



# Improving quality of education – Human capital development in Emerging Asia

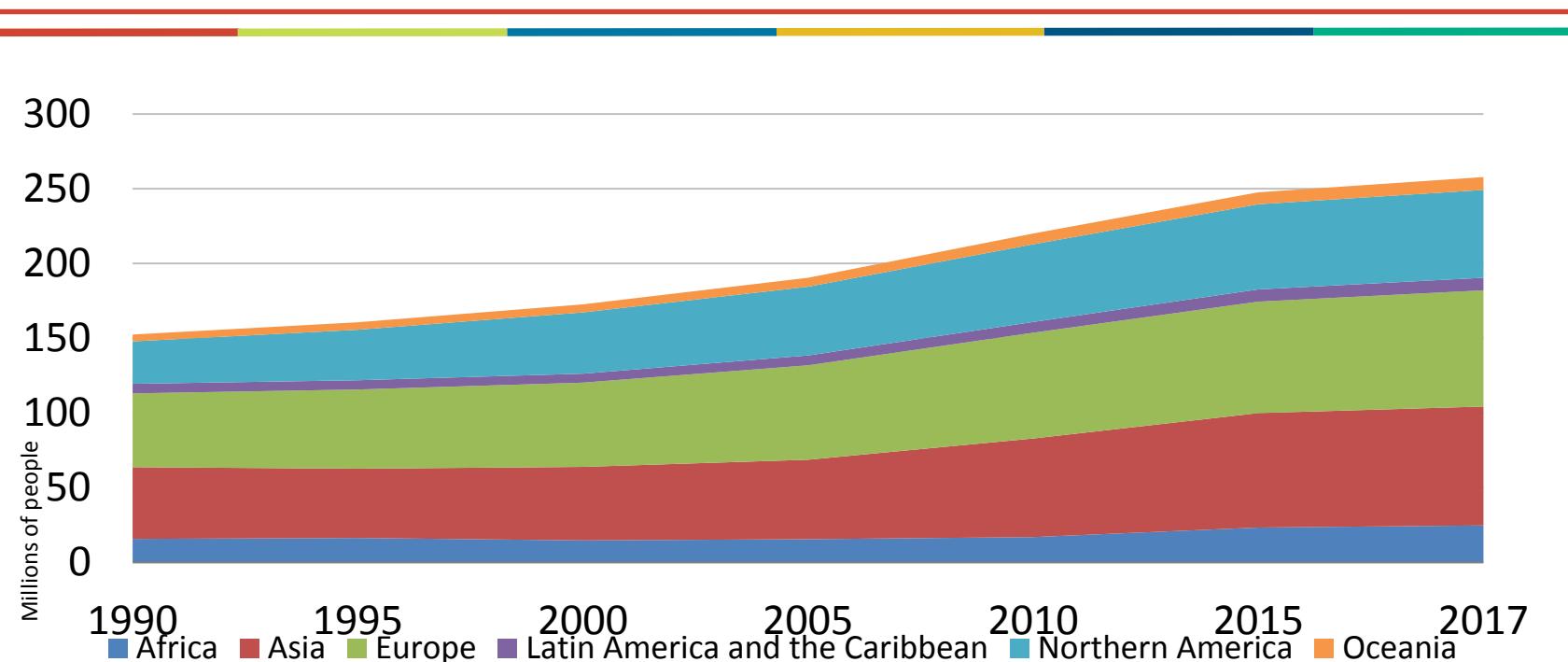
7<sup>TH</sup> OECD-AMRO-ADB/ADBI-ERIA  
ASIAN REGIONAL ROUNDTABLE

**Yuri Belfali**  
Head of Early Childhood and Schools Division



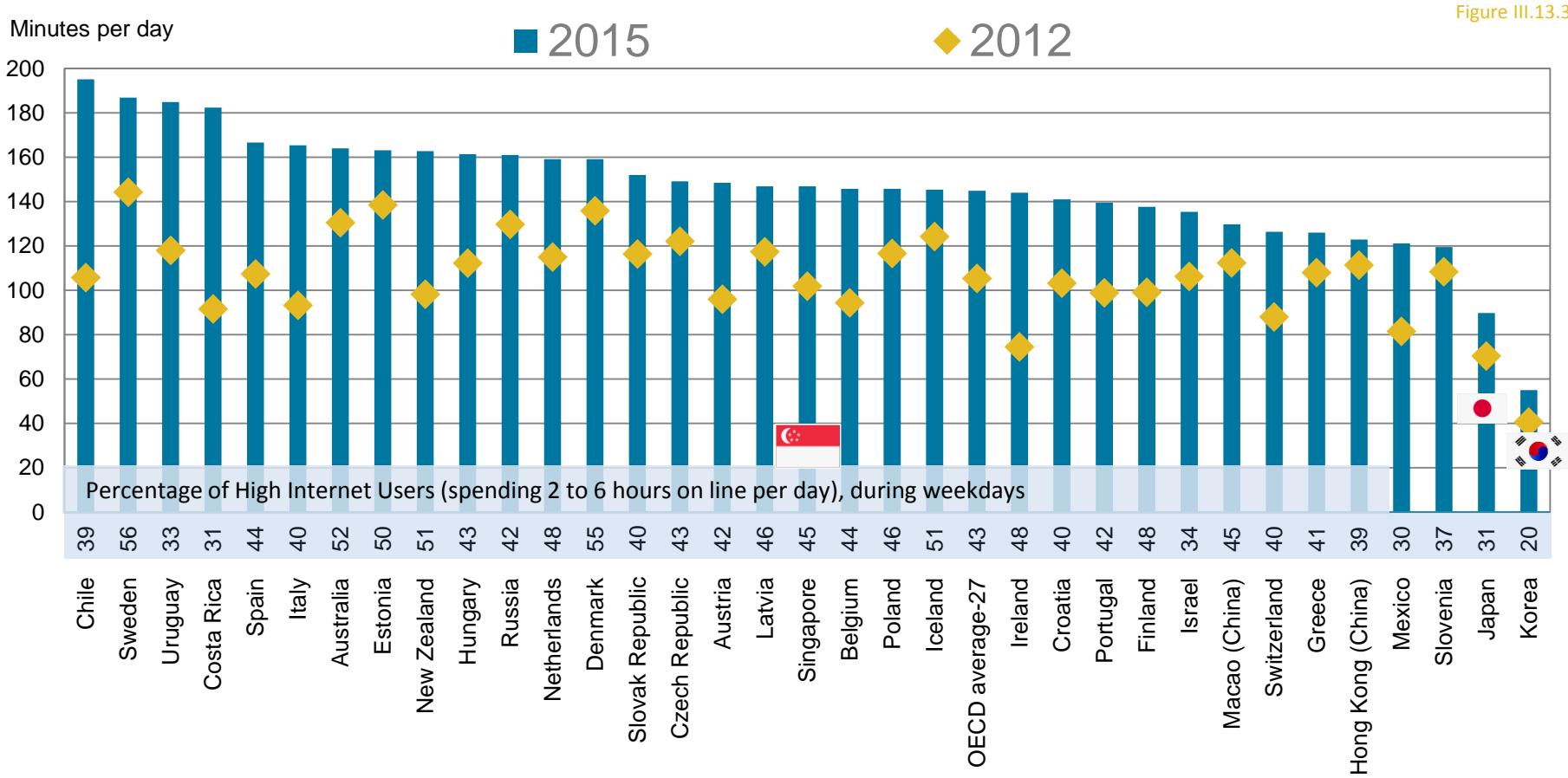
# More people on the move

Estimates of international migrant stock by region of destination, 1990-2017

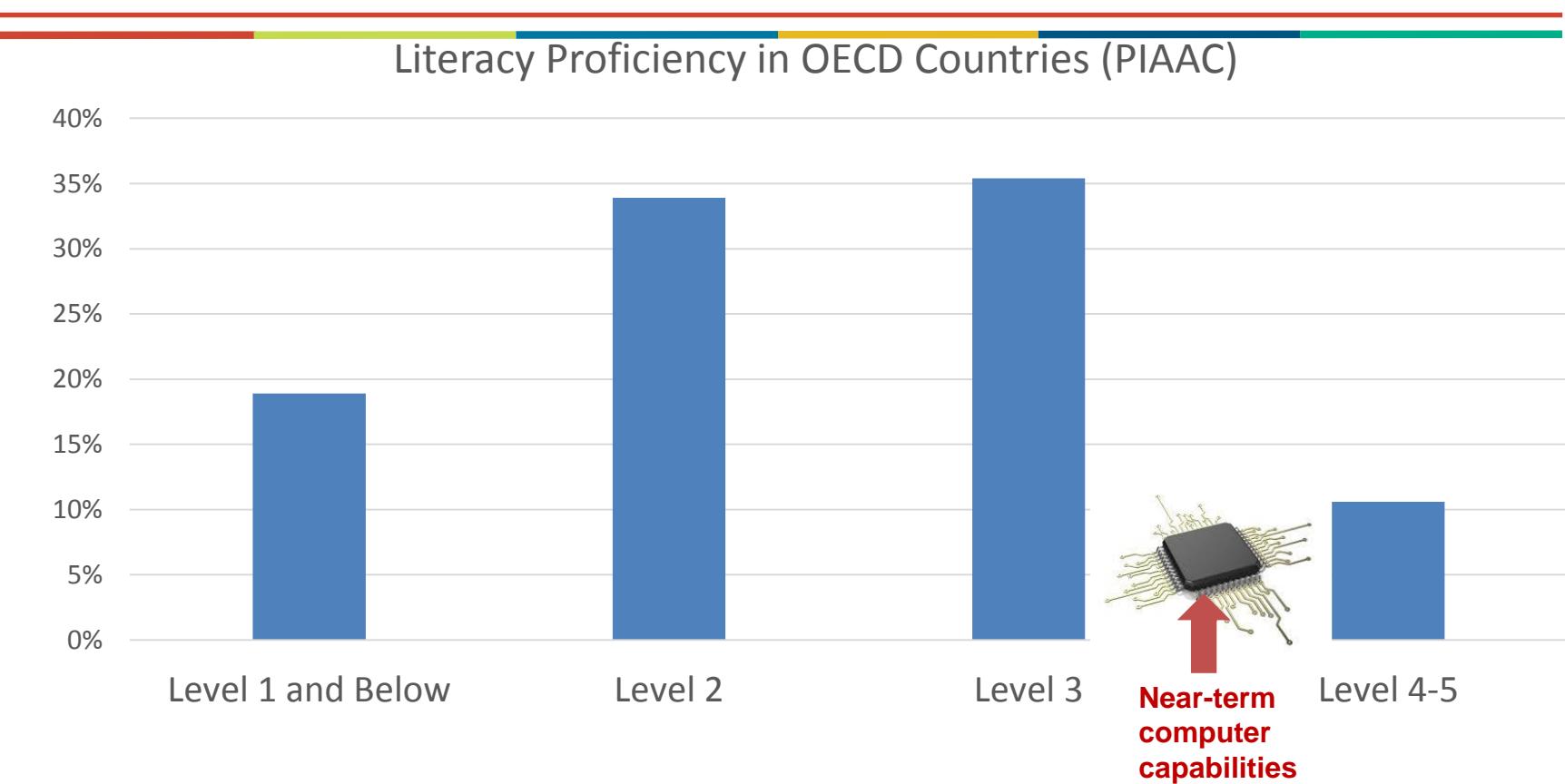


Source: OECD (2019), *Trends Shaping Education 2019*, [https://doi.org/10.1787/trends\\_edu-2019-en](https://doi.org/10.1787/trends_edu-2019-en)

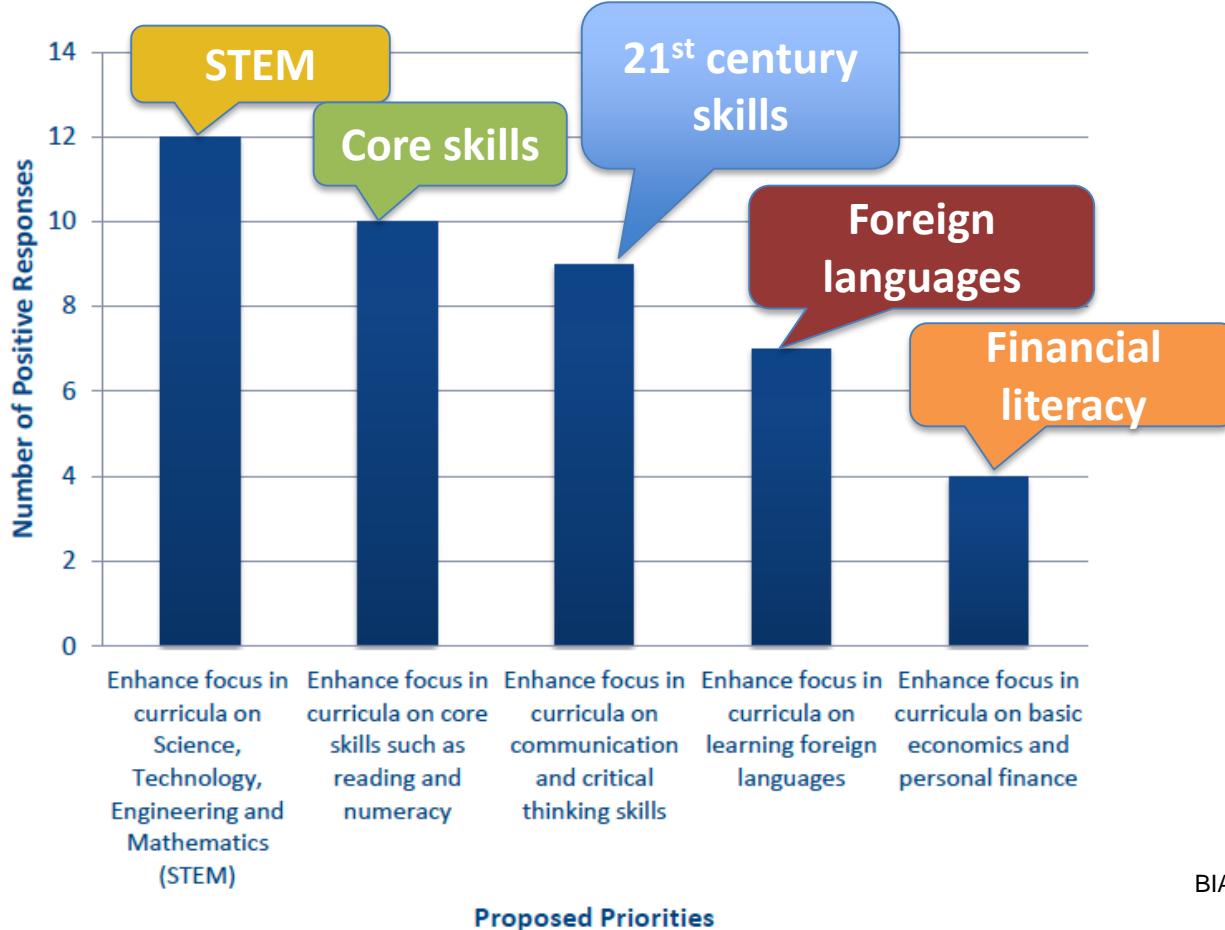
# More time online outside school on a typical school day (PISA)



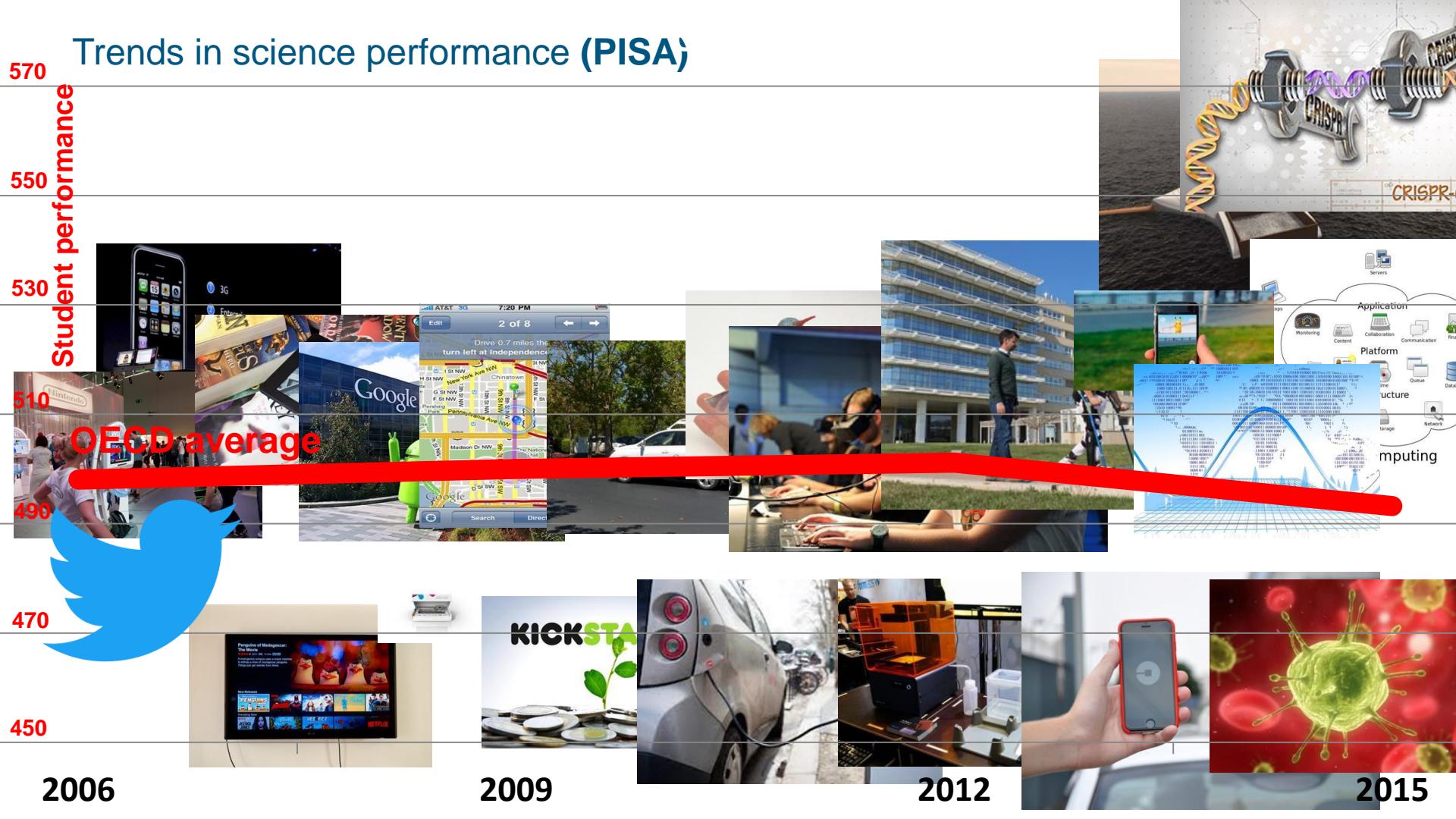
# Is AI more intelligent than human-being?



# What do employers expect from education?



# Trends in science performance (PISA)



# Trends in science performance

570

550

530

510

490

470

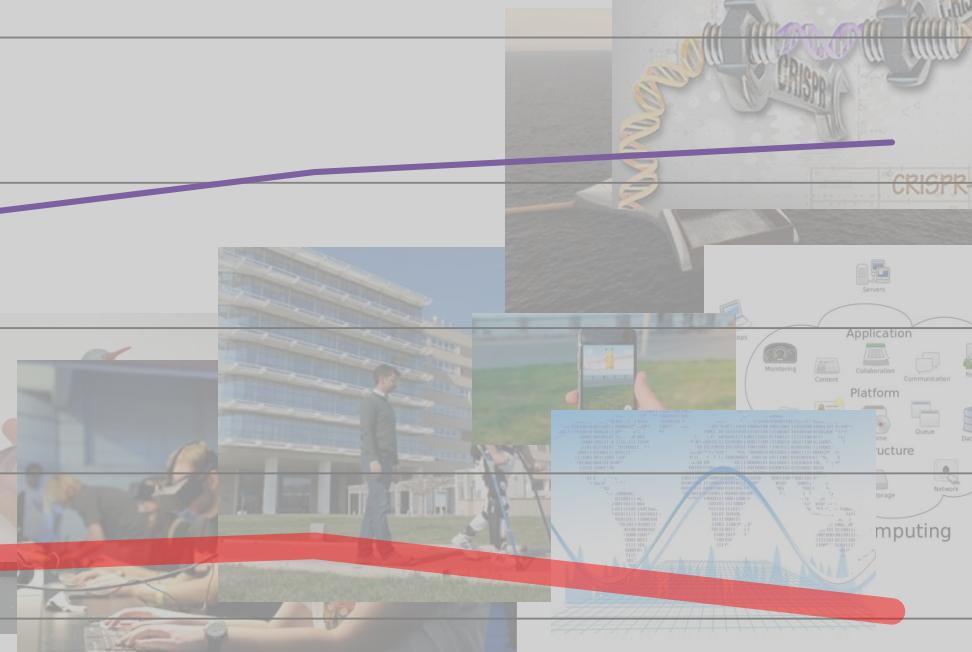
450

2006

2009

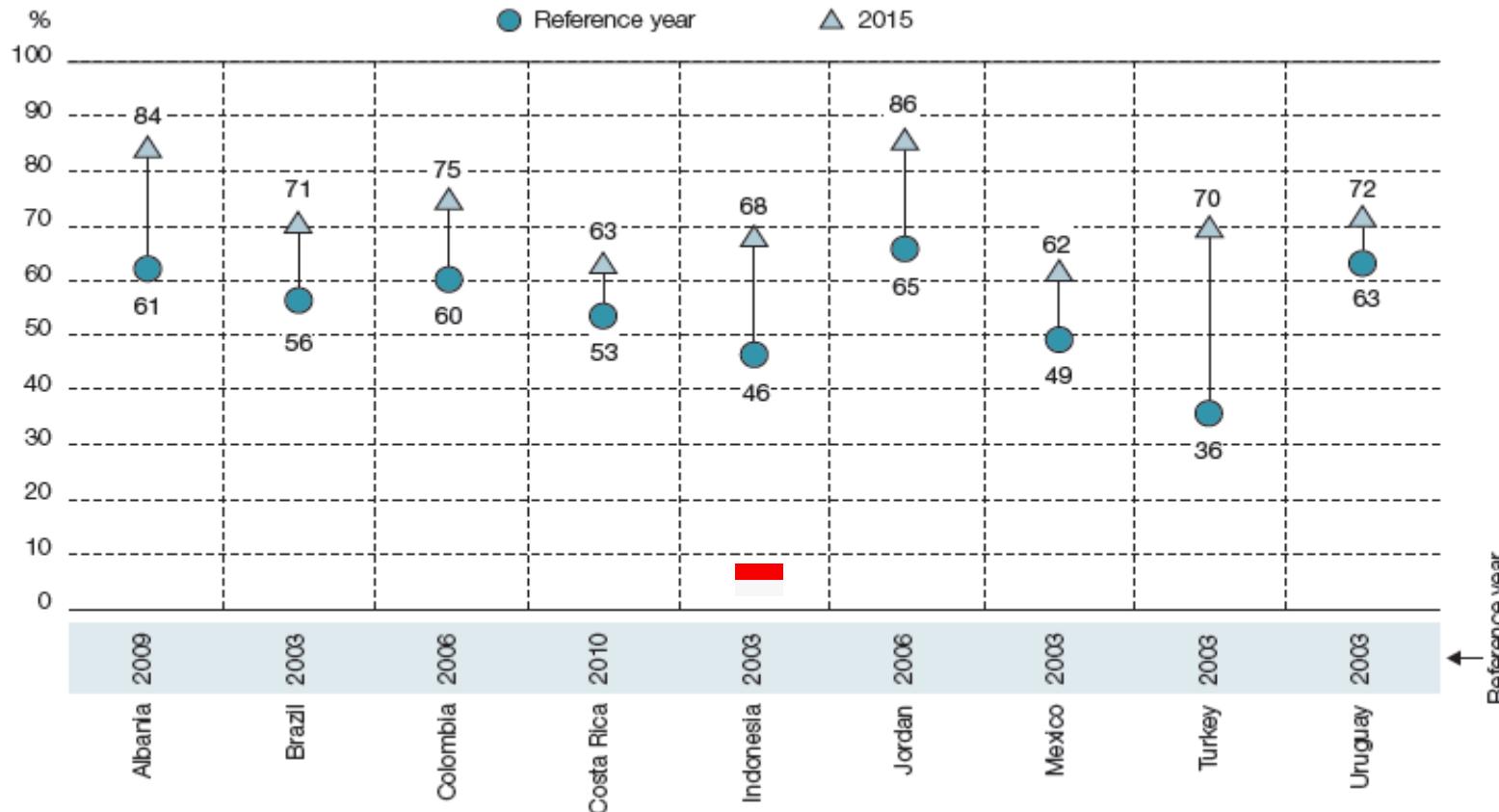
2012

2015

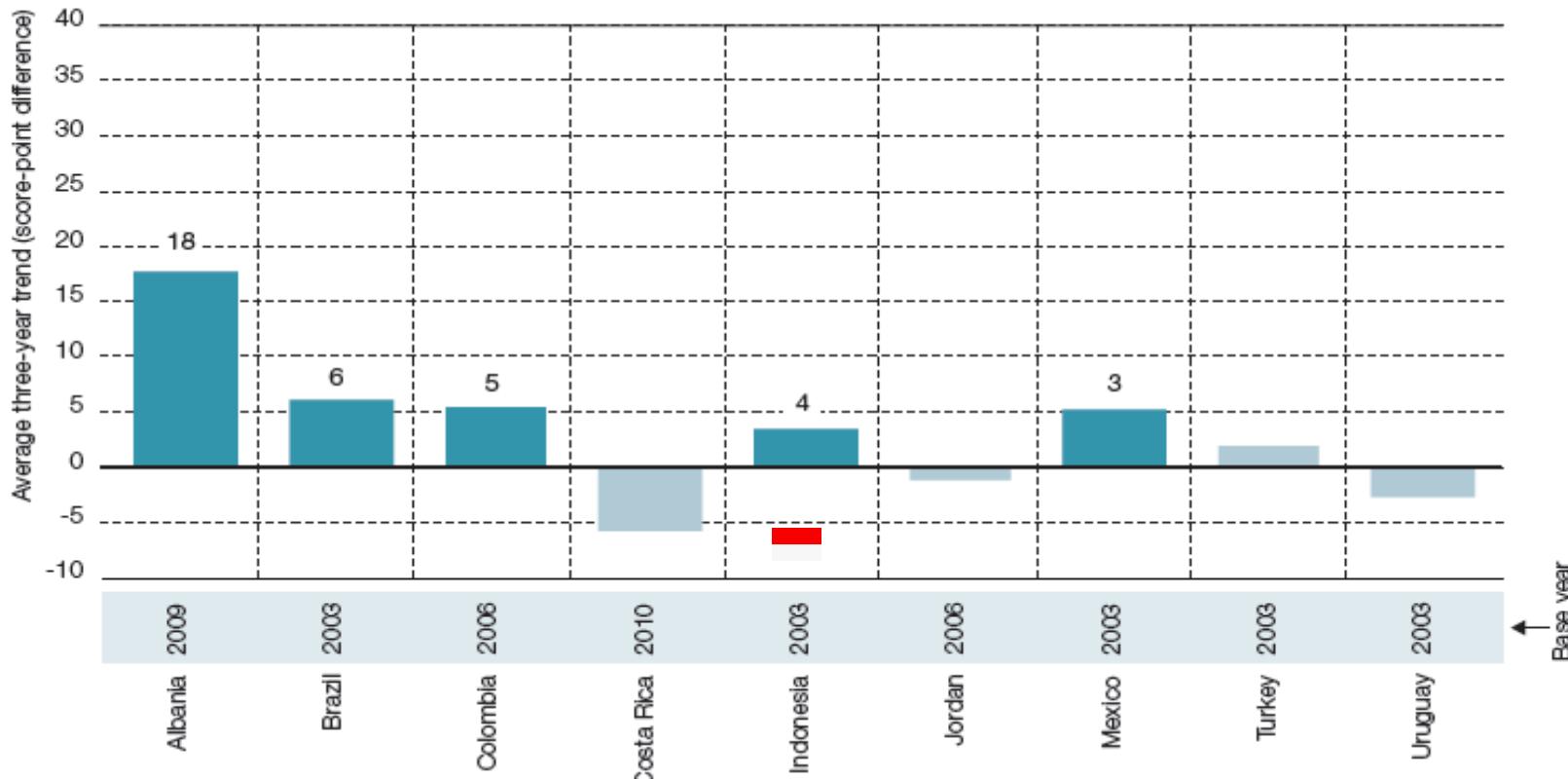


OECD average

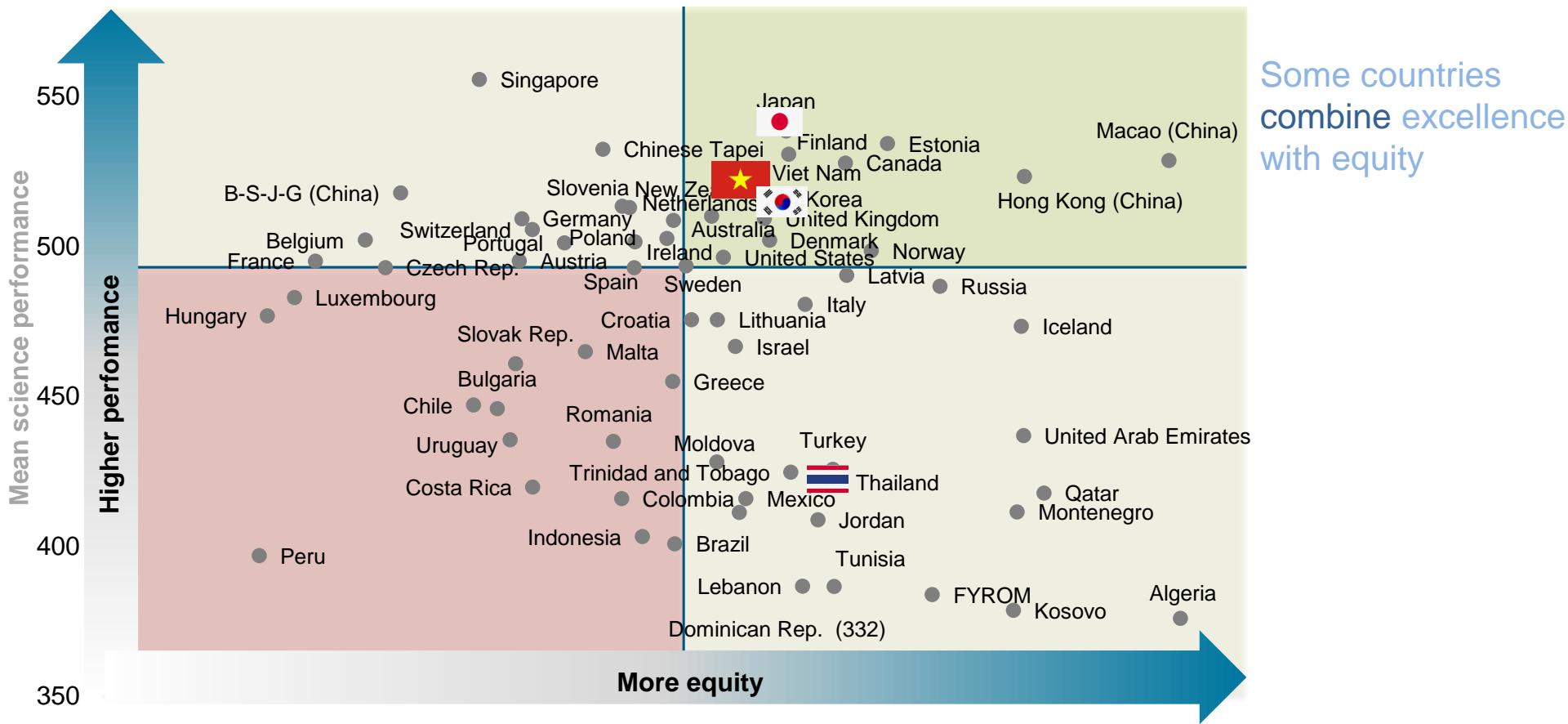
## Some countries significantly increased the enrolment of 15-year-olds



# And still improving mean performance (math)



# Science performance and equity in PISA (2015)



# Poverty is not destiny - Science performance

by international deciles of the PISA index of economic, social and cultural status (ESCS)

Figure I.6.7

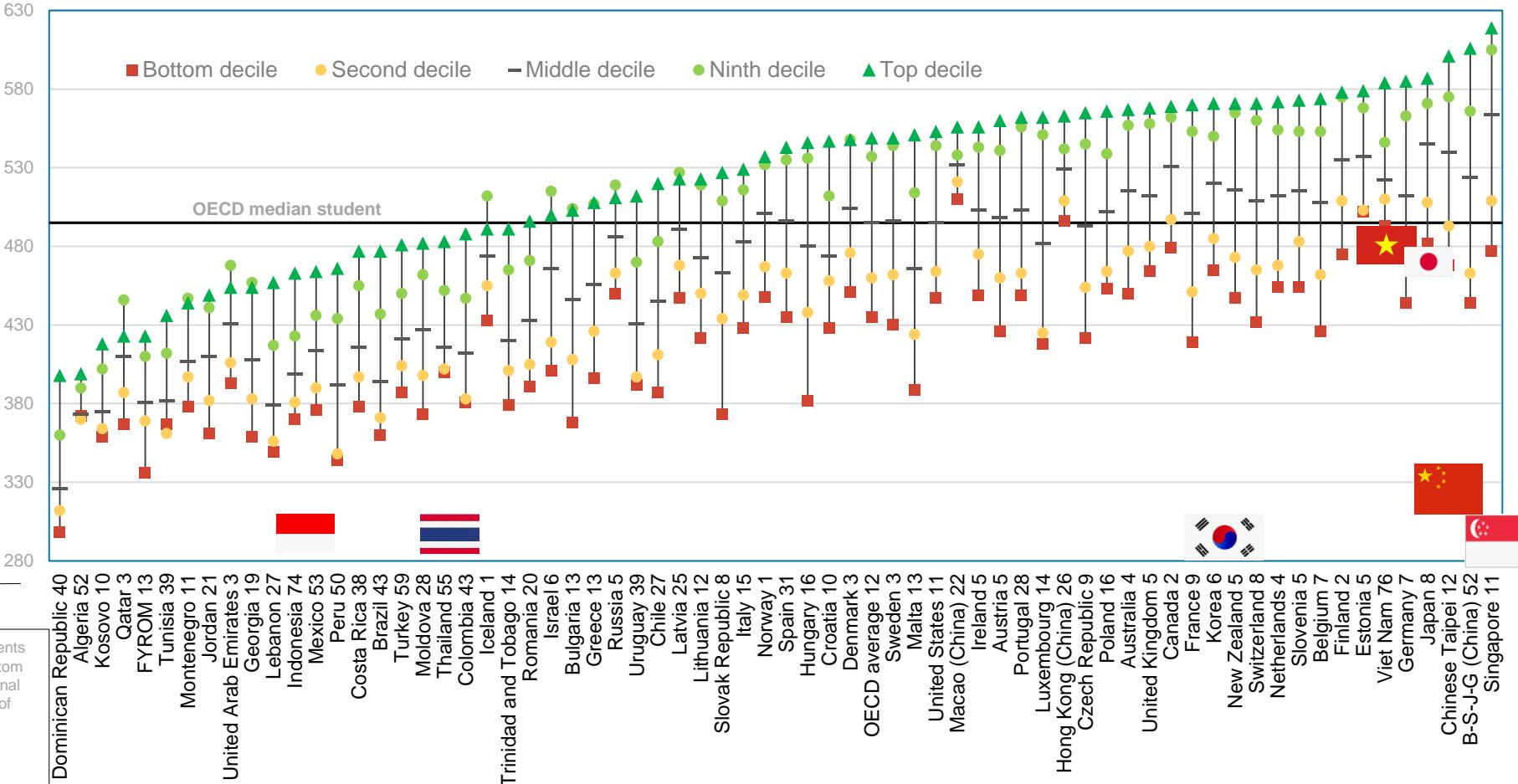
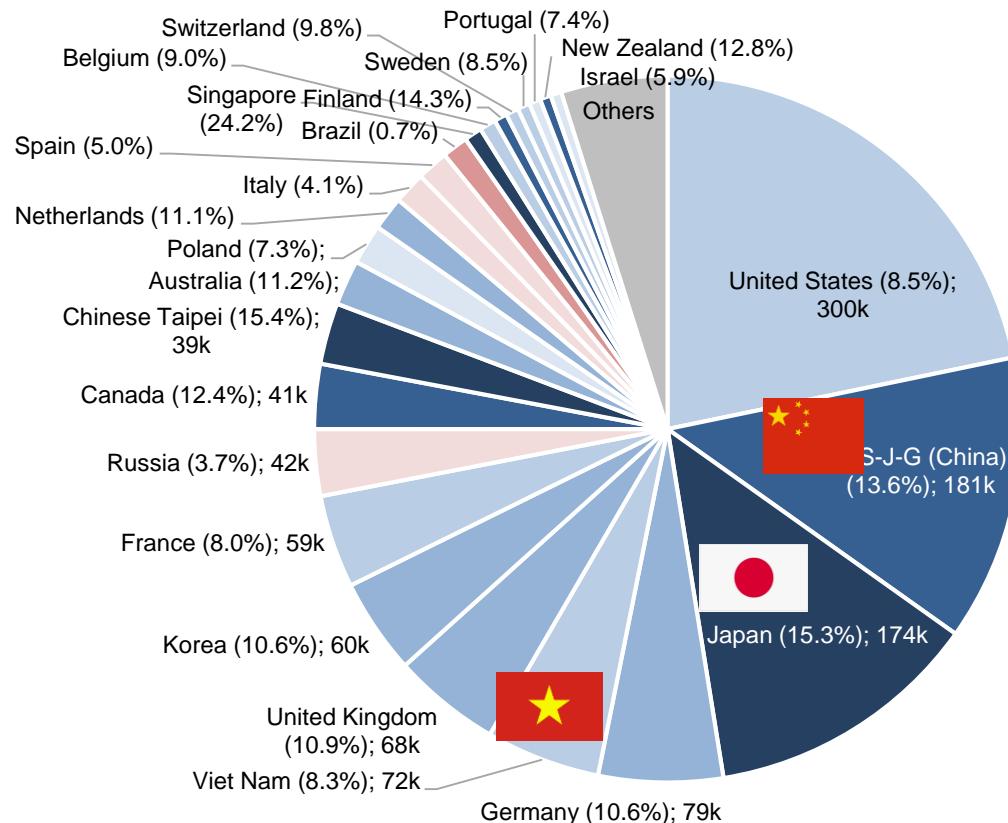


Figure I.2.18

# The global pool of top performers: A PISA perspective



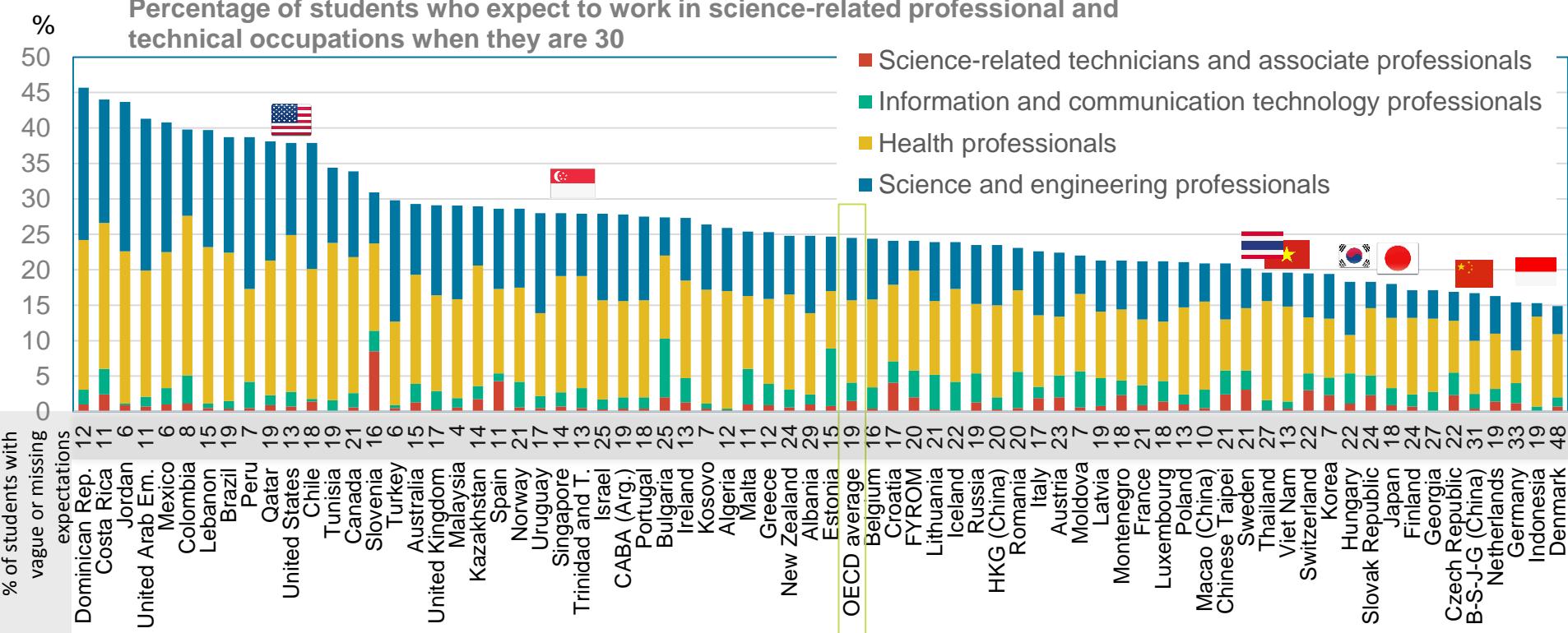
Share of top performers among 15-year-old students:

- Less than 1%
- 1 to 2.5%
- 2.5 to 5%
- 5% to 7.5%
- 7.5% to 10%
- 10% to 12.5%
- 12.5% to 15%
- More than 15%

39% of top performers are in Asia

Figure I.3.2

# Students expecting a career in science



## Multiple outcomes

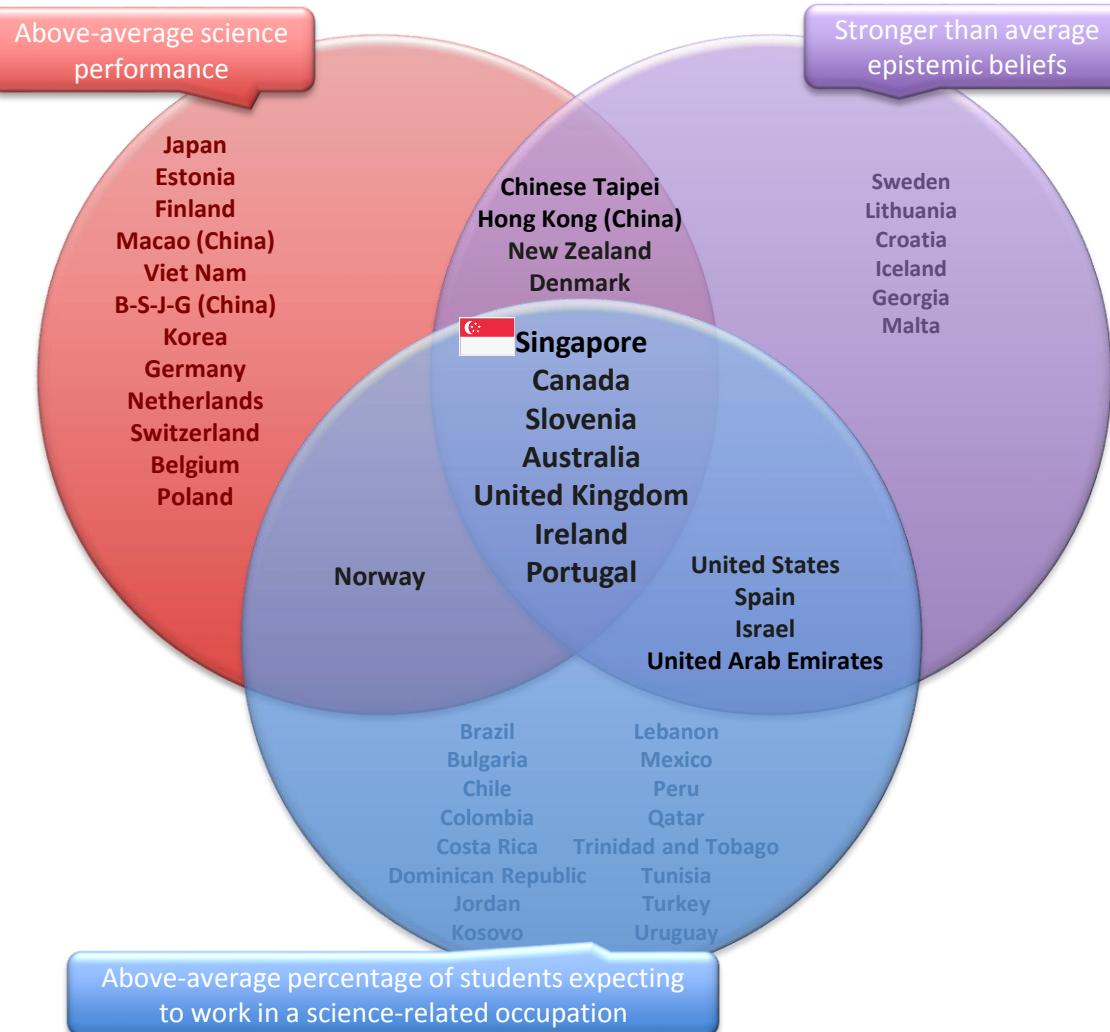


Figure II.6.2

# Spending per student from the age of 6 to 15 and science performance

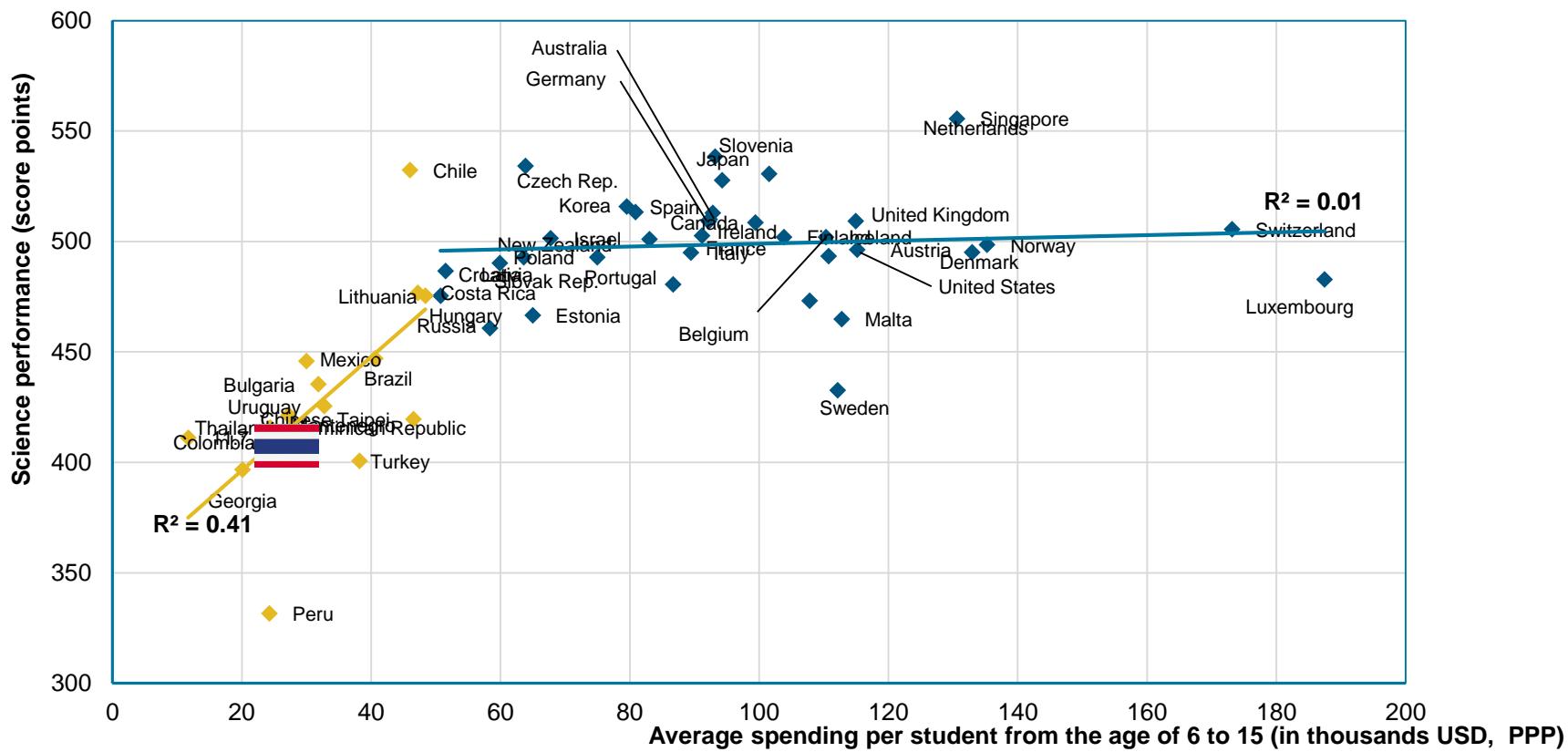
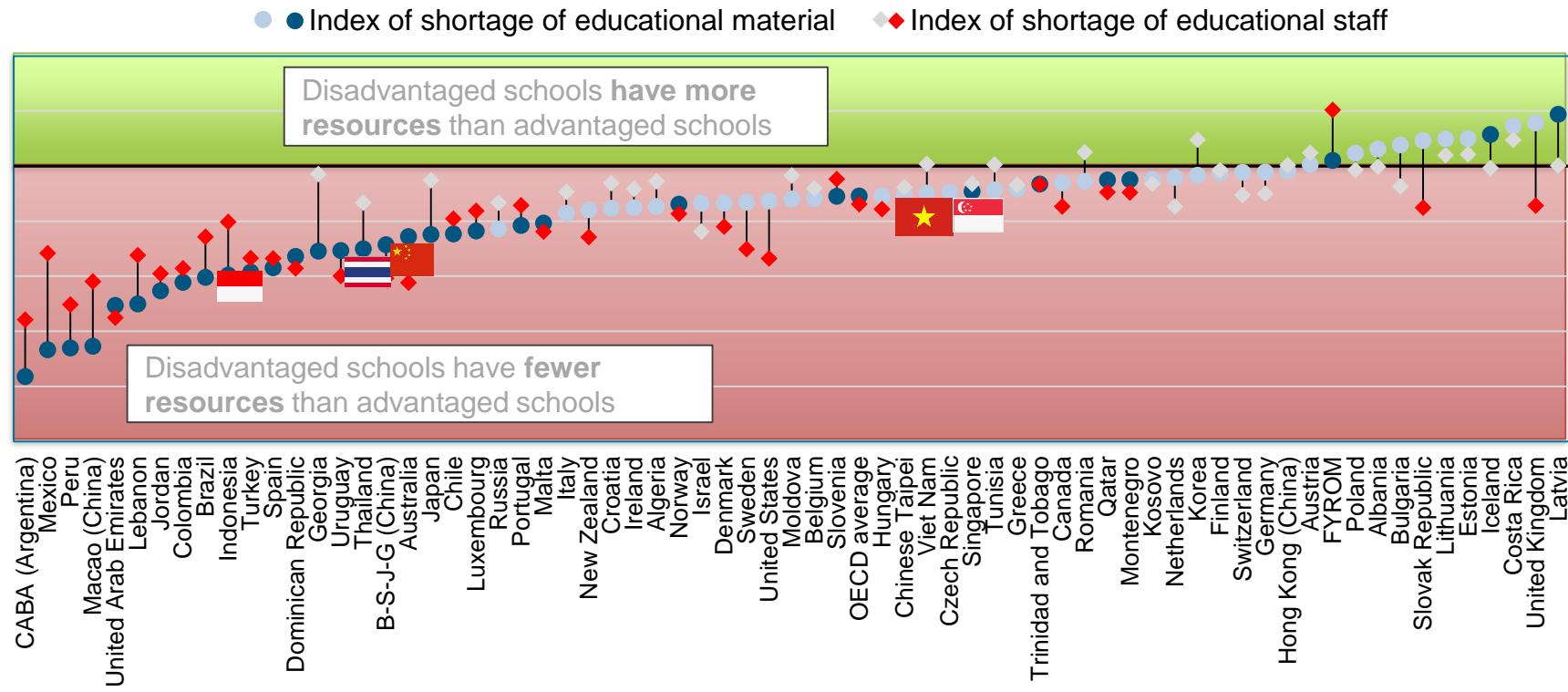


Figure I.6.14

# Differences in educational resources

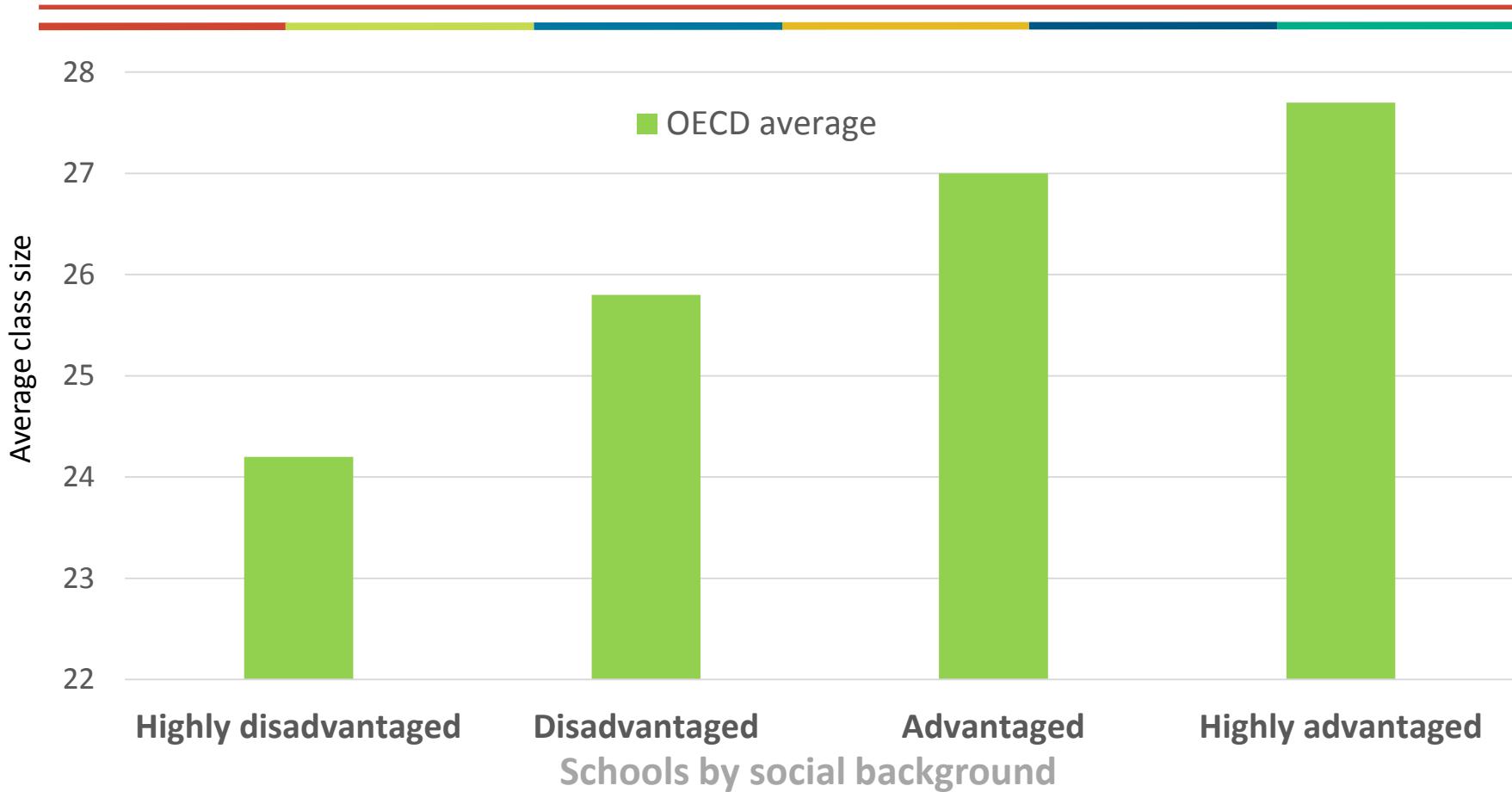
between advantaged and disadvantaged schools

Mean index difference between advantaged and disadvantaged schools



# Aligning resources with needs

Average class size in <9<sup>th</sup> grade>, by quarter of school socio-economic profile



# Aligning resources with needs

Science teachers without a university major in science, by school socio-economic profile (OECD Average)

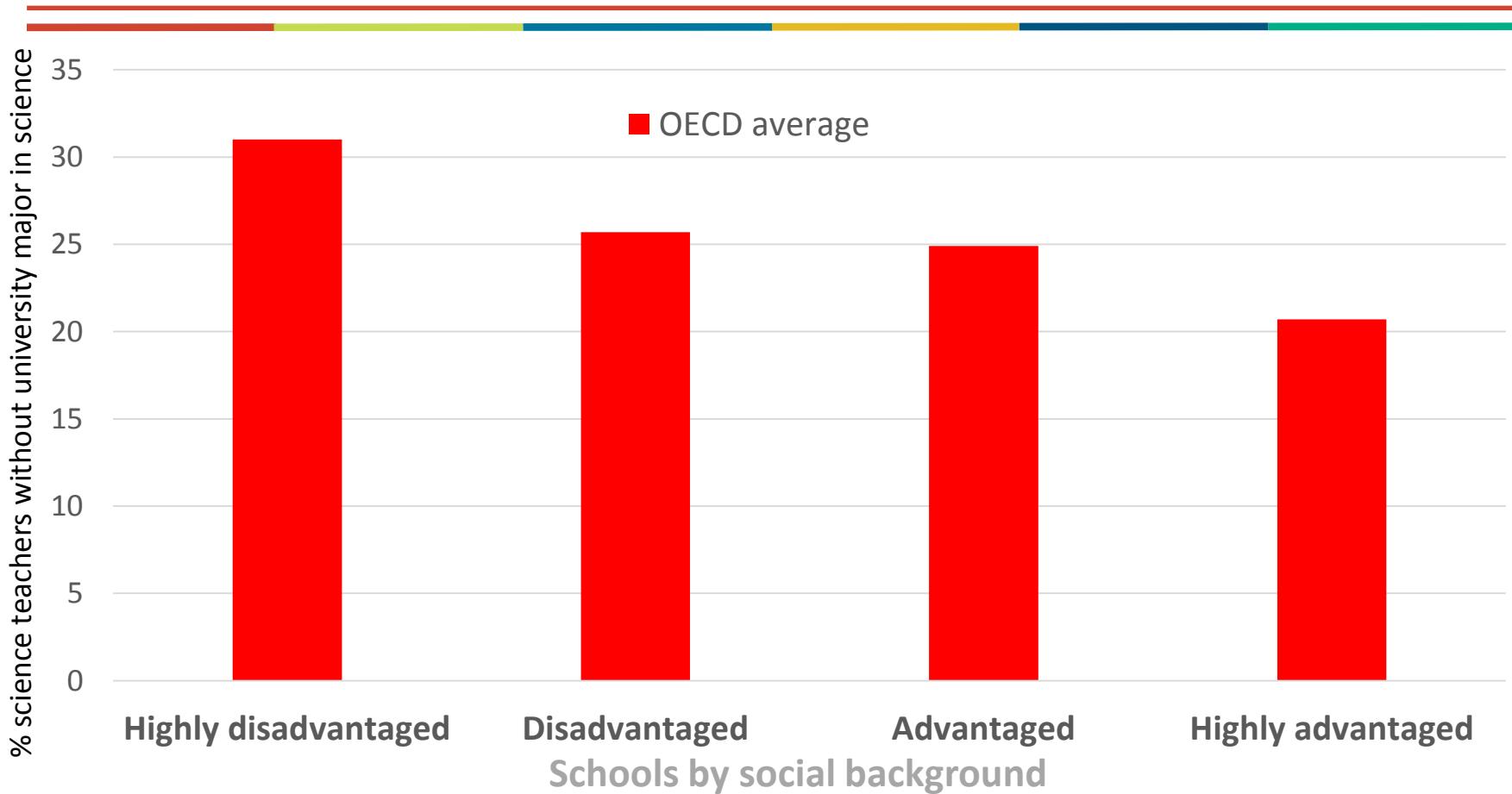
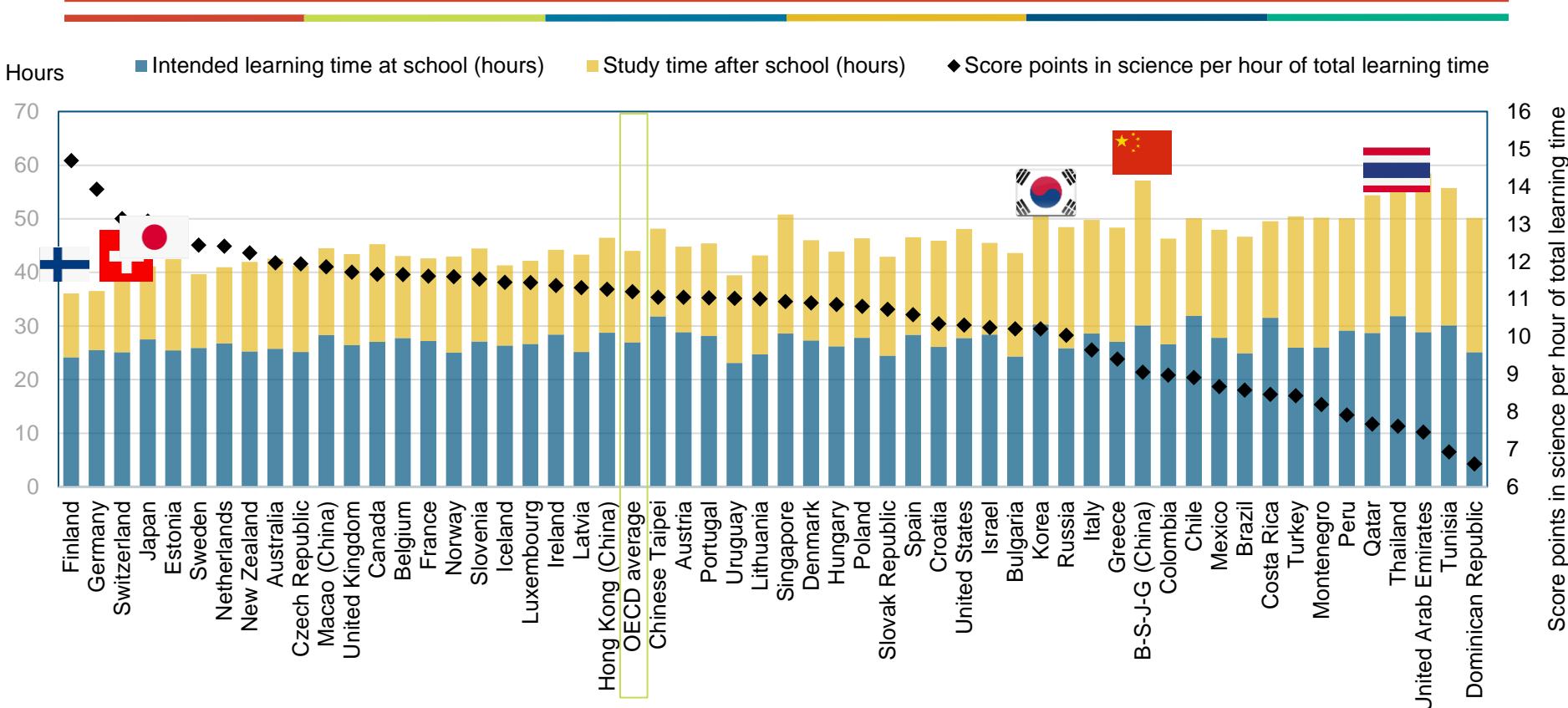


Figure II.6.23

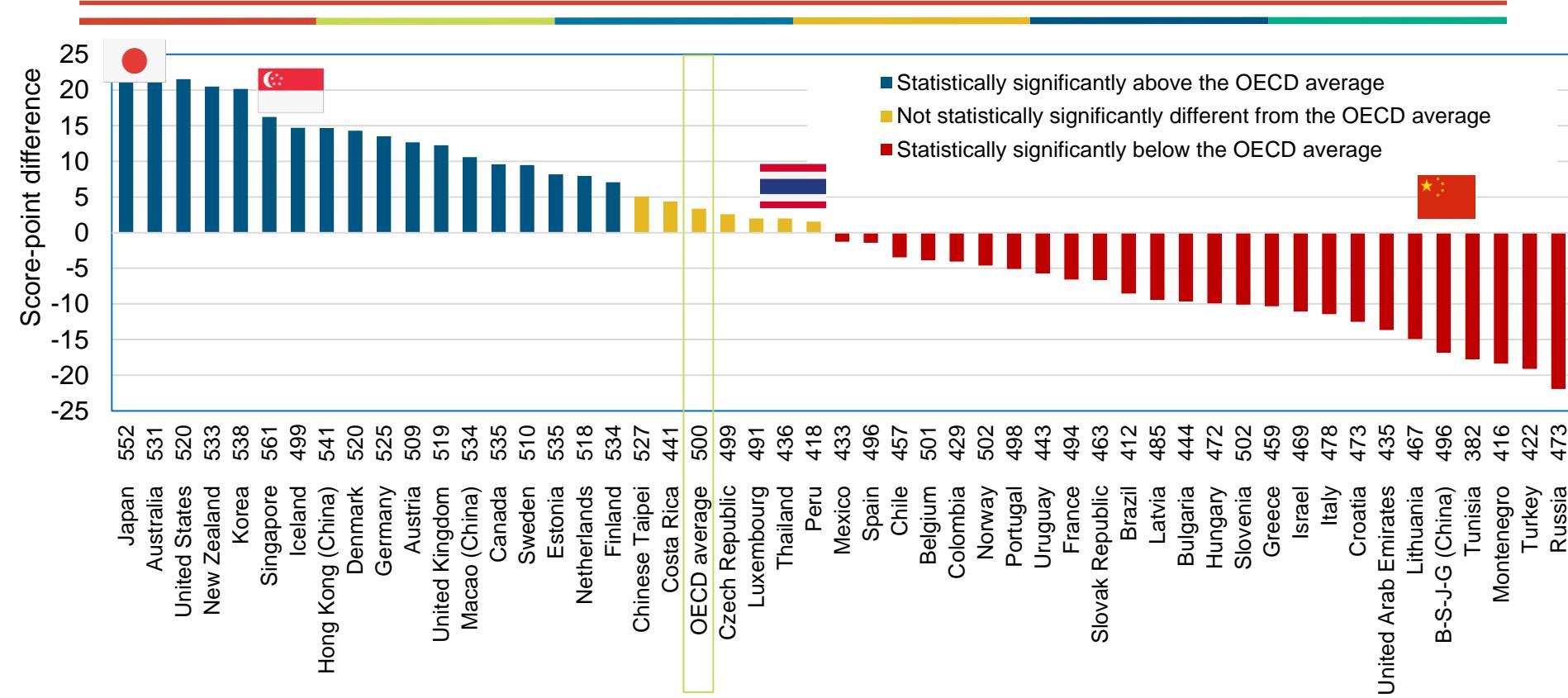
# Learning time and science performance



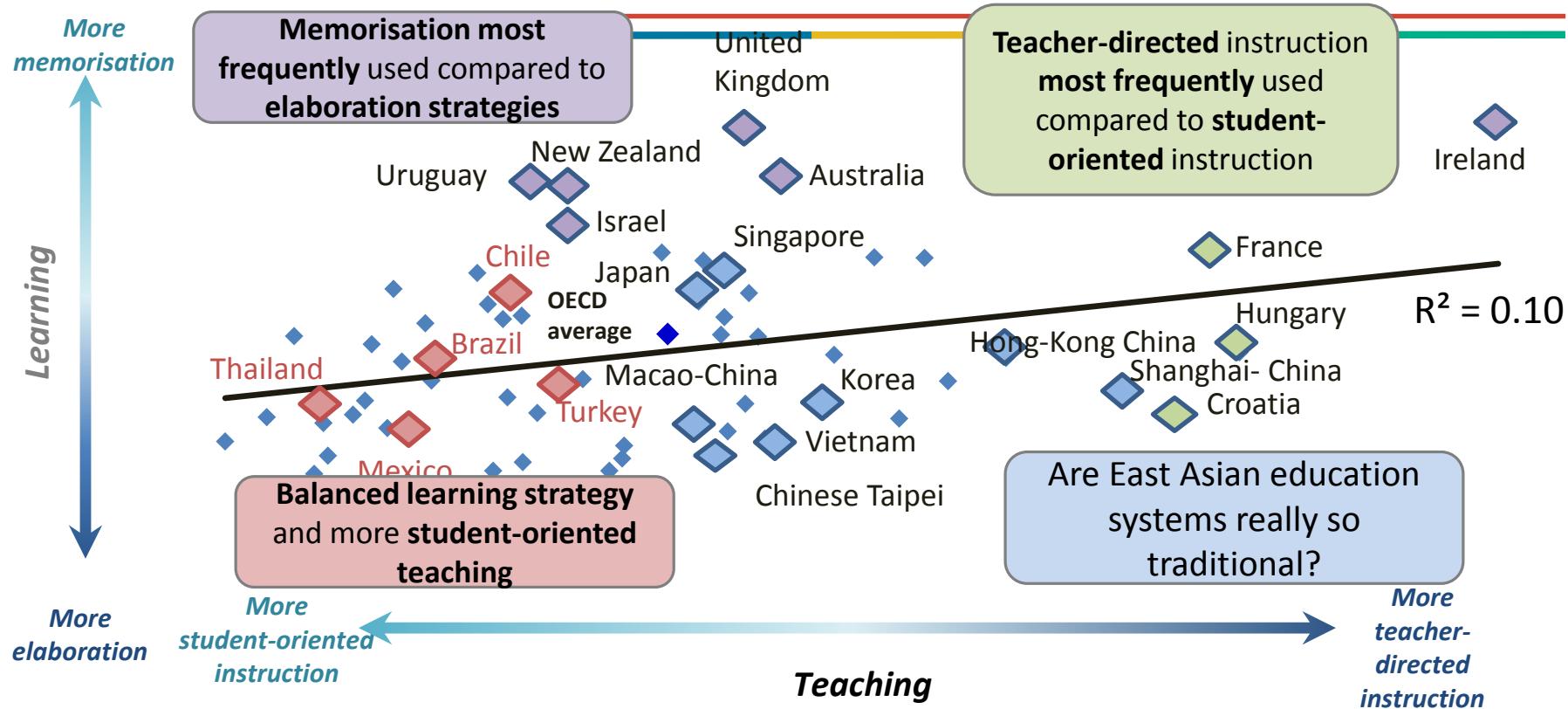
# Collaborative problem solving skills of 15-year-old students

relative to performance in reading, mathematics and science

Figure V.3.9



# Teaching and learning strategies in mathematics around the world



# Policy levers to teacher professionalism

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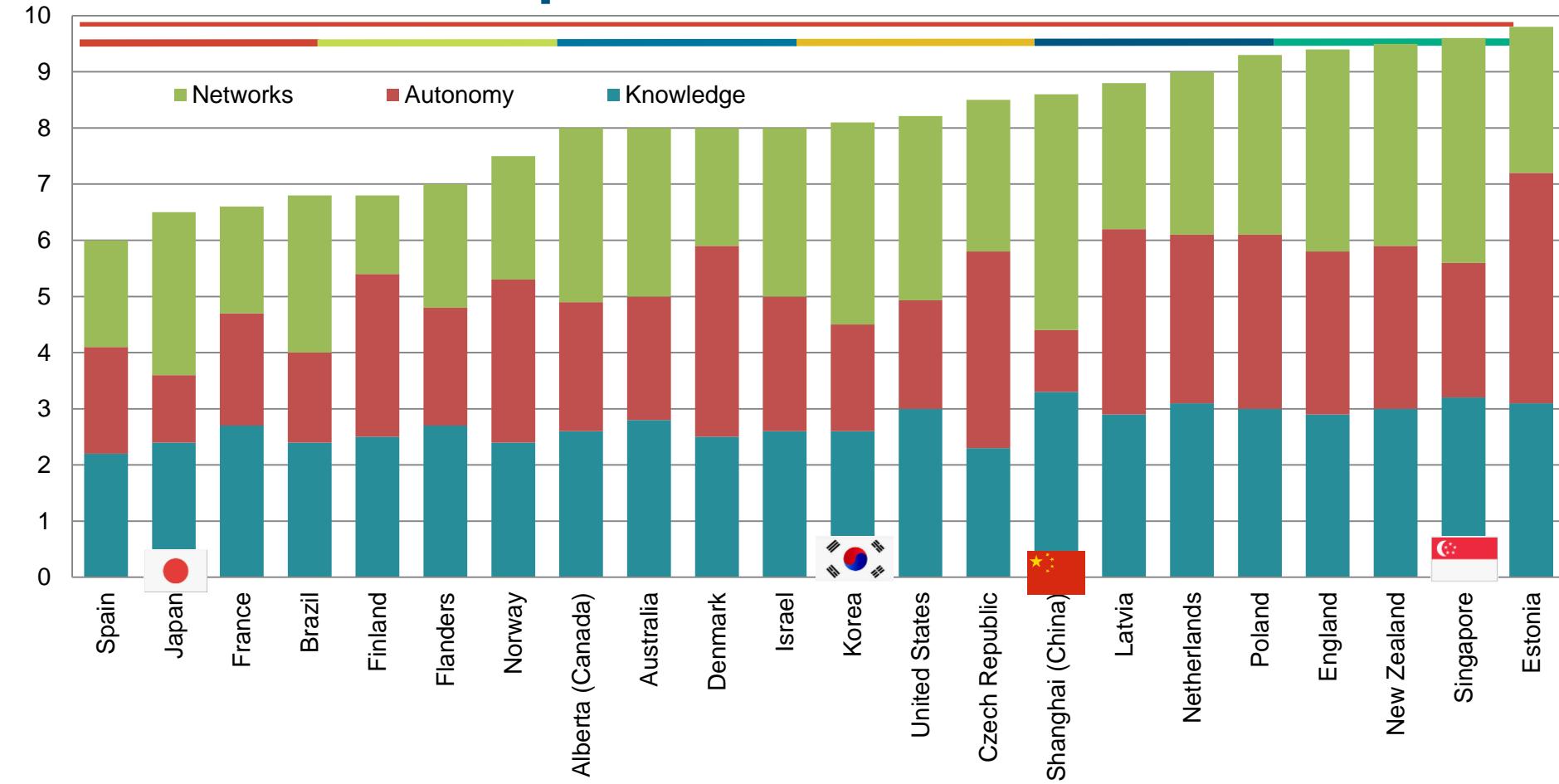
Autonomy: Teachers' decision-making power over their work  
(teaching content, course offerings, discipline practices)

Peer networks: Opportunities for exchange and support needed to maintain high standards of teaching (participation in induction, mentoring, networks, feedback from direct observations)

**Teacher professionalism**

Knowledge base for teaching  
(initial education and incentives for professional development)

# TALIS Teacher professionalisation index



# OECD learning compass for curriculum design

## Competencies:

Knowledge  
Skills  
Attitude  
Value

## Apply competencies for:

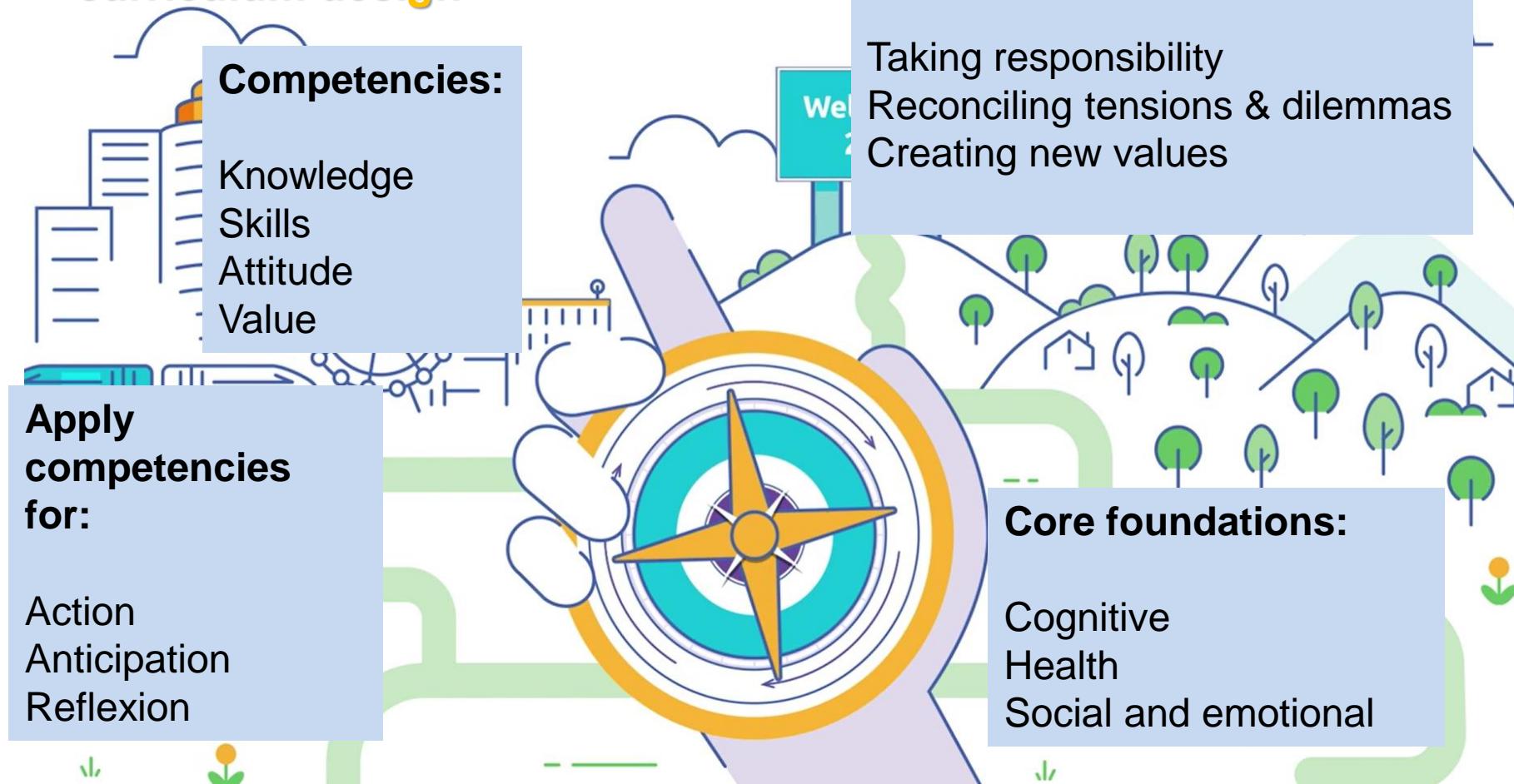
Action  
Anticipation  
Reflexion

## Transformative competencies:

Taking responsibility  
Reconciling tensions & dilemmas  
Creating new values

## Core foundations:

Cognitive  
Health  
Social and emotional



# THE FUTURE OF EDUCATION AND SKILLS

*Education 2030*



Thank you!

Please visit our website:

<http://www.oecd.org/education/2030-project/>

<https://www.oecd.org/pisa/pisa-2018-global-competence.htm>

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