 12 months (%)	47.5 (2016)	52.2 (2022)	**51**	**54**
Low-achieving students in sciences from the bottom quartile of the OECD PISA Index of Economic, Social and Cultural Status (ESCS) (%)	25 (2015)	26.6 (2022)	**19**	**14**
18-24 young adults who do not have upper-secondary educational attainment and who do not continue their studies (%)	8.3 (2018)	6.7 (2023)	**6.7**	**5**
Share of 15-year-old students who experienced bullying in an education institution several times a month (%)	11 (2018)	15.5 (2022)	**8**	**5**
Share of adults aged 15-74 with sufficient physical activity – at least 2 times a week for 30 minutes (%)	25.4 (2018)	25.4 (2022)	**26.5**	**28**

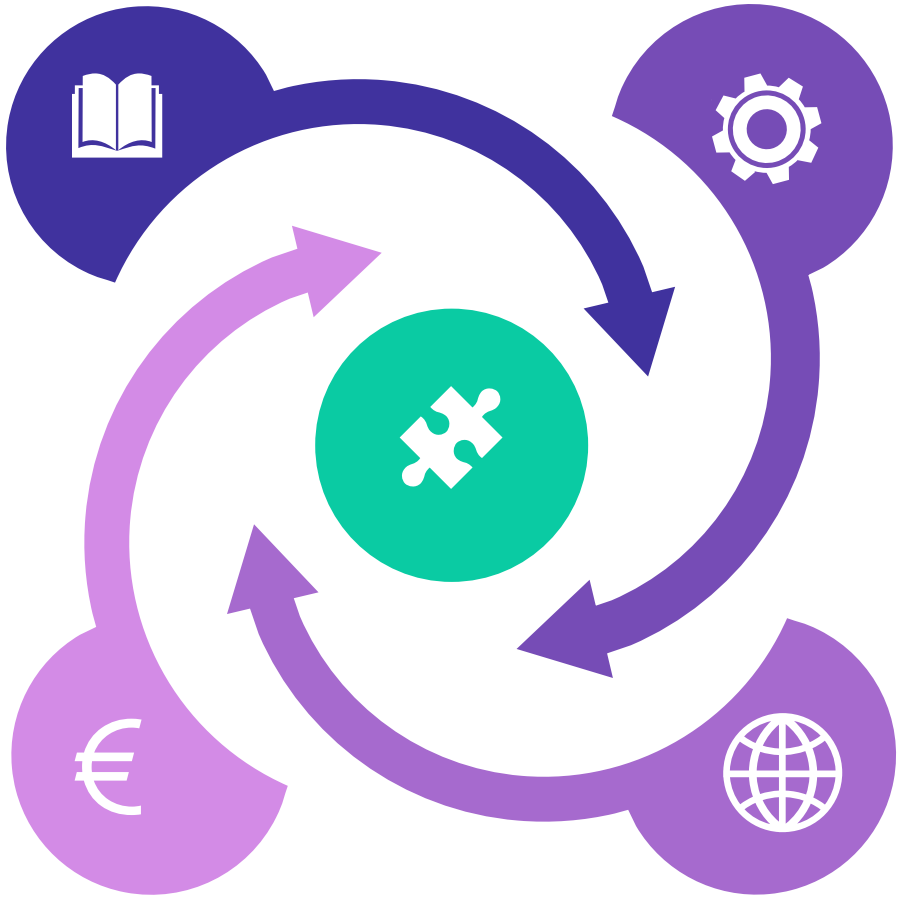
… a reference in key sectoral strategy document:
Education Development Guidelines 2021-2027

Objective 1
Highly qualified, competent and excellence-driven teachers and academic staff

Resilience of teachers: changes in the proportion of teachers with optimal work experience
OECD TALIS

Objective 4
Sustainable and efficient management of the education system and resources

Funding per full-time equivalent student (% of OECD average)
OECD EAG



Objective 2
Modern and qualitative education offer, focusing on the development of skills that are aligned with the needs of labour market

Top performers and low-performing students in mathematics, reading and science
OECD PISA

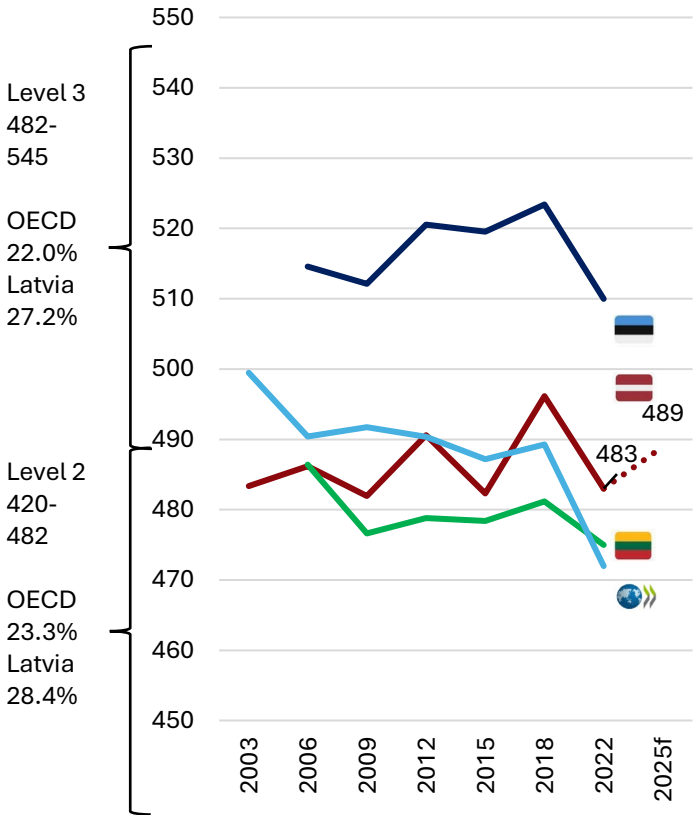
Percentages of students at the highest proficiency level of civic knowledge
IEA ICCS

Objective 3
Support for the growth of everyone

Students' exposure to bullying
OECD PISA

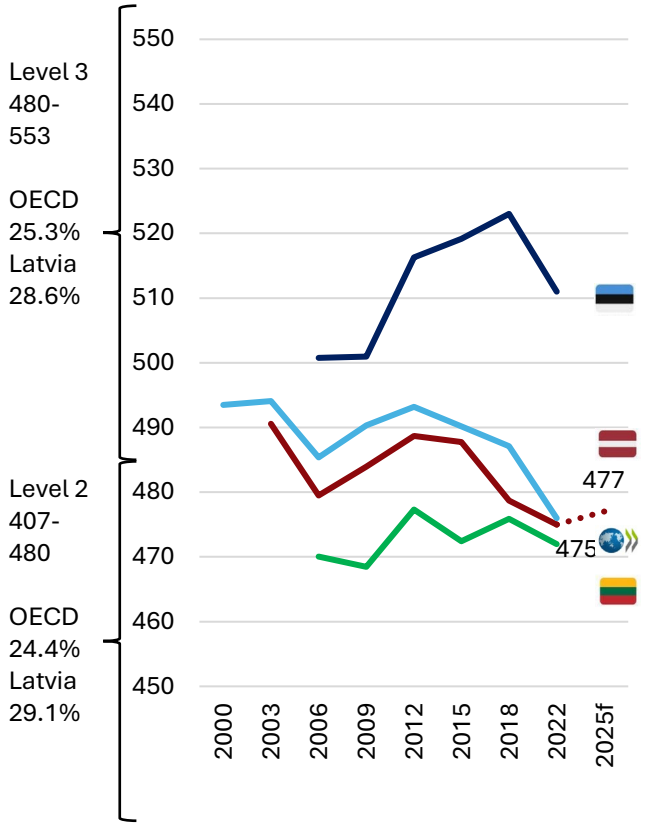
… a reference in key government strategy document: **Government Action Plan (2023–2027)**

Mathematics



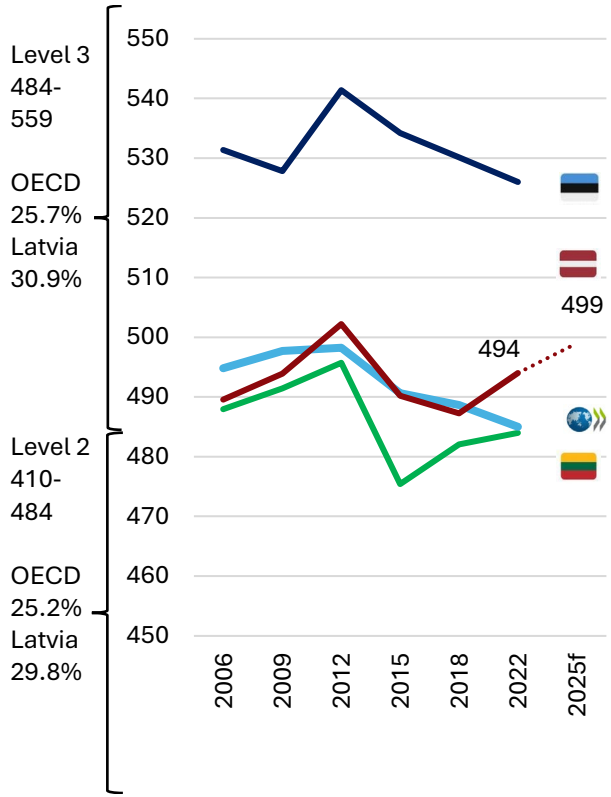
Supporting the OECD calculated trend. **Forecasting an increase of 1.2%.** Historically the highest increase has been 2.9% (2018 v 2015), historically the biggest deterioration was -2.6% (2022 v 2018).

Reading



Presuming that it is possible to keep the performance stable and intervene with very extensive literacy facilitating measures. **Forecasting an increase of 0.4%.** Historically the highest increase was 1.0% (2012 v 2009), historically the biggest deterioration was -2.3% (2006 v 2003).

Science

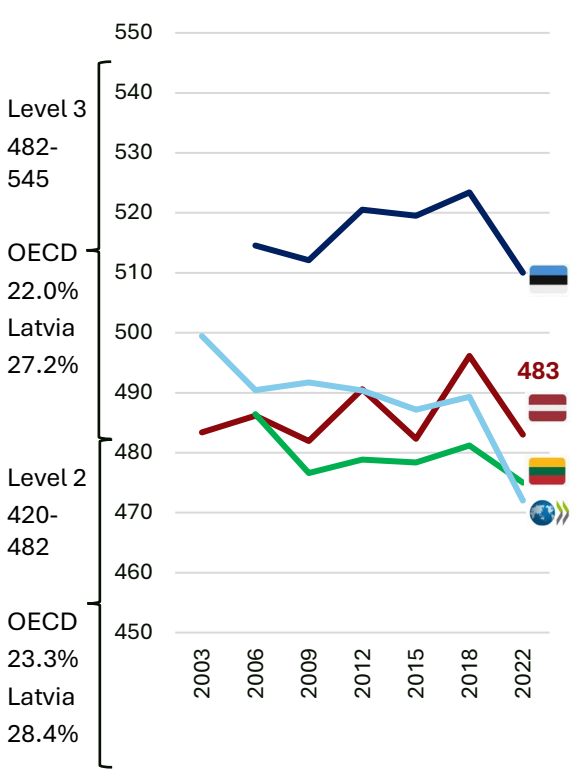


Continuously maintaining the priority of STEM, it is potentially possible to continue the upward trend. **Forecasting an increase of 1.0%.** Historically the highest increase was 1.7% (2012 v 2009), historically the biggest deterioration was -2.4% 2015 v 2012).

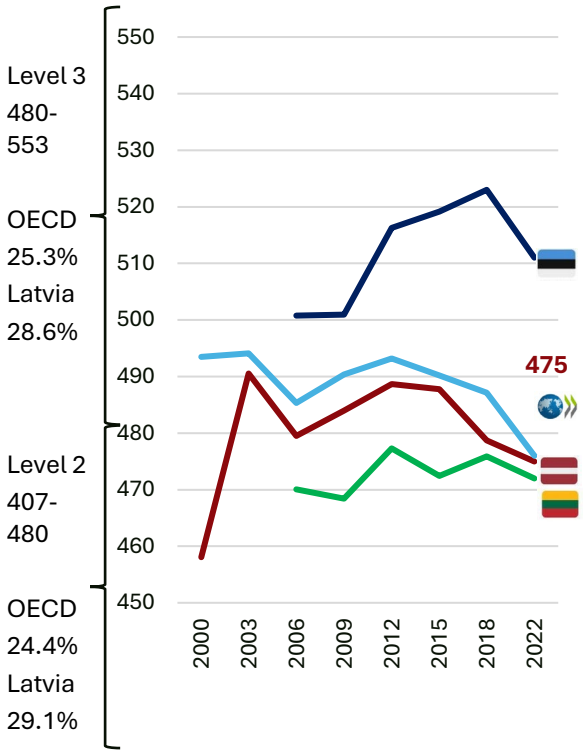
INTERNATIONAL ASSESSMENT DATA **TO CONFIRM THE EFFECTIVENESS OF CURRICULUM REFORMS**

OECD PISA 2022 results: growth in Science and deterioration in Mathematics and Reading

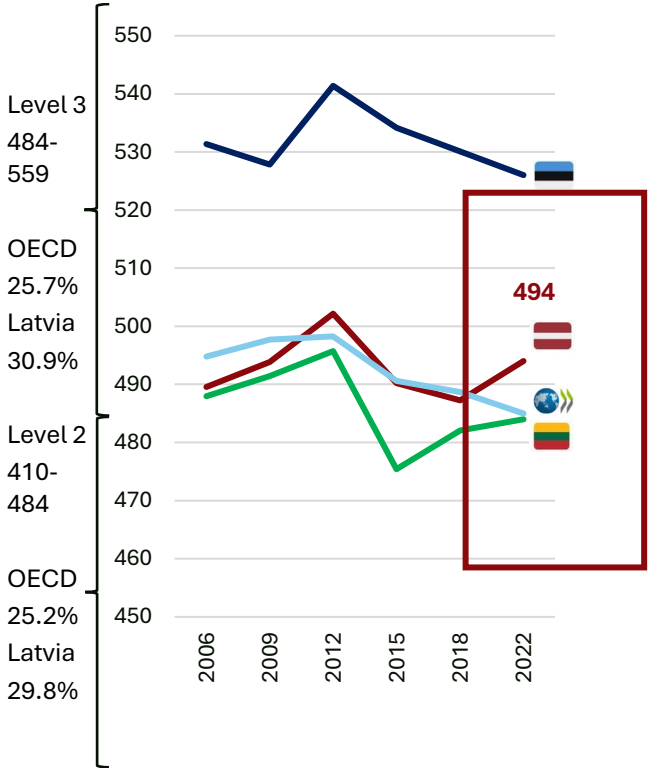
Mathematics



Reading



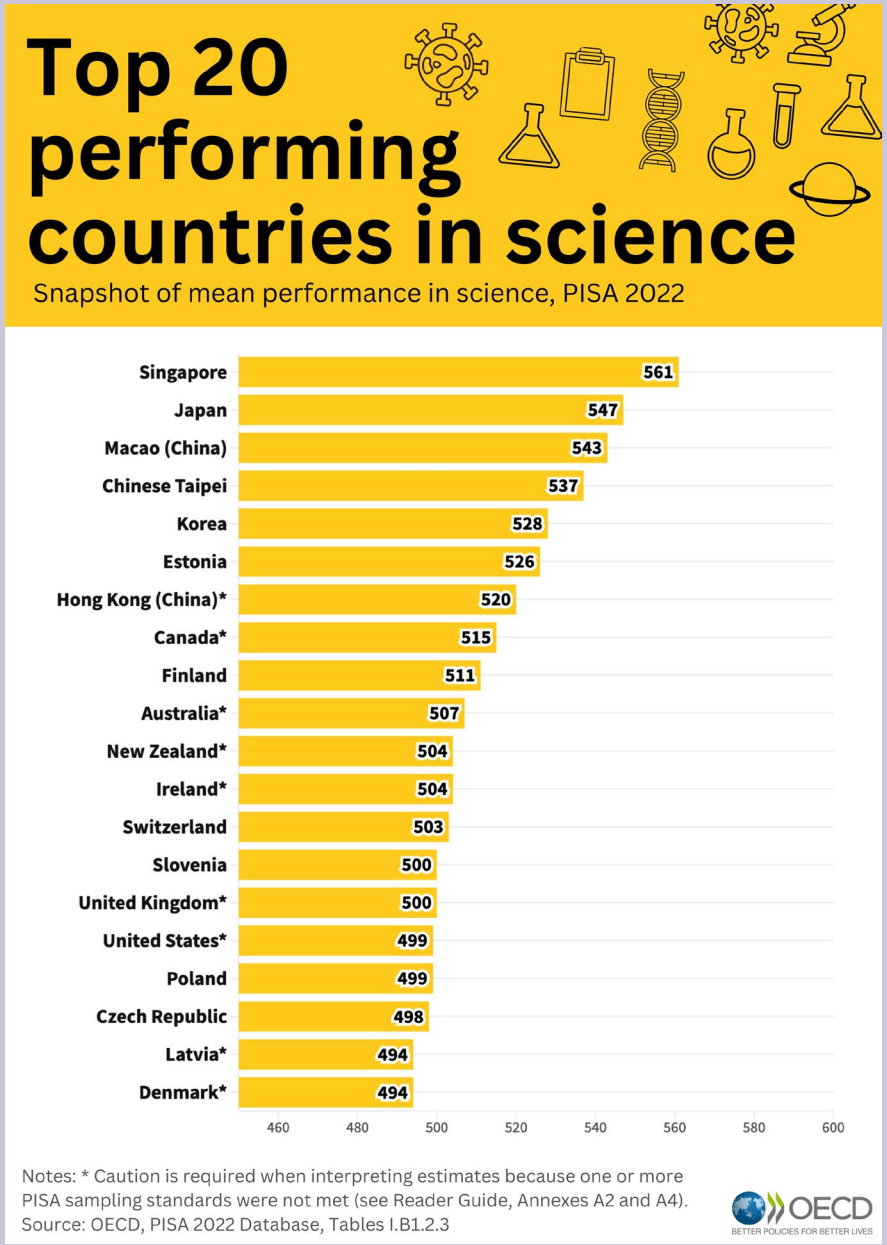
Science



- Performance in Science can be related to **the Science curriculum reform 2008-2015**, including revision of learning content and methodology, as well as investment in learning materials and teacher professional development.

- **New nation-wide curriculum reform in general education 2018-2023** (*School2030*) continues the revision of learning content and methodology, and has the development of scientific literacy as one of its goals.

- Student performance data is used by the National Education Centre and the University of Latvia **to design teacher professional development in relation to the curriculum reform** (focus on student cognitive activation etc.).



INTERNATIONAL ASSESSMENT DATA TO PROVIDE **AN INSIGHT INTO DISPARITY IN LEARNING ACHIEVEMENT BETWEEN RURAL AND URBAN AREAS**

Recent international research on student performance **highlight critical need to ensure equal schooling** despite of different geographical location

International research used as **an argument in undergoing reform of teachers' pay funding model:** from "money follows student" to "programme in school"

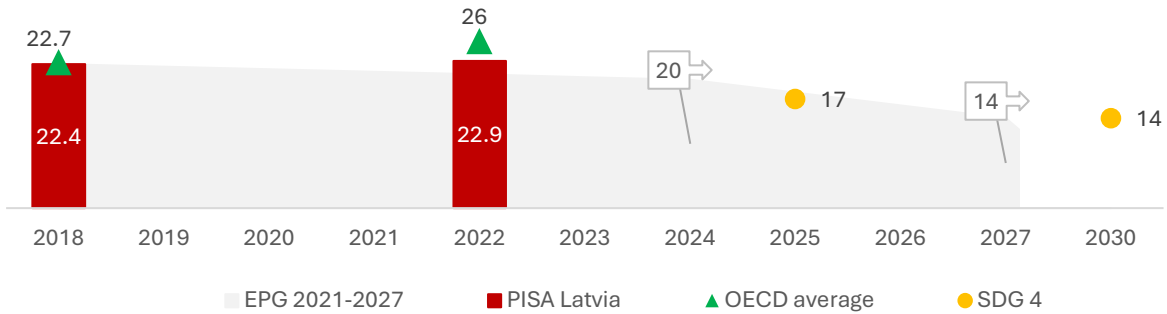
- **"Money follows pupil"** creates unequal opportunities for education institutions to provide quality education: the amount of money dedicated to the educational institution depends on the number of students and the municipality's decision on redistribution of the state budget allocation between schools.

- **"Programme in school"** ensures the educational process in accordance with the best interests of the student: funding is calculated for each educational institution, considering the amount of educational programmes it implements.

INTERNATIONAL ASSESSMENT DATA **TO DEMONSTRATE PROPORTION WITH HIGH AND LOW PERFORMING STUDENTS**

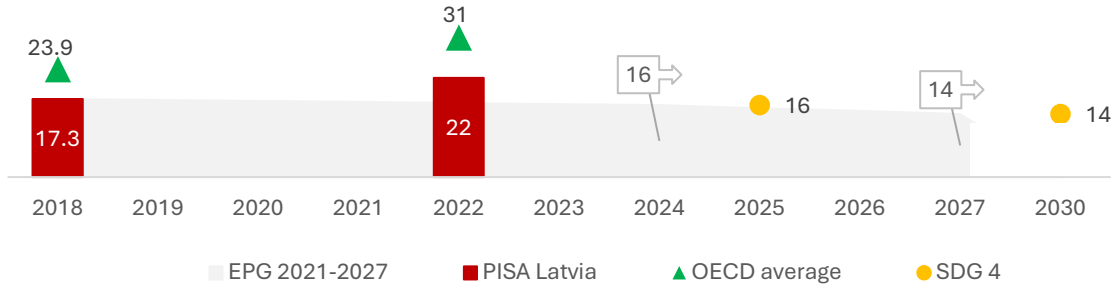
High-performing students in reading, %

Low-performing students in reading, %



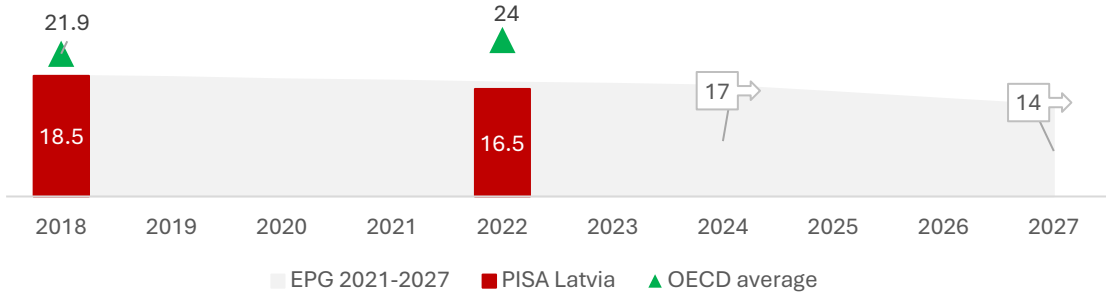
High-performing students in mathematics, %

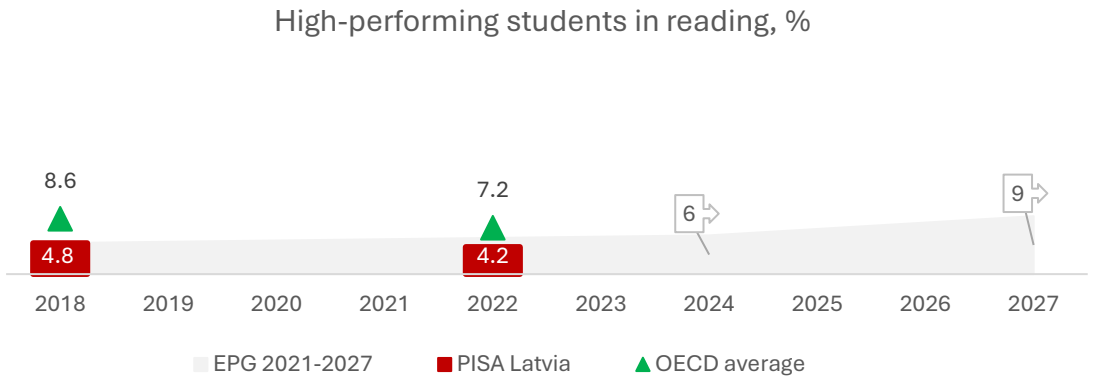
Low-performing students in mathematics, %

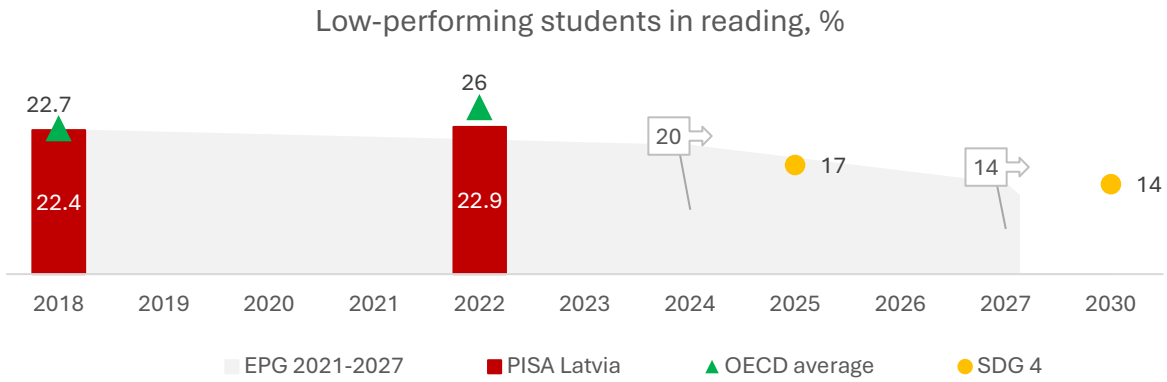


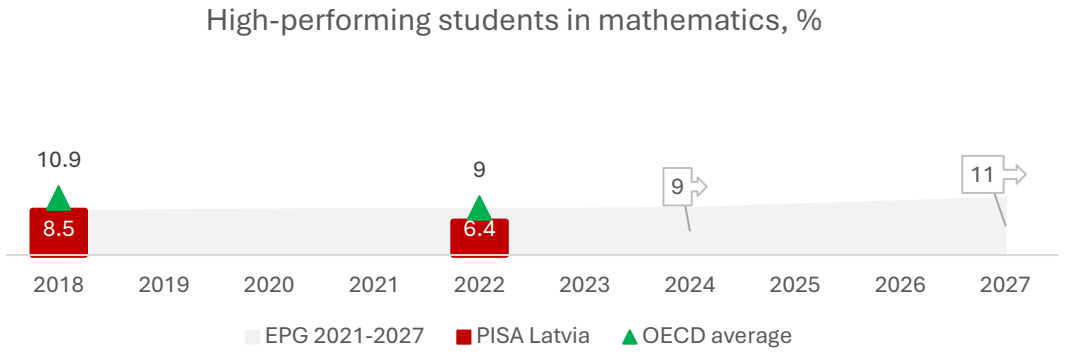
High-performing students in science, %

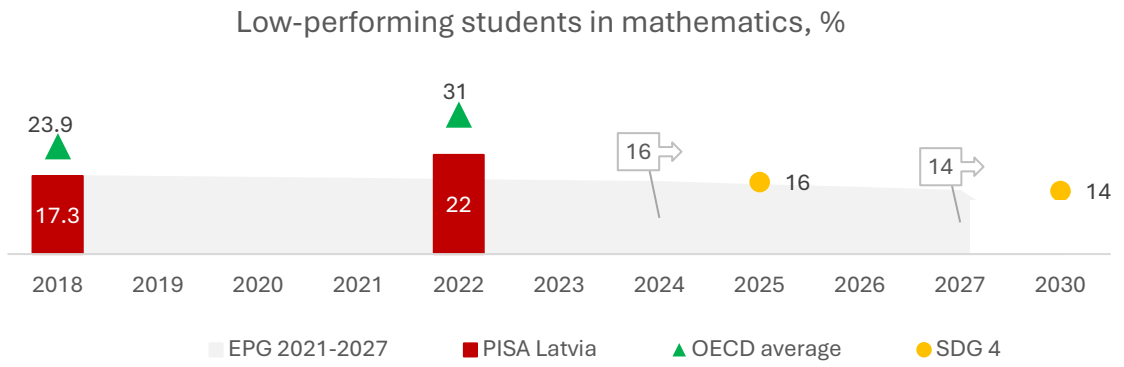
Low-performing students in science, %









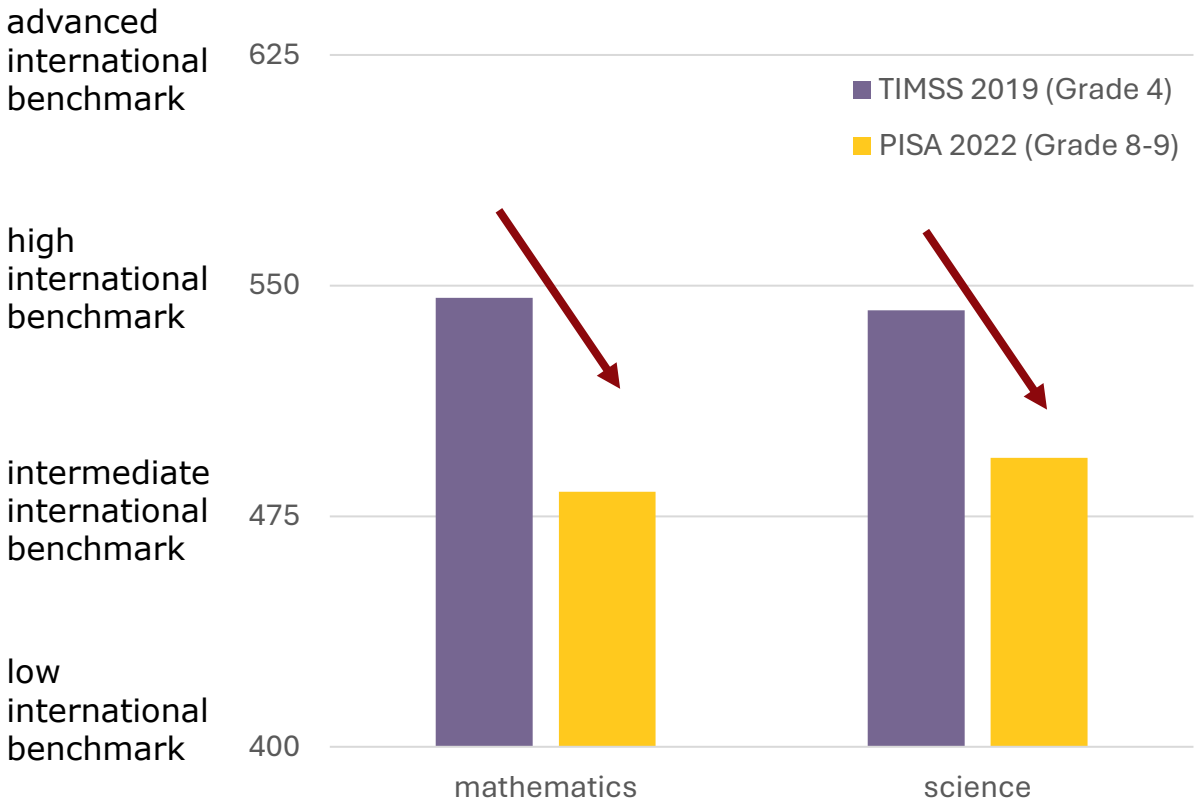


Policy responses:

1. Investment in teacher professional development (developing differentiation skills/strategies; providing individualized support)
2. Improvement of learning and assessment (exams) content: one that challenges high-performing students
3. Supporting mechanisms for (a) talent development and (b) prevention mechanisms for early school leaving at national, regional and school level

CROSS-COMPARISON OF INTERNATIONAL ASSESSMENTS TO BETTER UNDERSTAND CHALLENGES AND SOLUTIONS RELATED TO STUDENT LEARNING

Comparing **entering** (TIMSS) **and leaving** (PISA) grades of lower secondary education there is a clear decrease in performance as in mathematics as well as in science

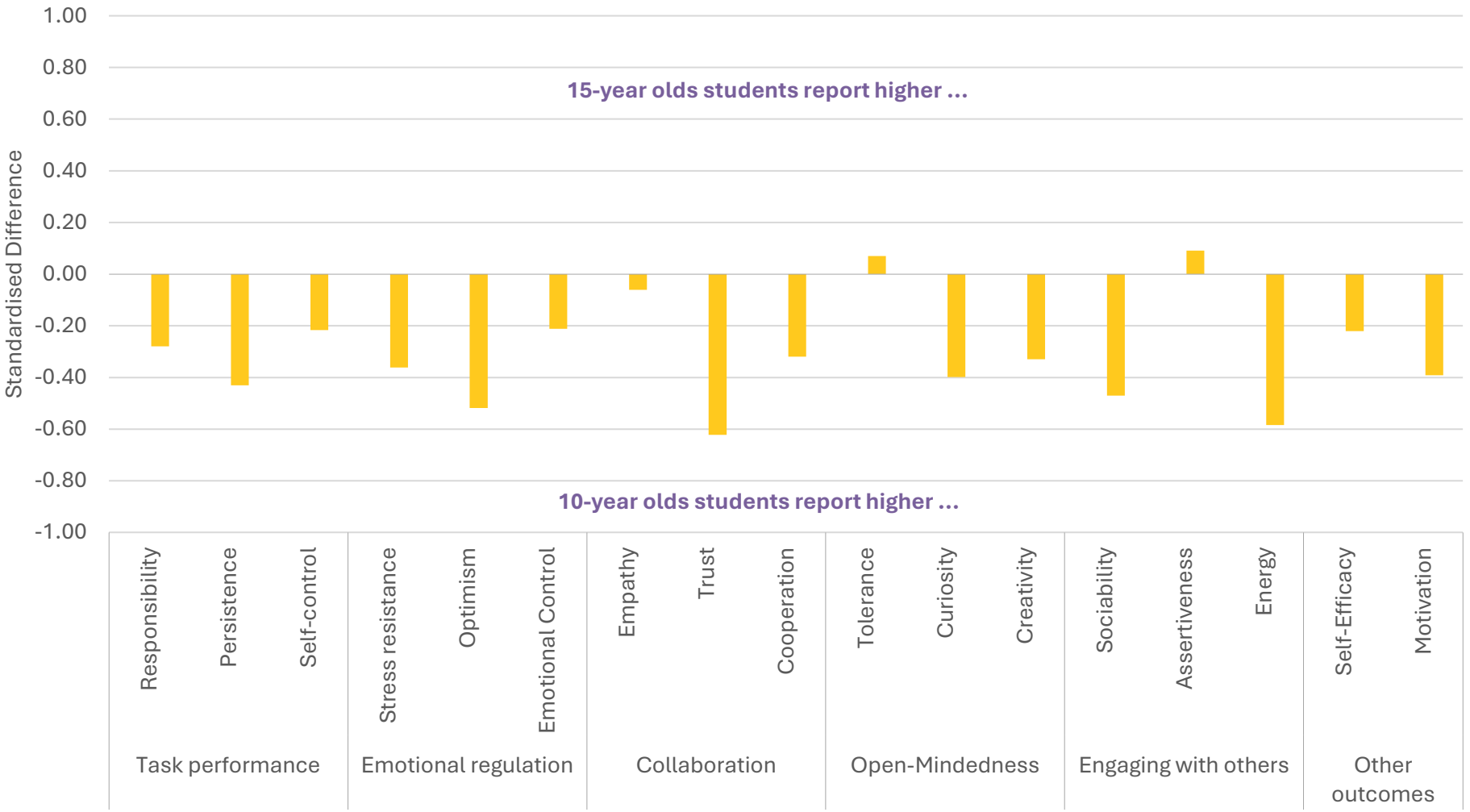


Insight: in high achievement countries there is a larger share of teachers with master and doctoral educational attainment level (ISCED levels 7 and 8).

Insight: additional support is provided not only for low achieving students but also for talented students.

Insight: need to focus on elementary and lower-secondary school; need for an early student performance monitoring and support mechanisms.

International research highlights age differences in social emotional skills between primary (TIMSS) and lower secondary students (PISA) **proving less energy, less optimism, less trust with next education level**



CROSS-COMPARISON OF INTERNATIONAL AND NATIONAL ASSESSMENTS TO BETTER UNDERSTAND CHALLENGES AND SOLUTIONS RELATED TO STUDENT LEARNING

Secondary analysis options

An in-depth research allows to inform both practice and policy planning.

PIRLS 2021

- statistically significant **effects and a comparison of factors** influencing reading achievement in PIRLS 2021 and PISA 2022;
- **methodical material for teachers** based on analysis of the publicly available tasks of the survey in relation to the achievements of students, **identifying the weaknesses** of LV students, methodological material with examples of texts, tasks and evaluation guidelines;
- **methodological material to promote student reading skills**, based on recommendations from studies.

TIMSS 2019

- **areas of cognitive skills that require more effective teaching methods, more effective support for students, more targeted measures**, ensuring an offer of methodological materials for schools;
- **international and national comparison** of the effectiveness of target measures;
- revealing statistically significant effects and linking student performance with **the contextual factors of students and the school**;
- assessment **of TIMSS 2019 and 2023/2024 school year 9th grade national examination results** in mathematics.

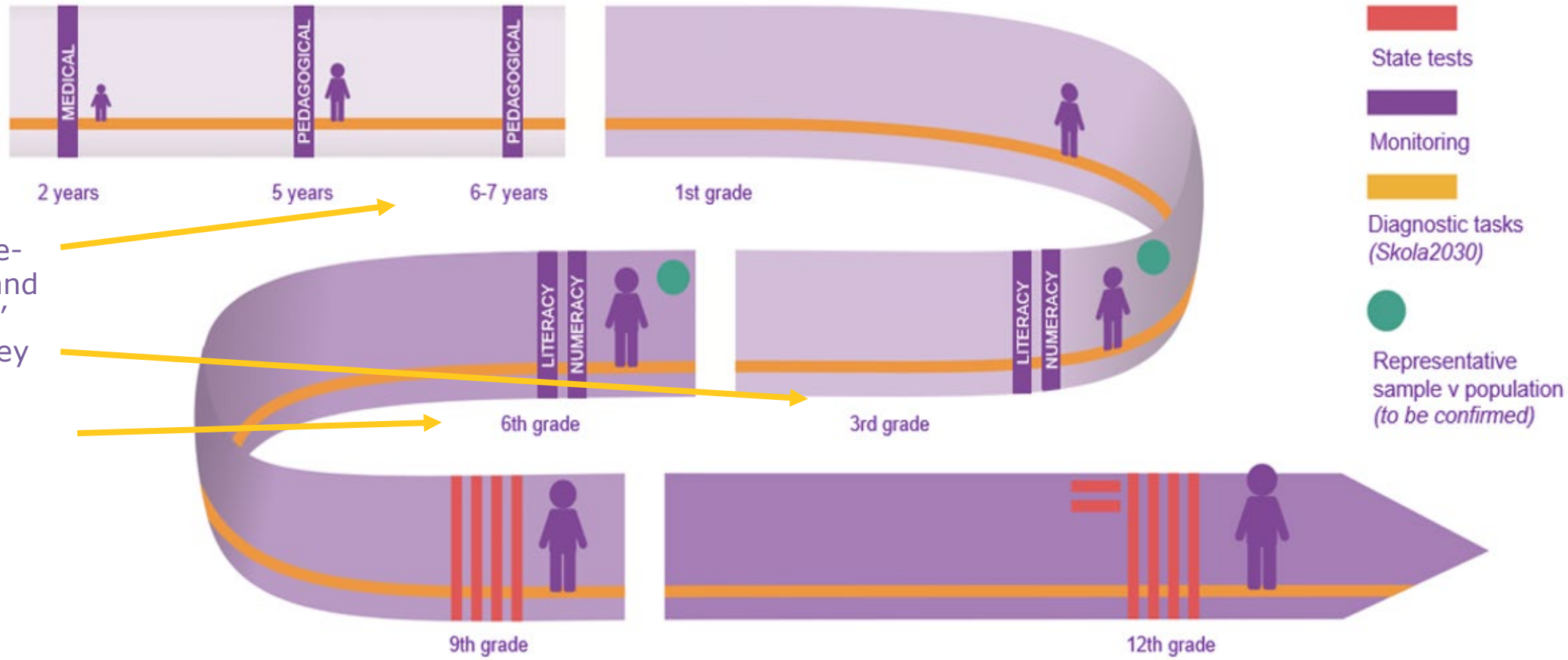
ICCS 2022

- recommendations **for strengthening civic participation in formal and non-formal education**, comparing the relationship between civic participation and achievements in ICCS competence test, and civic participation experience of schools,
- an **in-depth study** of civic attitudes, also using PISA 2022 results;
- to **develop evidence-based teaching and learning strategies and techniques** for the development and strengthening of civic competence of students and teachers by creating a set of digital materials as a support resource for teachers.

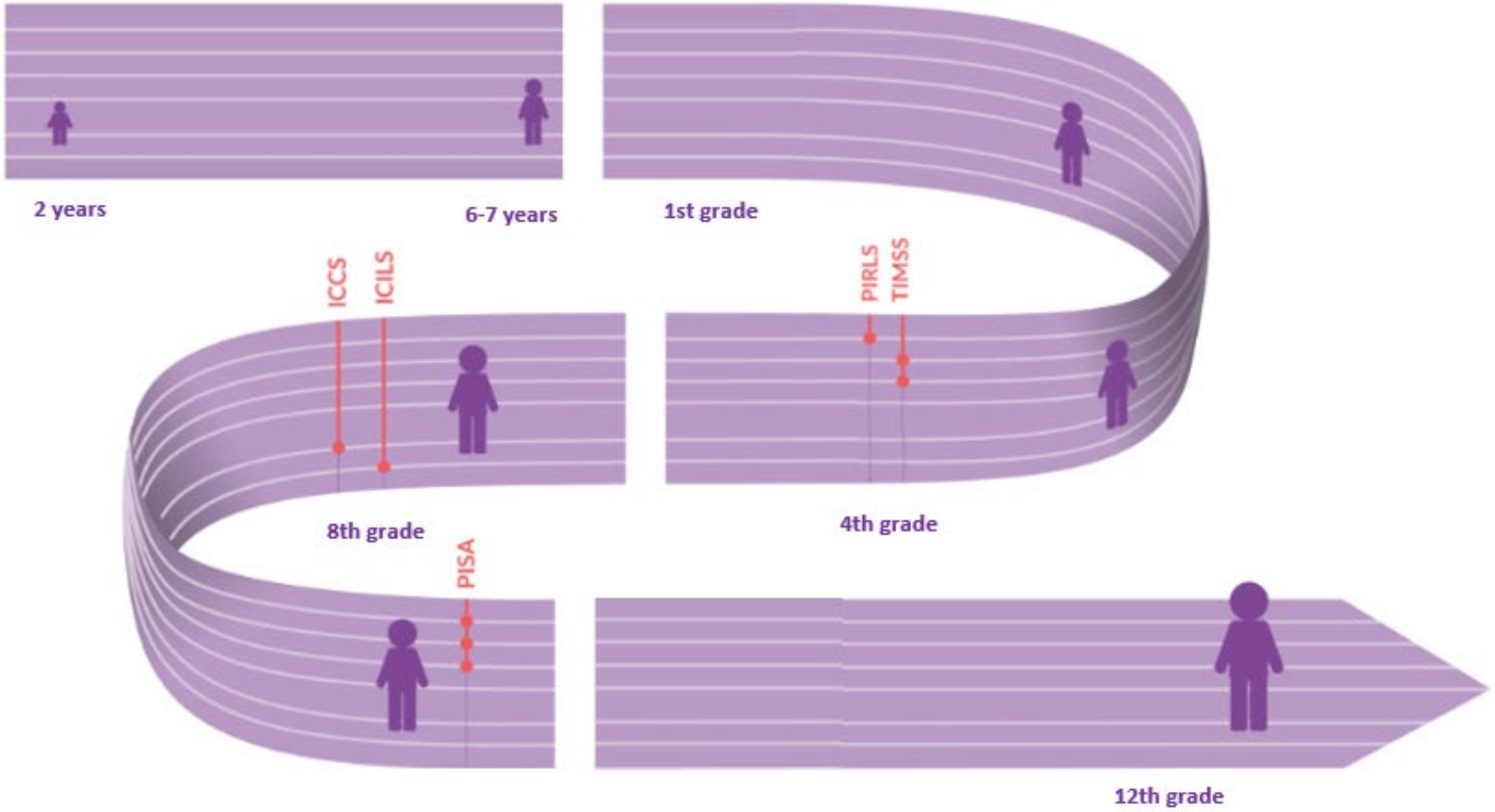
COMBINATION OF DIFFERENT ASSESSMENT INSTRUMENTS TO CREATE AN OPTIMAL SCENARIO

Individual performance monitoring as part of the **national assessment system** (insight for policy planning, feedback for teachers/parents/student on strength and weaknesses, added value measurement)

Monitoring for pre-school, Grade 3 and Grade 6 students' performance in key skill areas (potentially, also pre-school).



International student performance assessments as the benchmark for excellence



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THANK YOU!