EDUCATION & SKILLS

Driving change in education

ICP Emerging Leaders Forum

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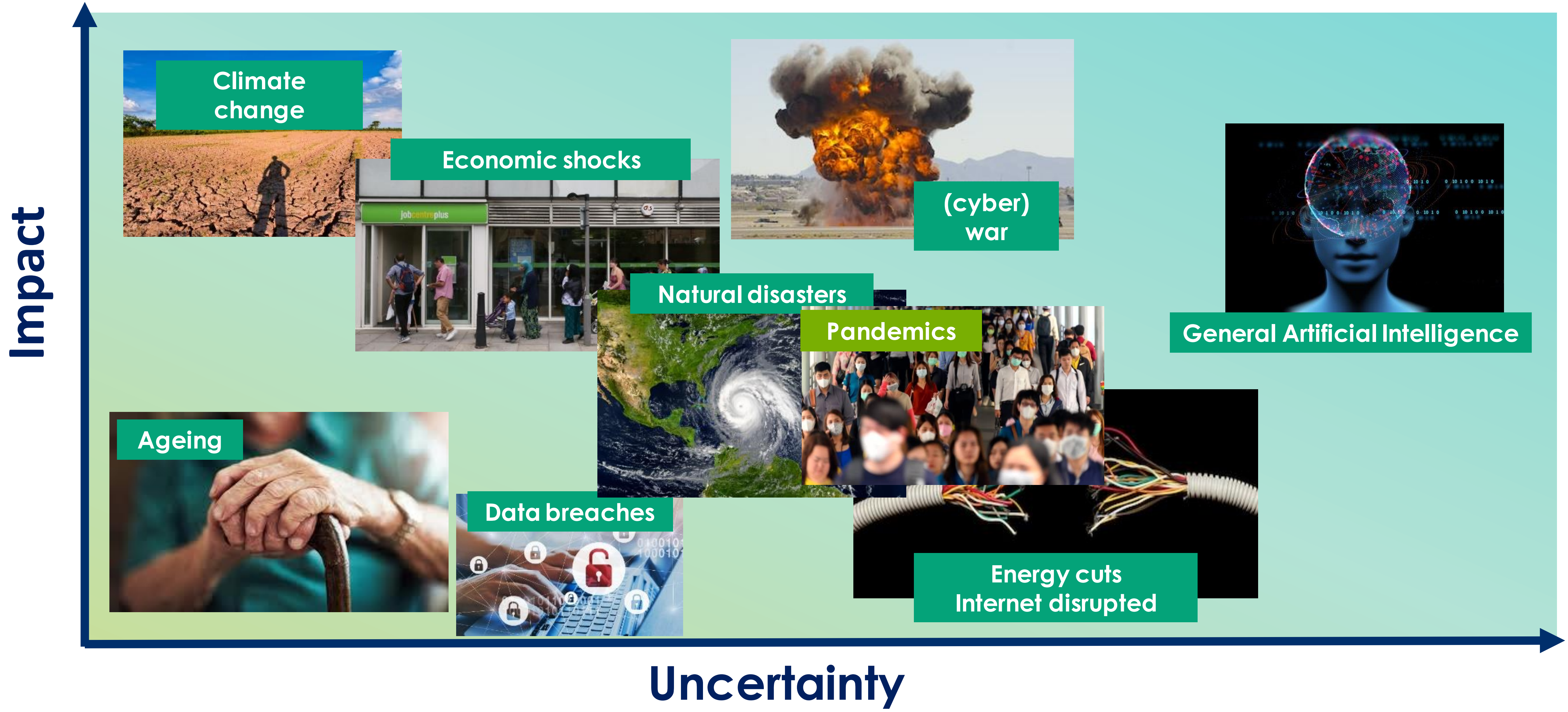
OECD Directorate for Education and Skills

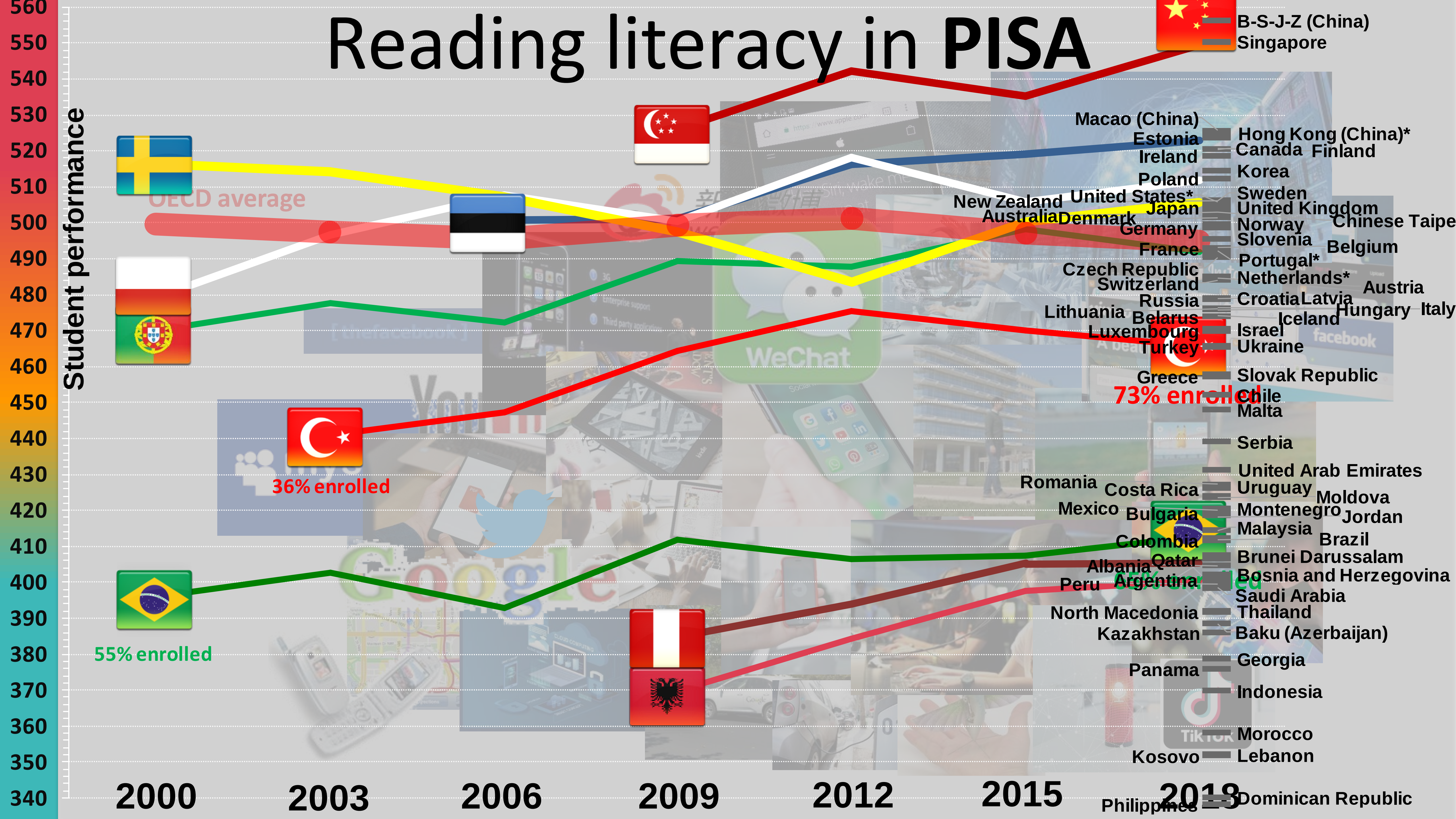
Rovaniemi, 20 September 2023

OECD
BETTER POLICIES FOR BETTER LIVES

Leading in an uncertain and complex world

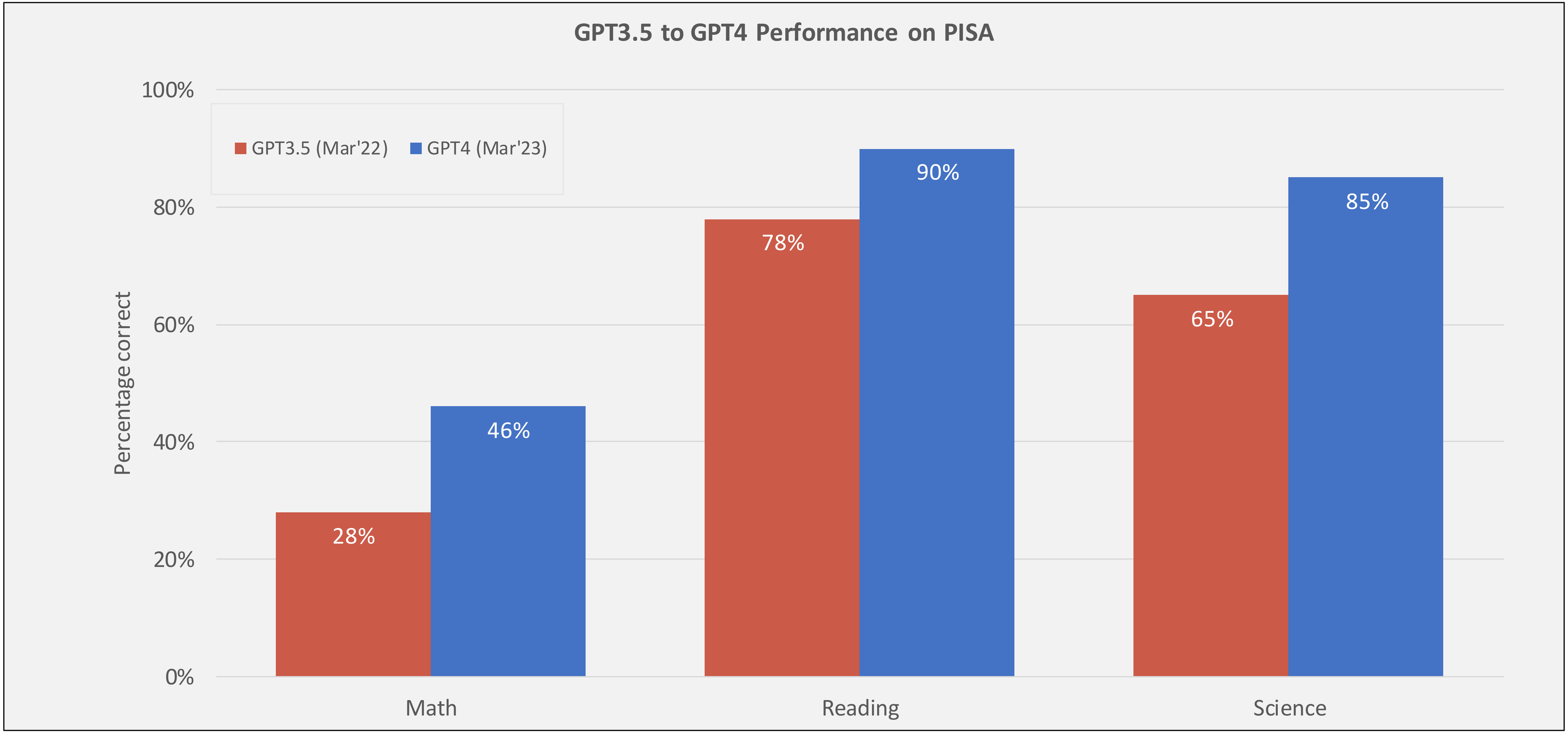
The future will always surprise us





Reading literacy in **PISA**
Student performance
560
550
540
530
520
510
500
490
480
470
460
450
440
430
420
410
400
390
380
370
360
350
340
2000
2003
2006
2009
2012
2015
2018
OECD average
36% enrolled
55% enrolled
73% enrolled
B-S-J-Z (China)
Singapore
Macao (China)
Hong Kong (China)*
Estonia
Canada
Finland
Ireland
Korea
Poland
Sweden
New Zealand
United States*
United Kingdom
Japan
Australia
Denmark
Norway
Chinese Taipei
Germany
Slovenia
Belgium
France
Portugal*
Czech Republic
Netherlands*
Switzerland
Austria
Russia
Croatia
Latvia
Lithuania
Belarus
Hungary
Italy
Iceland
Luxembourg
Israel
Turkey
Ukraine
Greece
Slovak Republic
Chile
Malta
Serbia
United Arab Emirates
Romania
Costa Rica
Uruguay
Moldova
Mexico
Bulgaria
Montenegro
Jordan
Malaysia
Brazil
Colombia
Brunei Darussalam
Albania
Qatar
Bosnia and Herzegovina
Peru
Argentina
Saudi Arabia
North Macedonia
Thailand
Kazakhstan
Baku (Azerbaijan)
Georgia
Panama
Indonesia
Morocco
Kosovo
Lebanon
Philippines
Dominican Republic

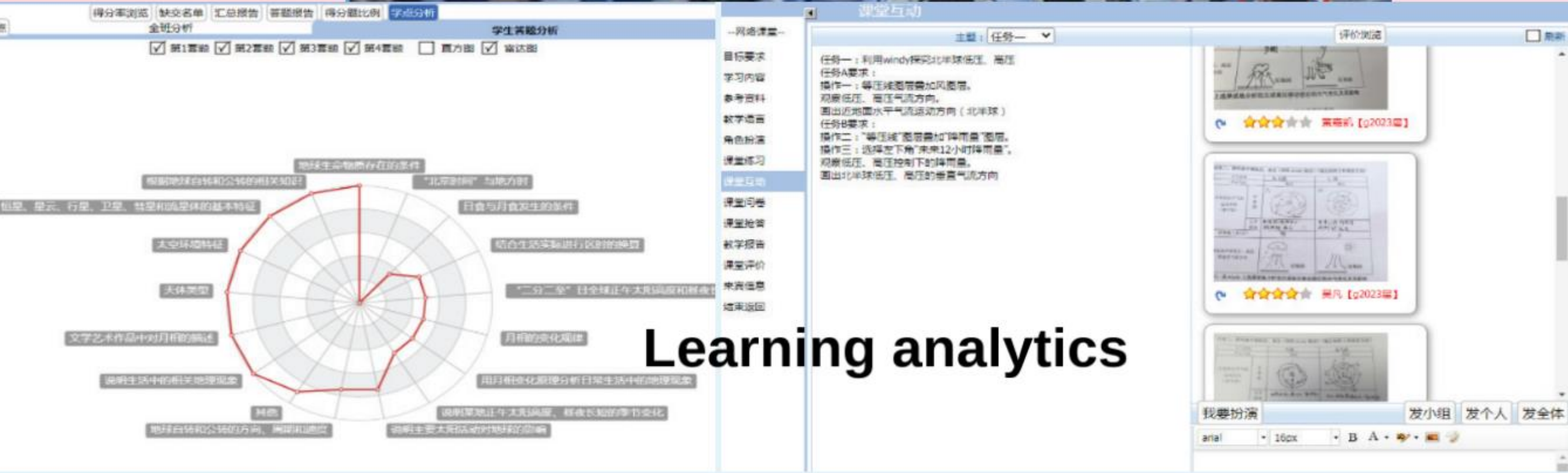
GPT Performance on PISA test: March 2022 to March 2023



Schools are just waking up to the digital world that is radically transforming learning

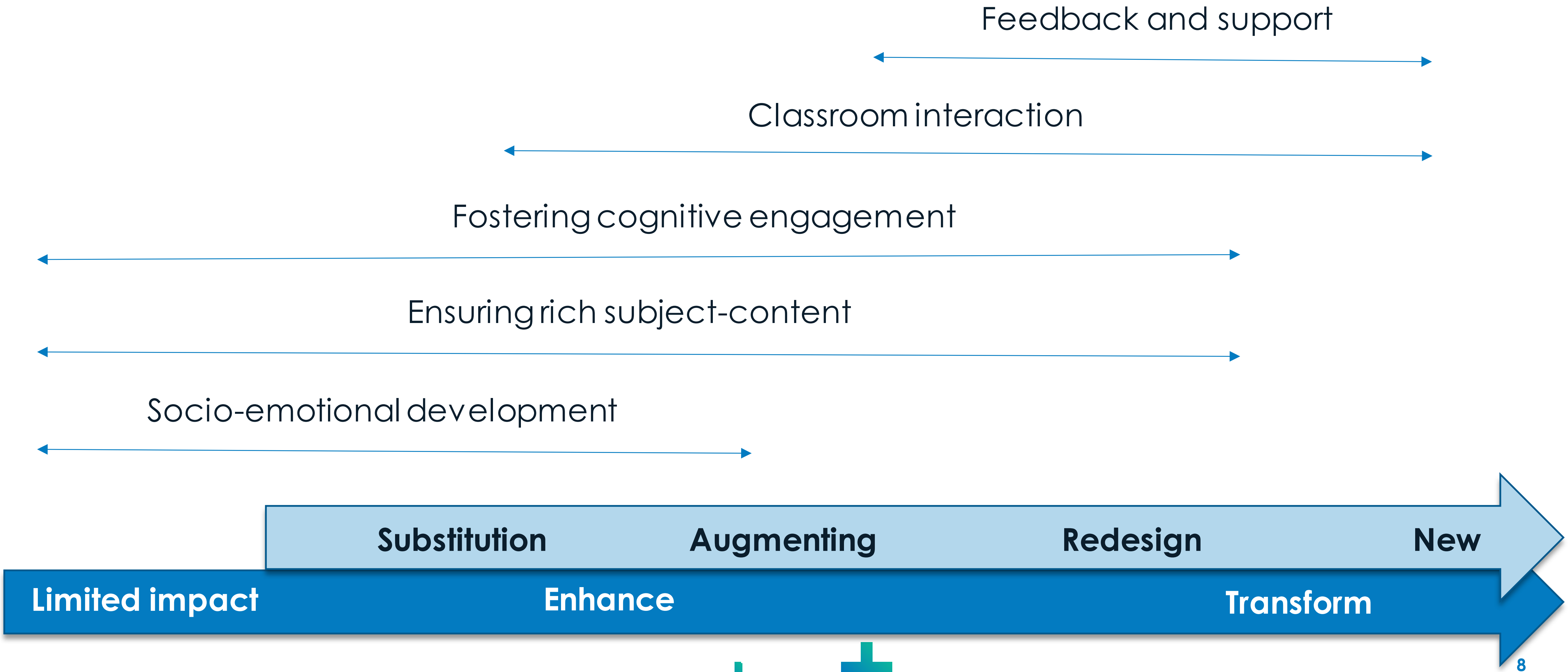
Big Leaps in Assessments and Exams

VS.

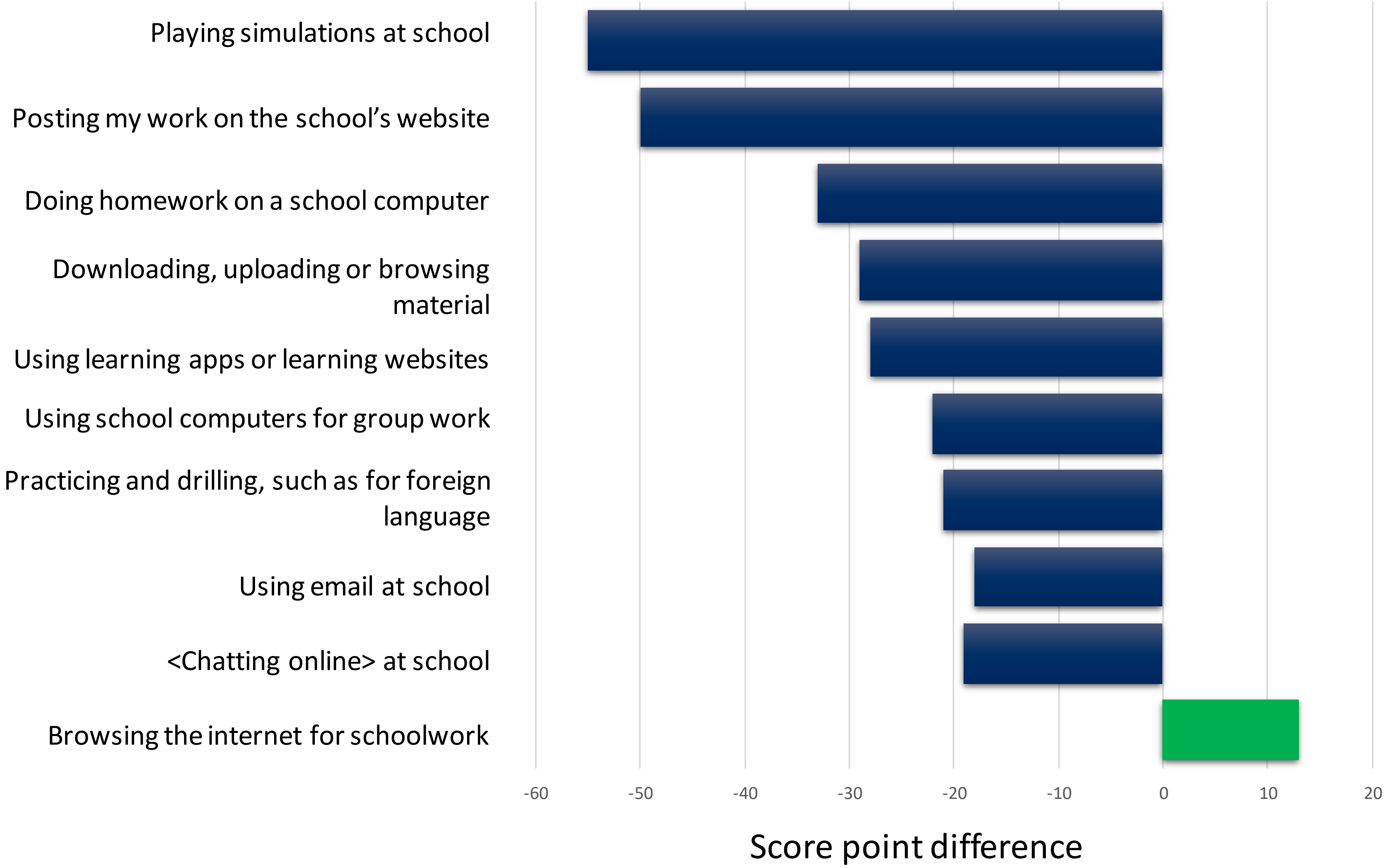


Learning analytics

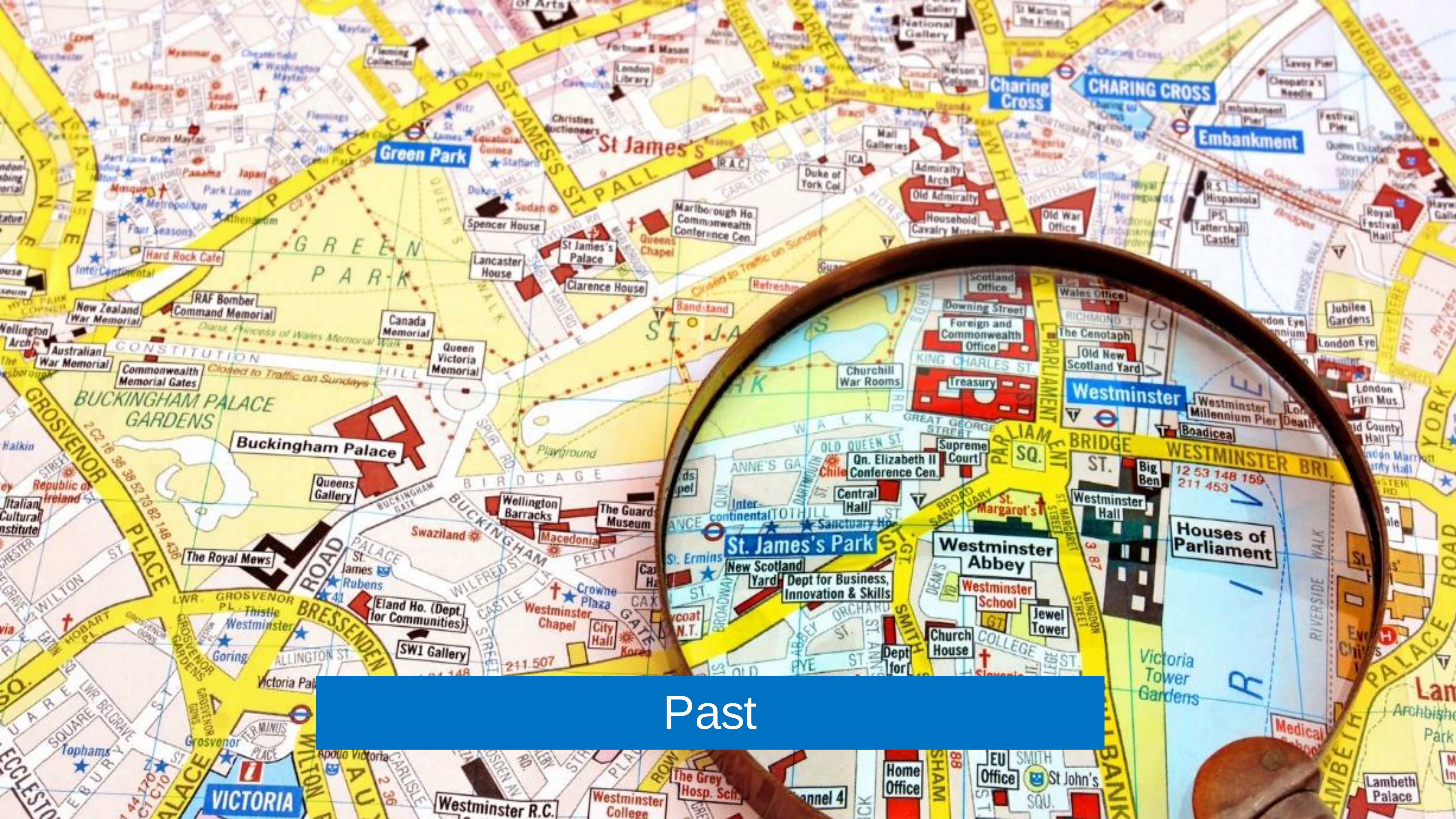
The potential implications of GenAI in the classroom



School activities done on digital devices tend to be negatively associated with learning outcomes (PISA reading, OECD)

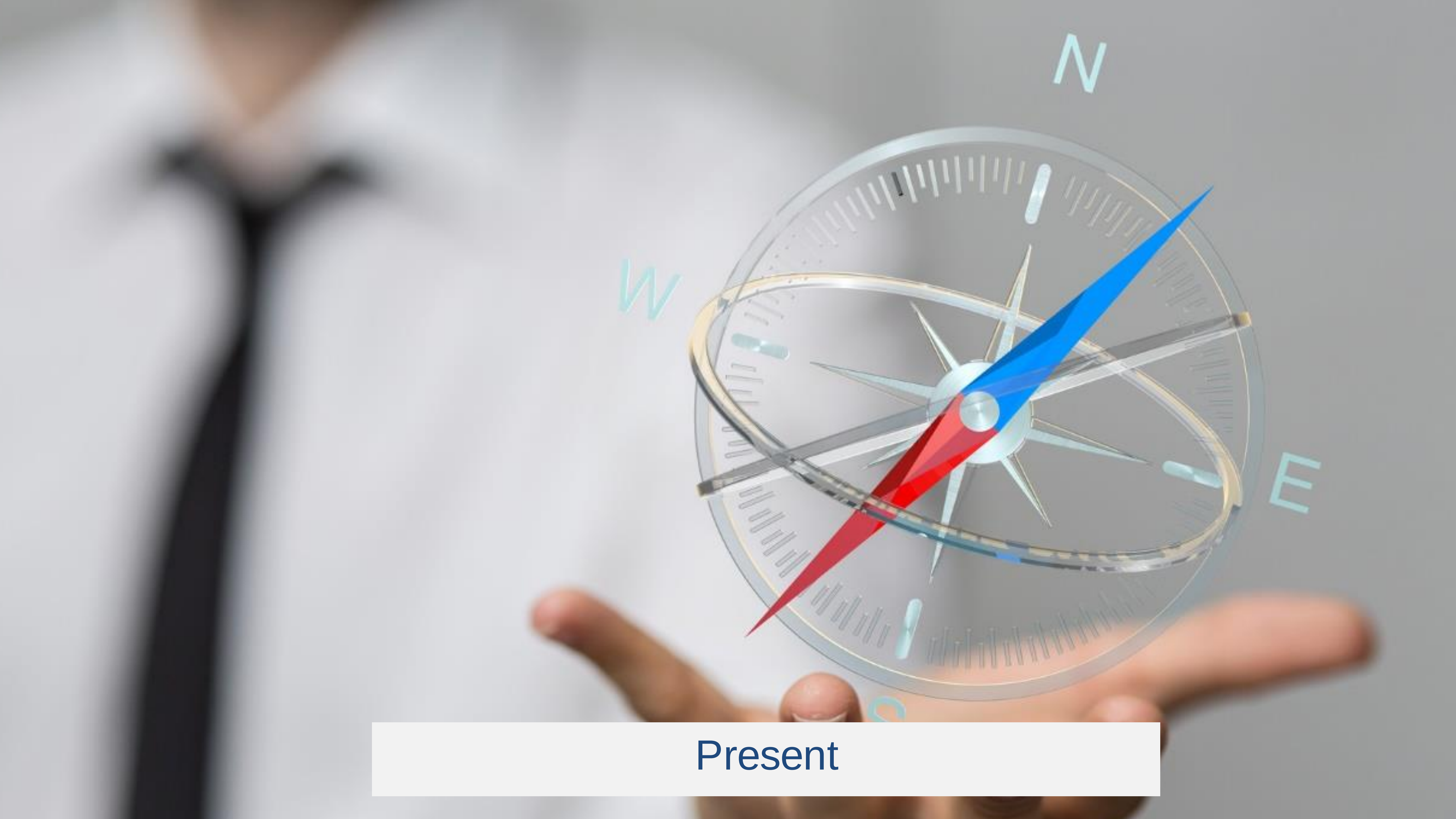


Past



Green Park
Charing Cross
CHARING CROSS
Embankment
St James's
GREEN PARK
BUCKINGHAM PALACE GARDENS
Buckingham Palace
Westminster
St. James's Park
Westminster Abbey
Houses of Parliament
Big Ben
Westminster Hall
VICTORIA
National Gallery
Spencer House
Clarence House
St James's Palace
Lancaster House
Queen Victoria Memorial
Canada Memorial
Hard Rock Cafe
The Royal Mews
Queens Gallery
Wellington Barracks
The Guards Museum
Treasury
Churchill War Rooms
Downing Street
Foreign and Commonwealth Office
Scotland Office
Wales Office
The Cenotaph
Old Admiralty
Admiralty Arch
Horse Guards
Central Hall
Qn. Elizabeth II Conference Cen.
Supreme Court
New Scotland Yard
Dept for Business, Innovation & Skills
Westminster School
Jewel Tower
Church House
Home Office
London Eye
Jubilee Gardens
Victoria Tower Gardens
Lambeth Palace
WESTMINSTER BRI.
PICCADILLY
CONSTITUTION HILL
BIRDCAGE WALK
GROSVENOR PLACE
BRESSENDEN
PALL MALL
WHITEHALL
PARLIAMENT SQ.

Present



When fast gets really fast, being slow to adapt makes education really slow

Industrial Systems	World Class Systems
Student inclusion	
Some students learn at high levels (sorting)	All students need to learn at high levels
Curriculum, instruction and assessment	
Routine cognitive skills	Complex ways of thinking, complex ways of doing, collective capacity
Teacher Education	
Standarisation and compliance	High-level professional knowledge workers
Work organisation	
'Tayloristic,' hierarchical	Flat, collegial
Accountability	
Primarily to authorities	Primarily to peers and stakeholders


What would you dare to change?

EDUCATION
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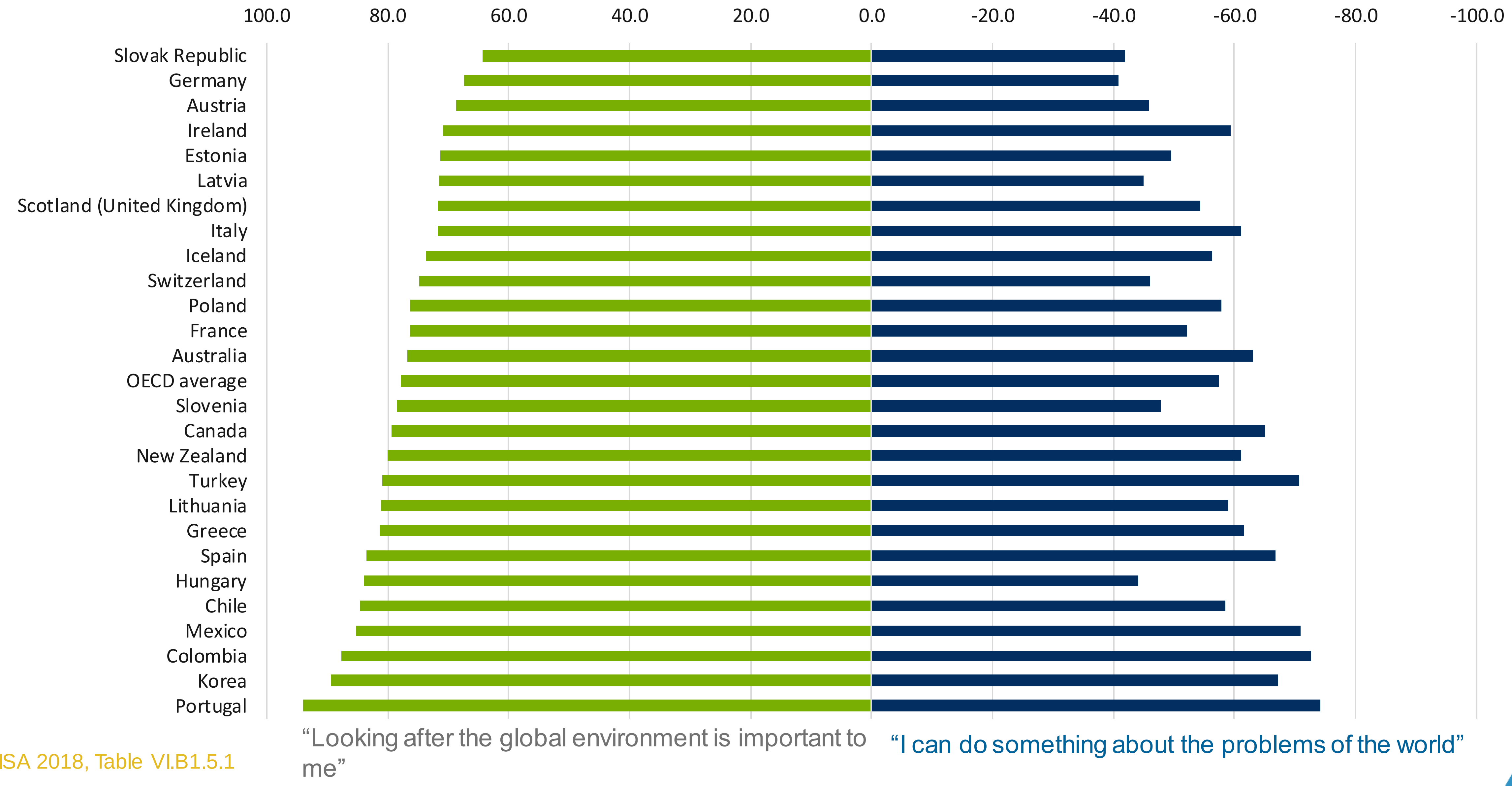
The soft skills of the 20th century are becoming the hard skills of the 21st century *(and vice versa)*

Education as a social enterprise

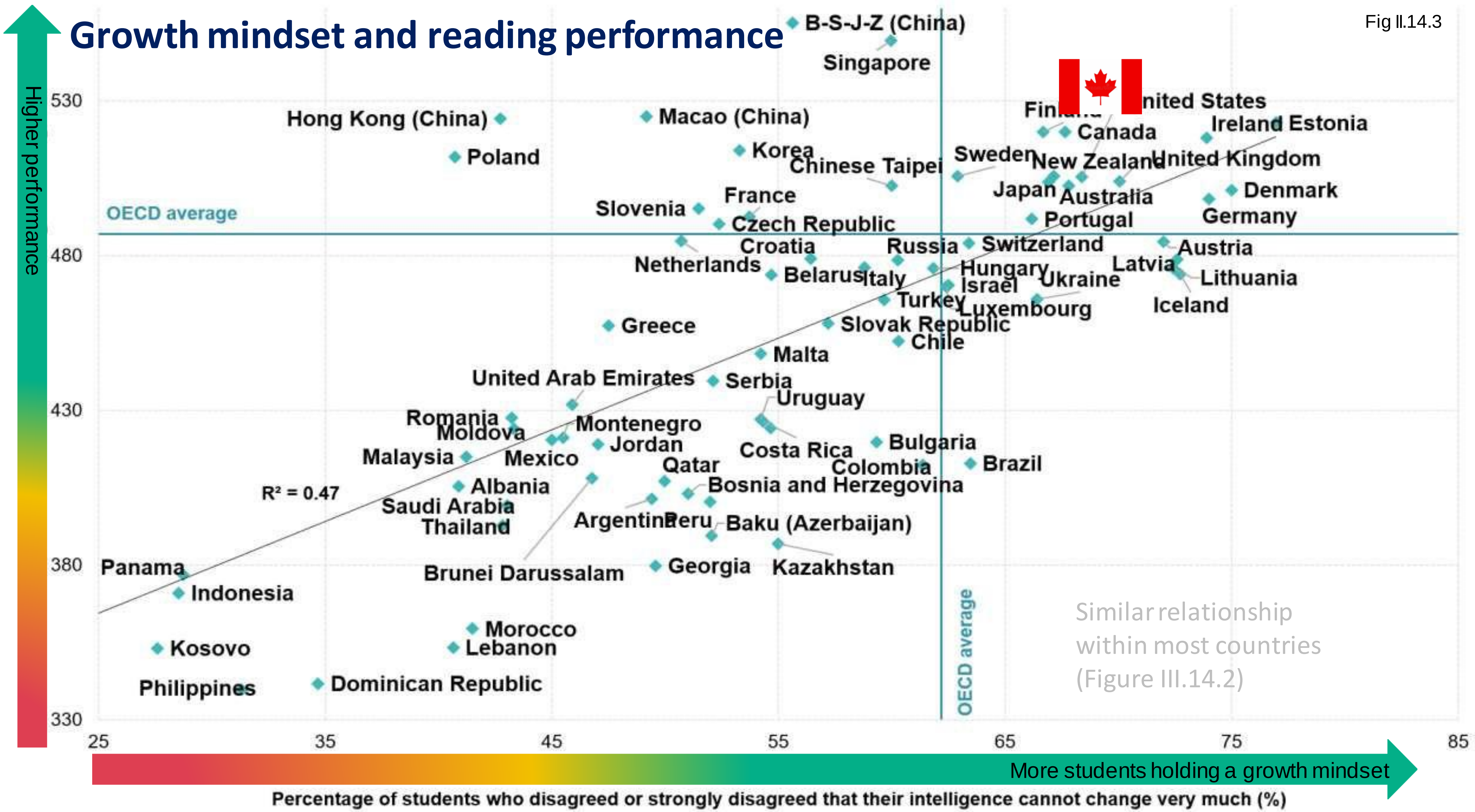
Agency: empowering students to make a difference

Percentage of students who agree or strongly agree



PISA 2018, Table VI.B1.5.1

Growth mindset and reading performance



15-year-olds report lower creativity than 10-year-olds

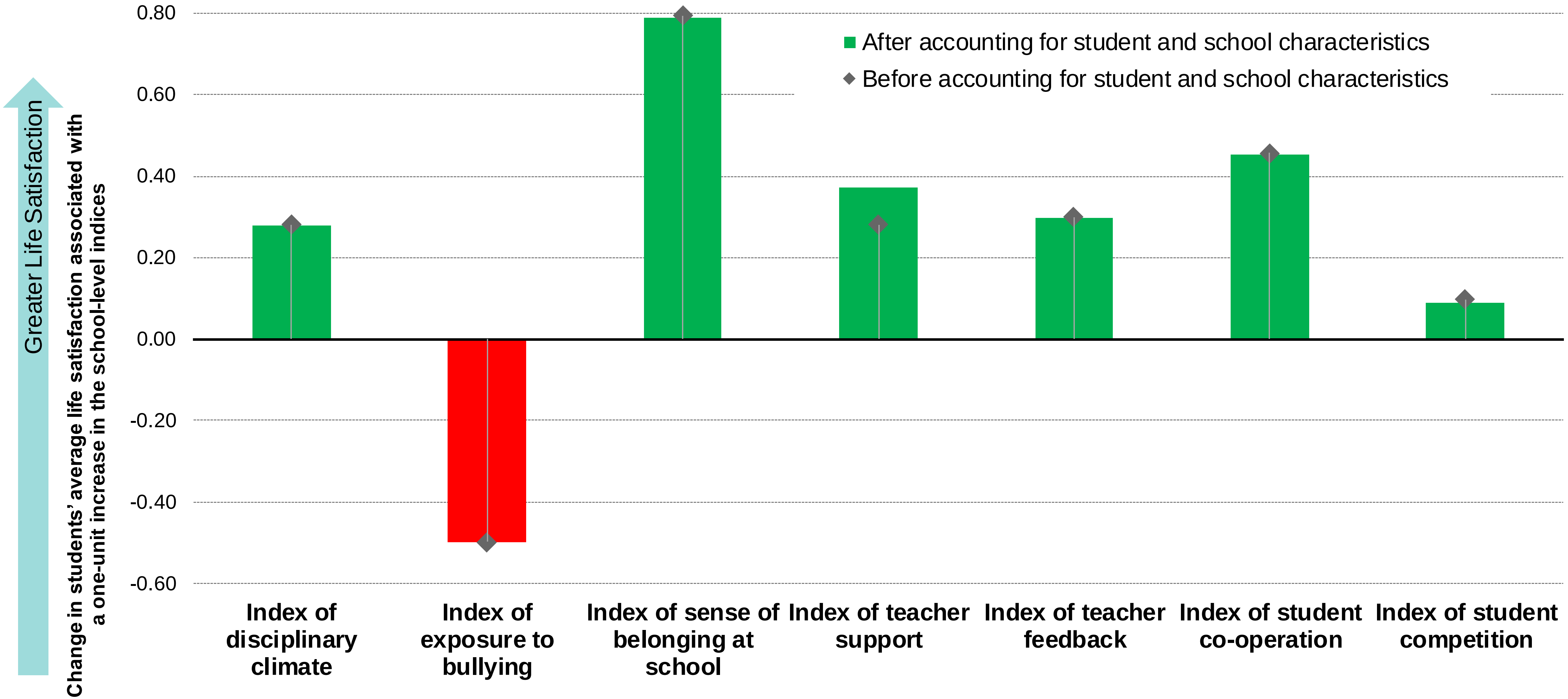
Age gaps in creativity

Figure 4.3

Students' life satisfaction and school climate

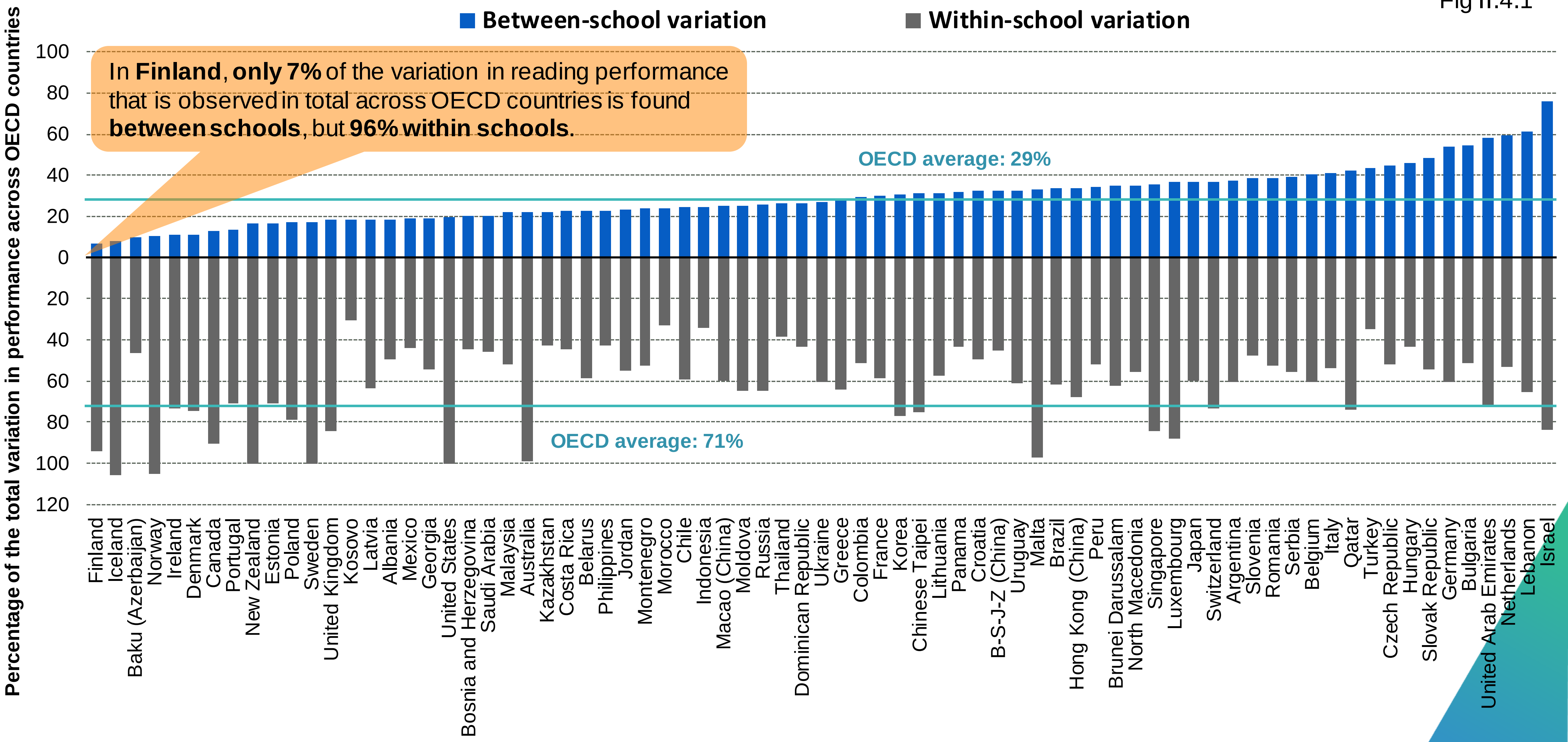
Change in the school-level index associated with a one-point change on the student life-satisfaction scale

Fig III.11.7



Every school can be a great school

Fig II.4.1

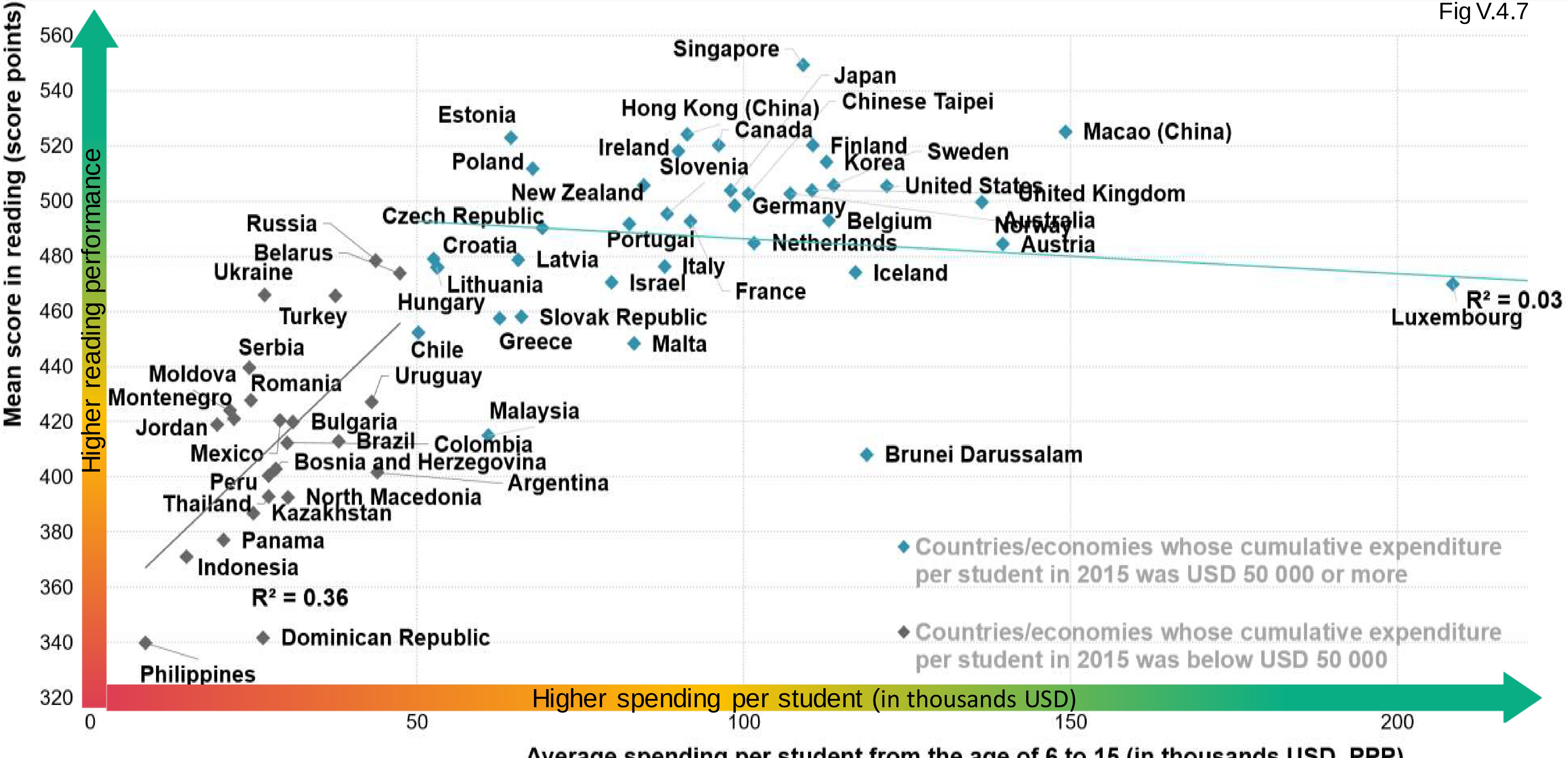


EDUCATION
& SKILLS

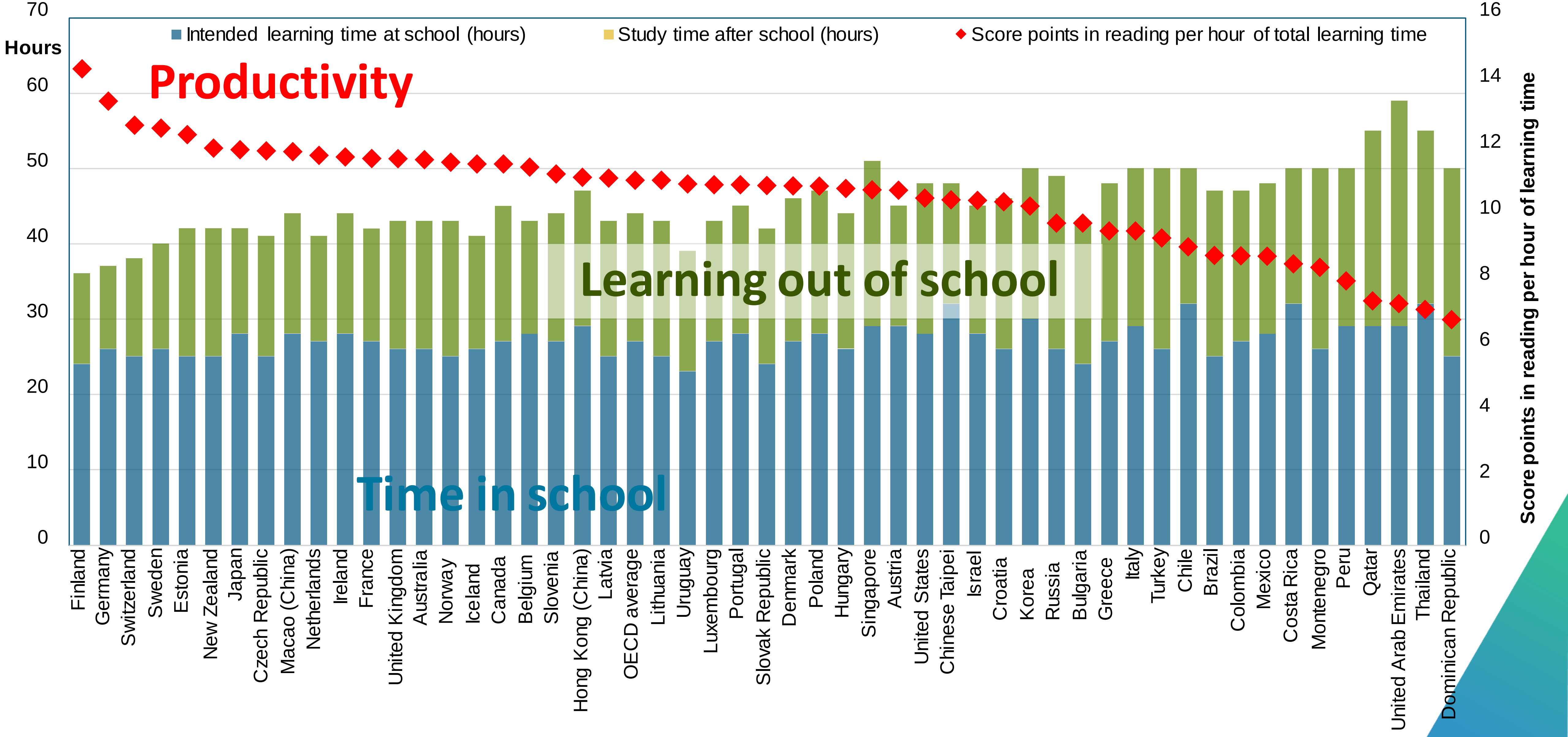
Focusing on what matters most

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

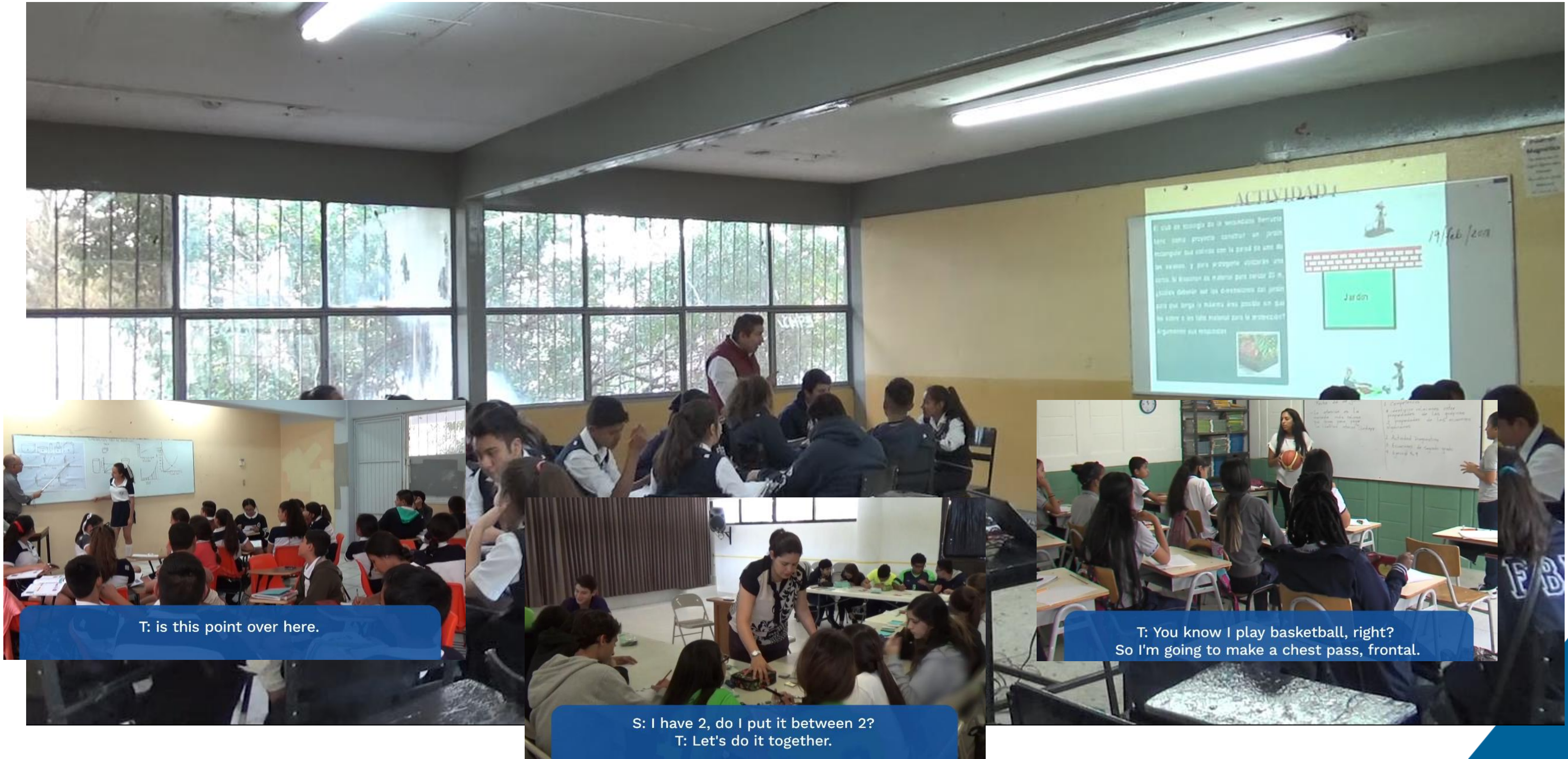
Fig V.4.7



Learning time ≠ learning outcomes



We don’t know enough about effective pedagogy



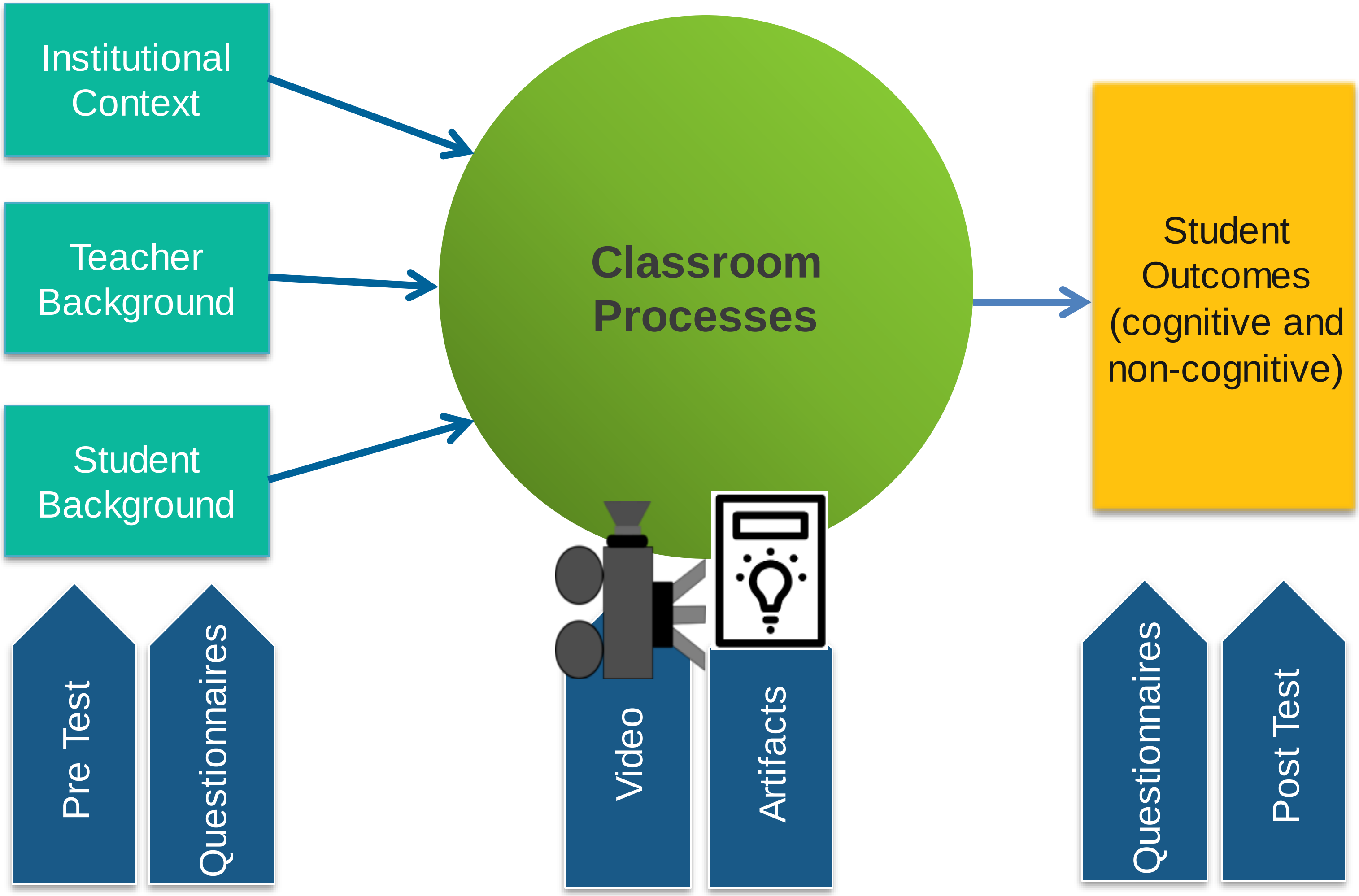
Global Teaching InSights: A Video Study of Teaching

700 teachers
17 500 students

Across eight countries/economies: B-M-V (Chile), Colombia, England (UK), Germany*, K-S-T (Japan), Madrid (Spain), Mexico, Shanghai (China)

A collaborative effort between participating countries, the OECD Secretariat and an International Consortium (RAND, ETS, DIPF)

Global Teaching InSights: A Video Study of Teaching



Measuring teaching through observation and teaching materials

Example of rating for observation

Component: Eliciting student thinking

Questions, prompts, and tasks elicit detailed student responses (written or oral).

1	2	3	4
There is **no student thinking** present.	There is a **small amount** of student thinking present. Questions, prompts, and tasks result in **perfunctory student contributions** that only concern answers, procedures, or the steps necessary for solving a problem.	There is a **moderate amount** of student thinking elicited. Questions, prompts, and tasks result in **detailed student contributions** concerning answers, procedures, and the steps necessary for solving a problem.	There is a **lot of student** thinking present. Questions, prompts, and tasks result in a mixture of student contributions concerning answers, procedures, the steps necessary for solving a problem, ideas, and concepts. Contributions may be detailed or perfunctory.

Example of rating for teaching materials

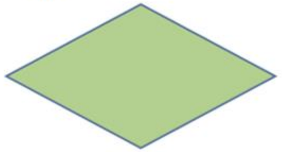
Asking for explanations measures the extent to which students are asked to explain or justify their thinking about mathematical procedures and concepts

Solve the following by factoring:

a) $3x^2 - 18x = 81$ b) $3x^2 + 6 = x(x + 13)$

Rated **low** because students are only asked to apply a standard routine; they are not asked how or why the method works, or why it is appropriate.

4. Calculate the lengths of the diagonals of a field rhombus shaped, knowing that they differ in 6 m and the area of the field is 108 m².



a) If you assign the *x* variable to one of the diagonals, how do you represent the measurement of the other diagonal? How do you represent the area of the field?
b) Which quadratic equation solves the problem? Which method is convenient to use for solving? Why?

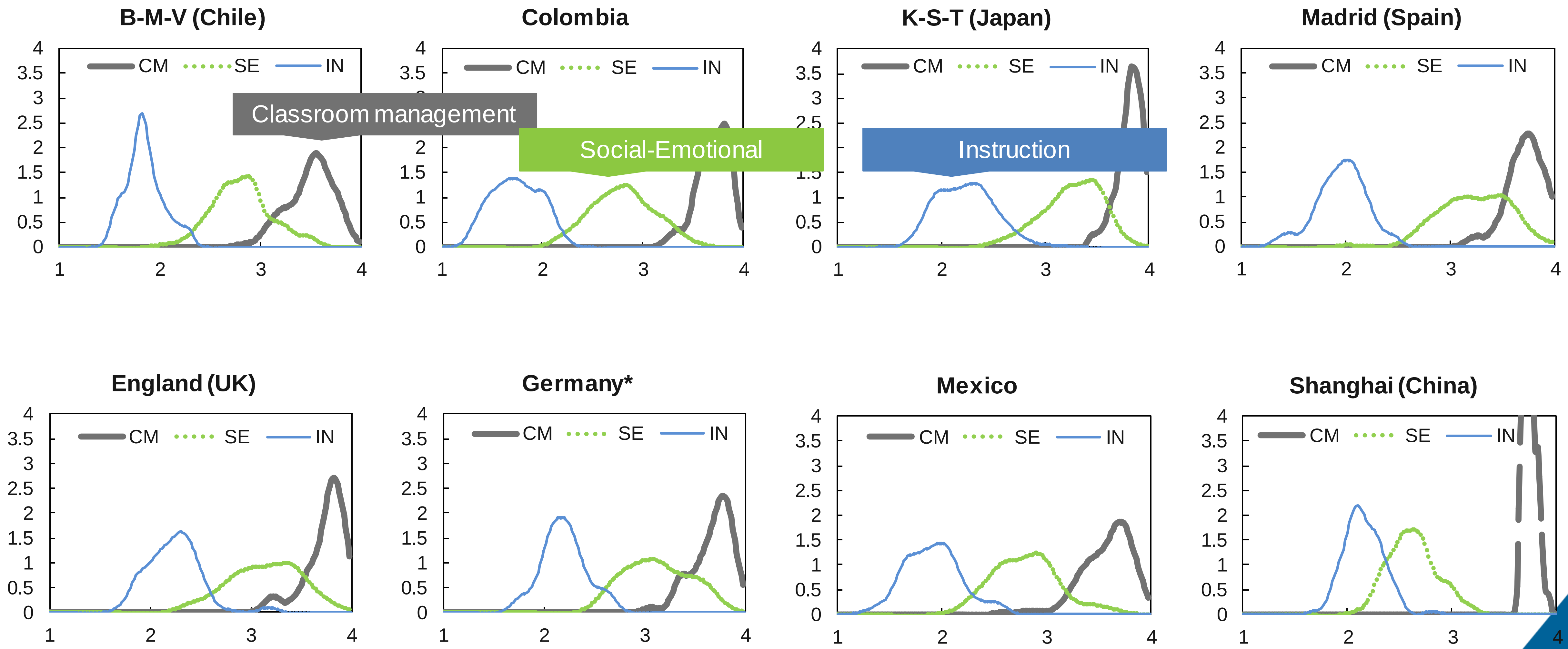
Rated **high** because students are asked to describe a procedure they used (ie how to represent the area of the field), and to provide the justification for why procedures are effective in a given solution.

Is pedagogy keeping up with the demands of the 21st Century?

Source: OECD, Global Teaching InSights Database, Figure 8.1

The findings from the Global Teaching InSights Video Study

*Distribution of classrooms, by the mean **teaching domain score***

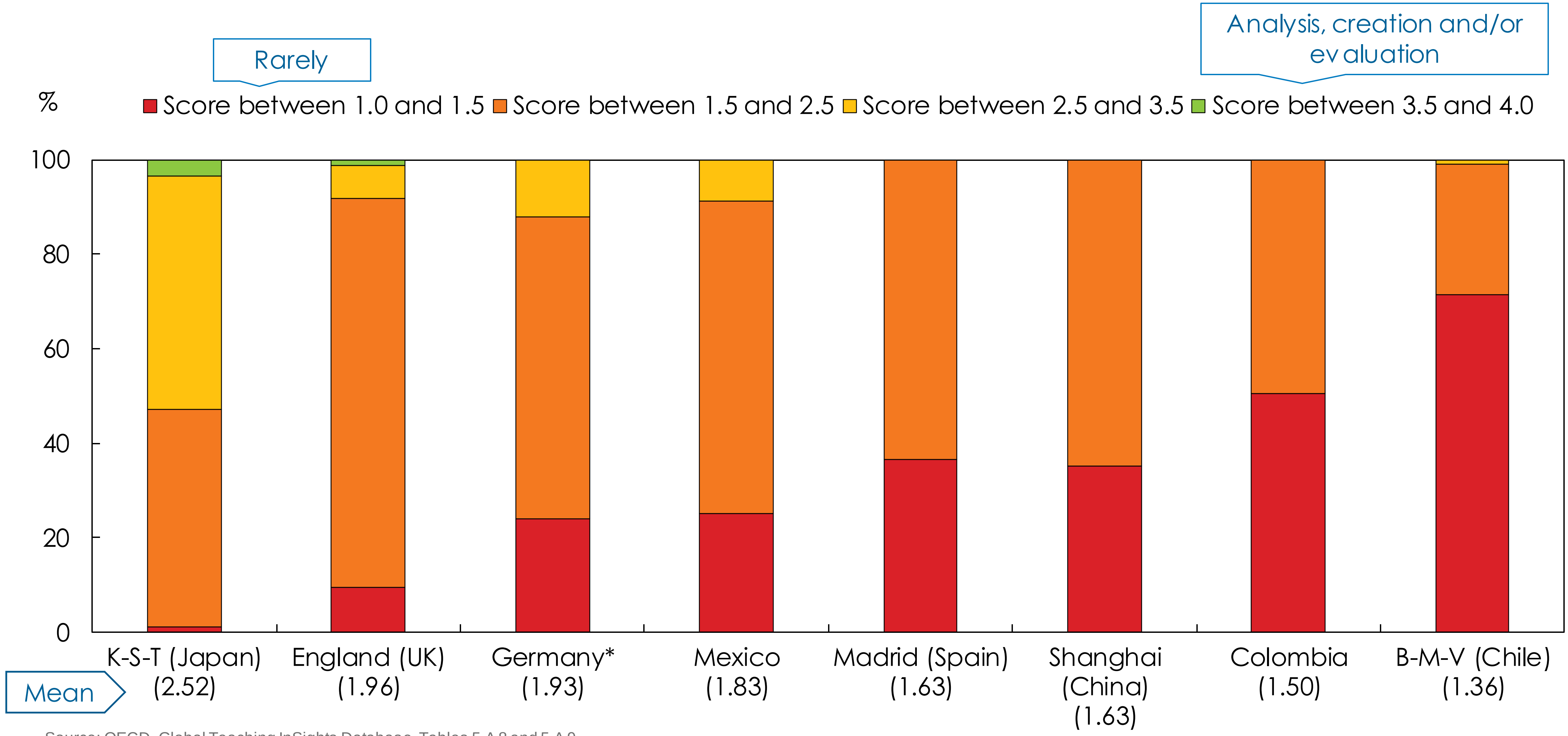


Read the report [here]

Source: OECD, Global Teaching InSights Database, Tables 5.A.15 and 5.A.16

High levels of cognitive engagement remains a challenge

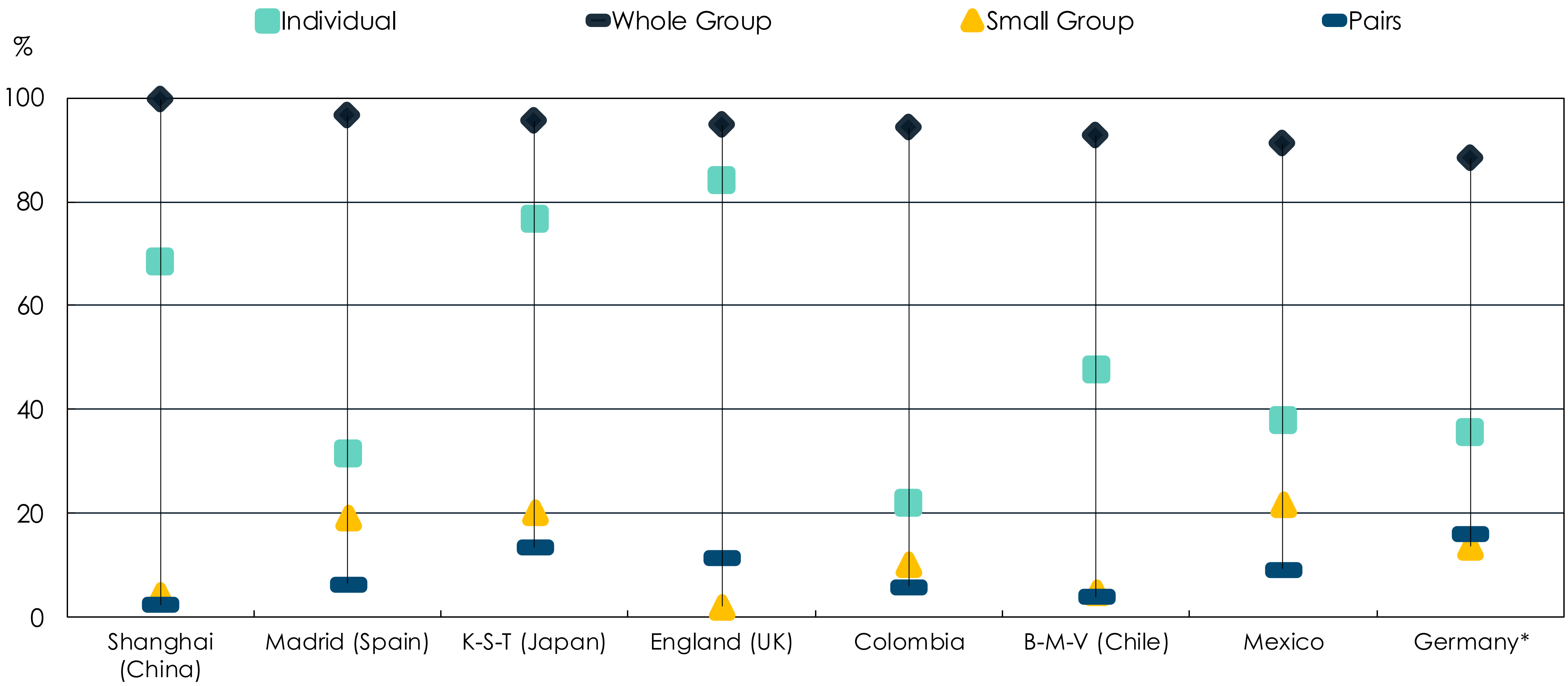
Percentage of classrooms observed by mean cognitive engagement score



Source: OECD, Global Teaching InSights Database, Tables 5.A.8 and 5.A.9

Frontal teaching prevails in nearly all classrooms

Mean proportion of the lesson segments using the following activity structures



Source: OECD, Global Teaching InSights Database, Tables 3.A.6

Empowering teachers with a toolbox and opportunities to reflect on their practice

Intentional practices and approaches that effectively engage and support all learners to develop desired educational outcomes

- *Intentional:* Considered choices by teachers that balances students' needs with pedagogical, content and pedagogical content knowledge.
- *Effectively:* Decisions grounded in evidence and research and monitored by teachers to ensure impact.
- *All learners:* Focuses on equity and inclusion to identify and remove barriers to the presence, participation and achievement of all students.
- *Desired educational outcomes:* knowledge, skills, attitudes and values that students should master.

EDUCATION & SKILLS

Supporting teachers

Novice teachers are more likely to work in more challenging schools

Percentage of novice teachers, by school characteristics (OECD average-31)

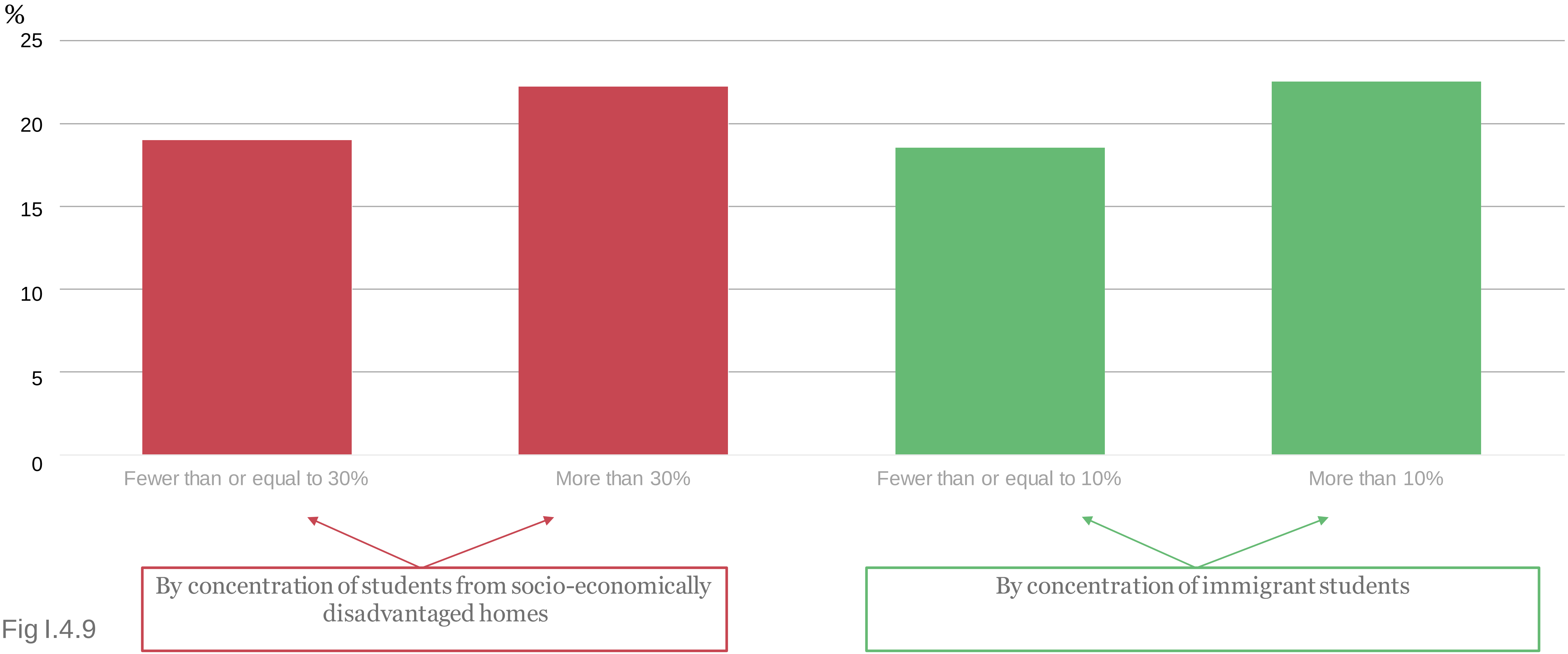


Fig I.4.9

School leaders consider that mentoring opportunities are important…

Percentage of principals reporting that the following outcomes of mentoring are of "high" importance (OECD average-30)

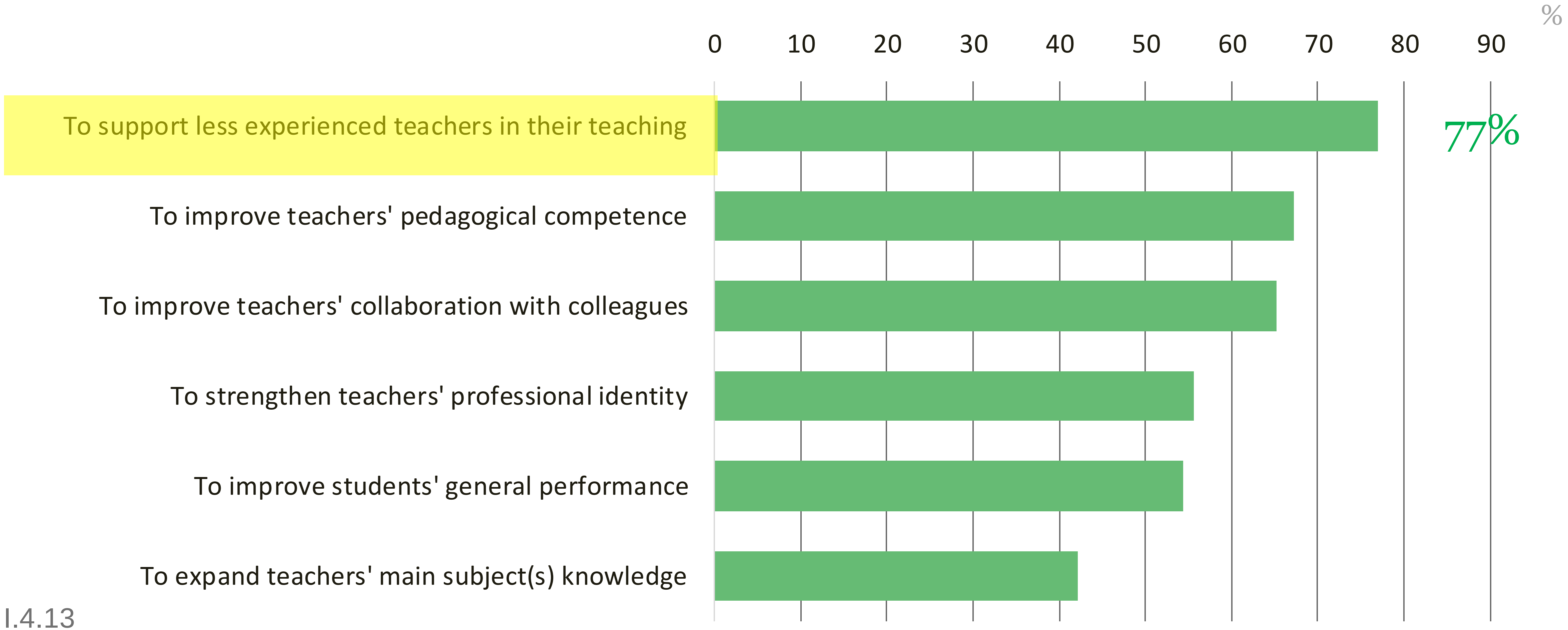


Fig I.4.13

… but few teachers have a mentor

Percentage of teachers who have an assigned mentor as part of a formal arrangement at the school, by teachers' teaching experience

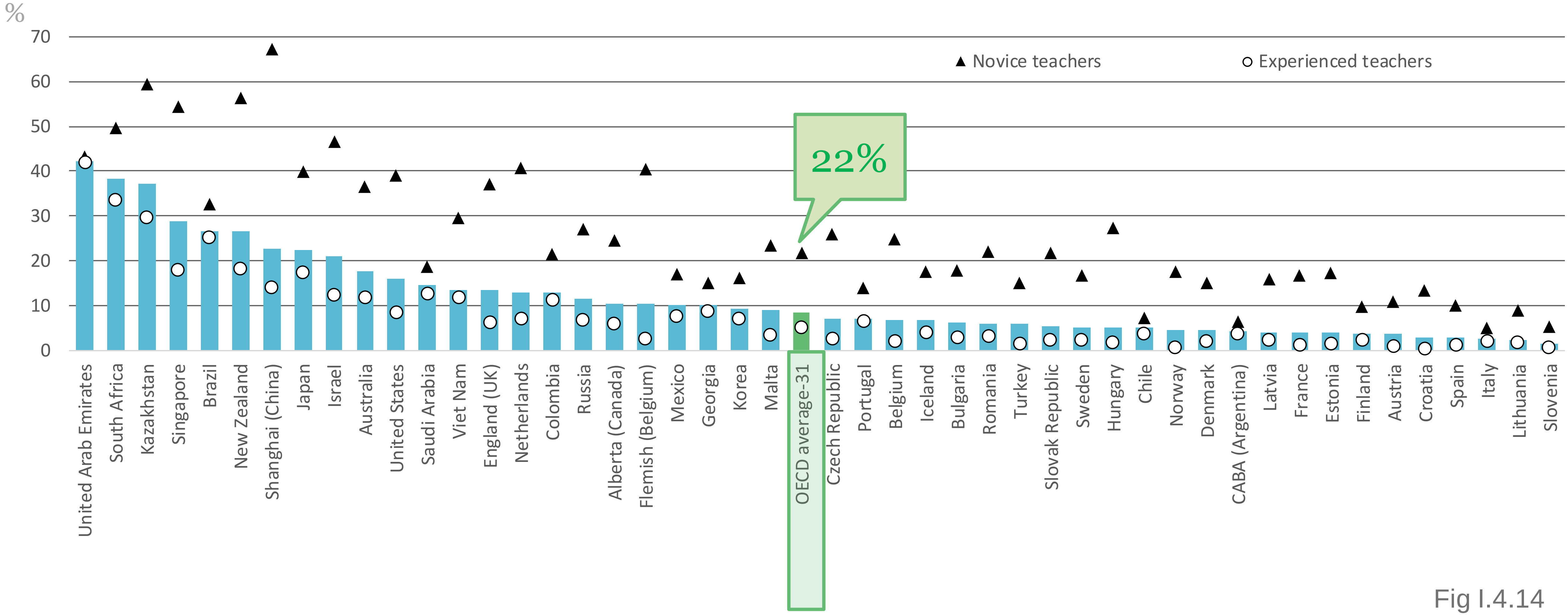


Fig I.4.14

Participation in professional development activities

Percentage of teachers who participated in professional development activities in the 12 months prior to the survey

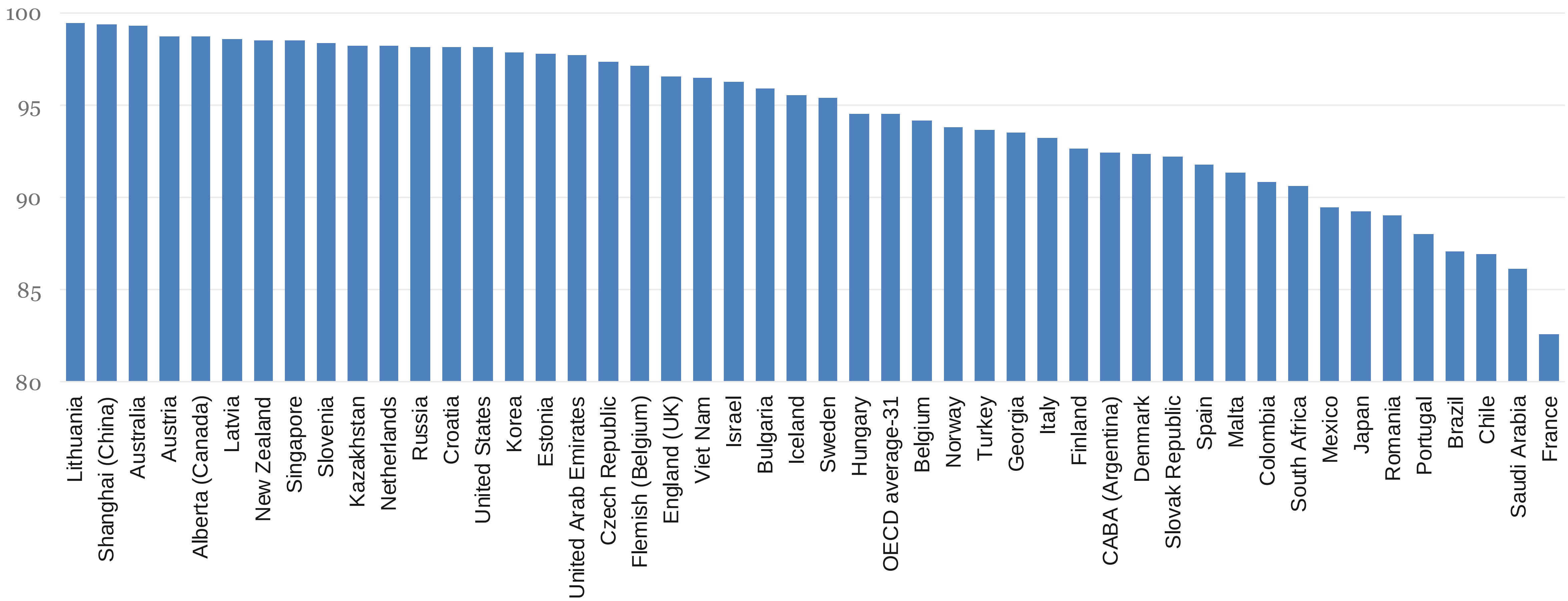
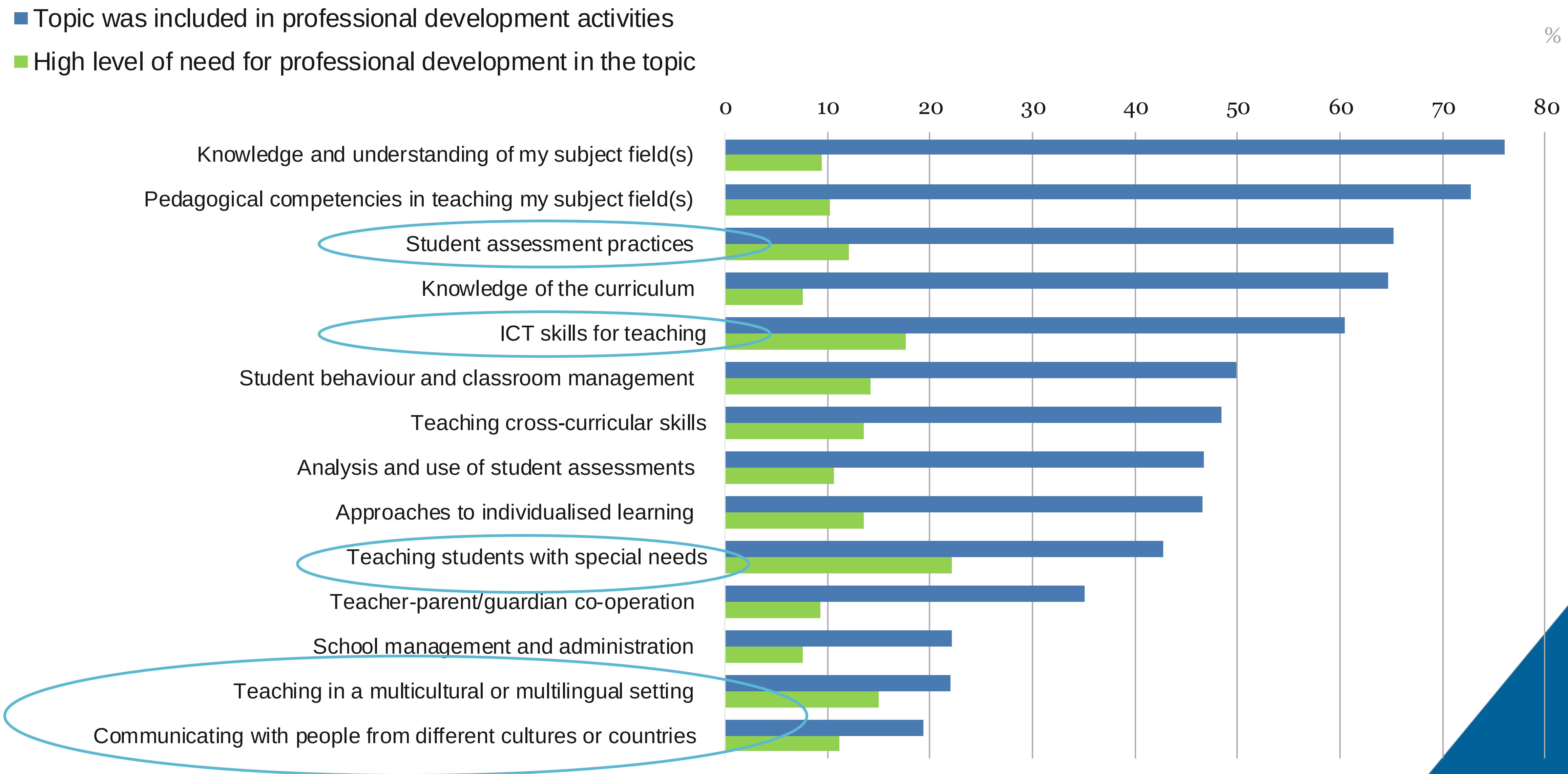


Fig I.5.1

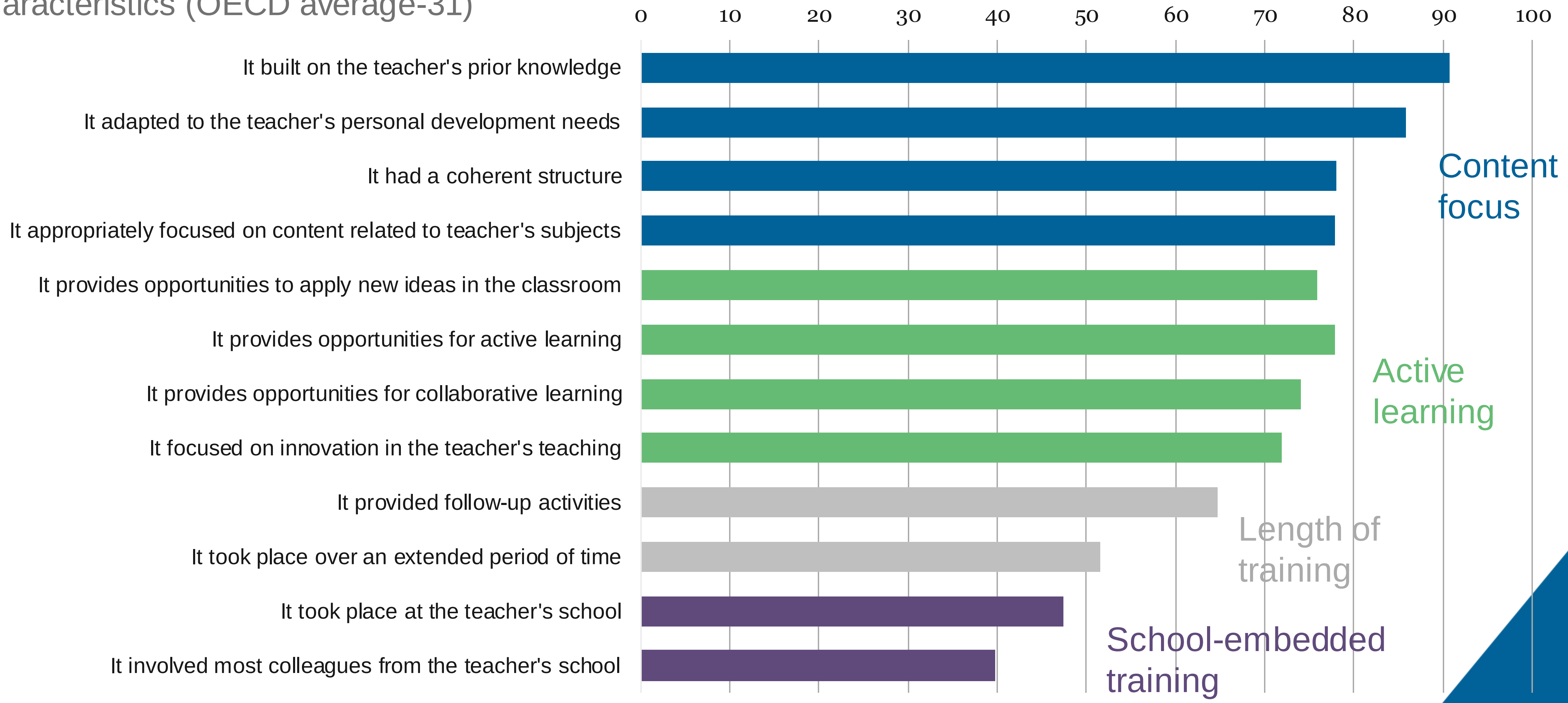
Participation in professional development for teachers and need for it

Percentage of teachers for whom… / who report…



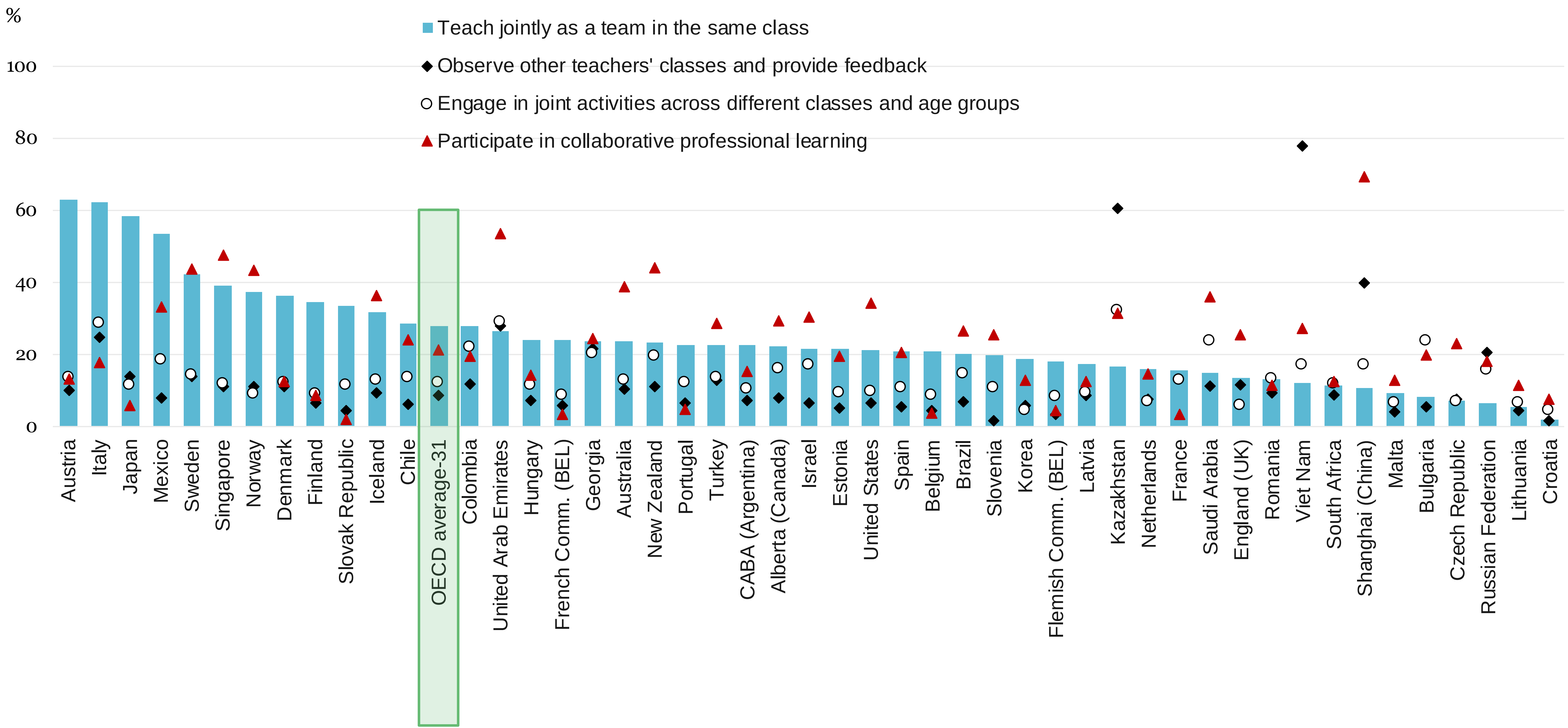
Characteristics of effective professional development, according to teachers

Percentage of teachers for whom the most impactful professional development activities had the following characteristics (OECD average-31)



Prevalence of deeper forms of professional collaboration

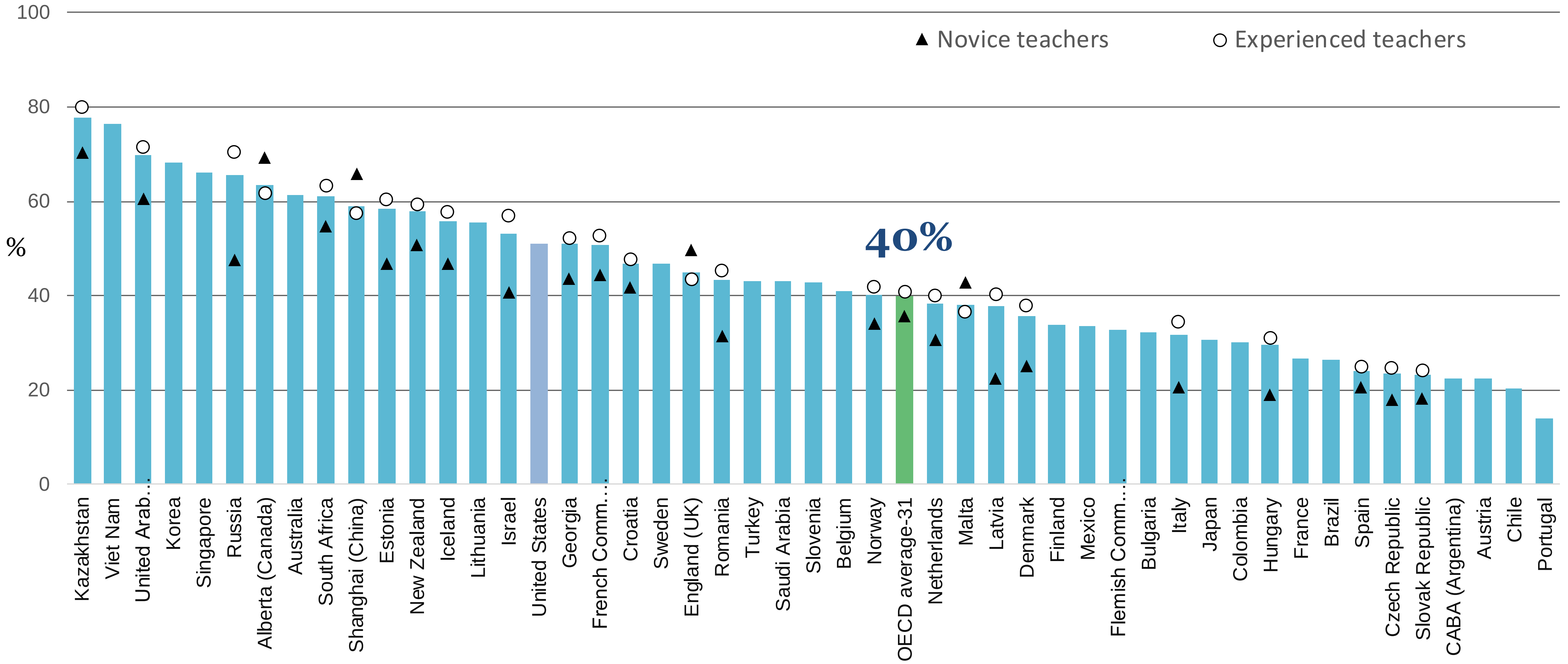
Percentage of lower secondary teachers who report engaging in the following collaborative activities in their school at least once a month



What does the teachers’ room look like in your school?

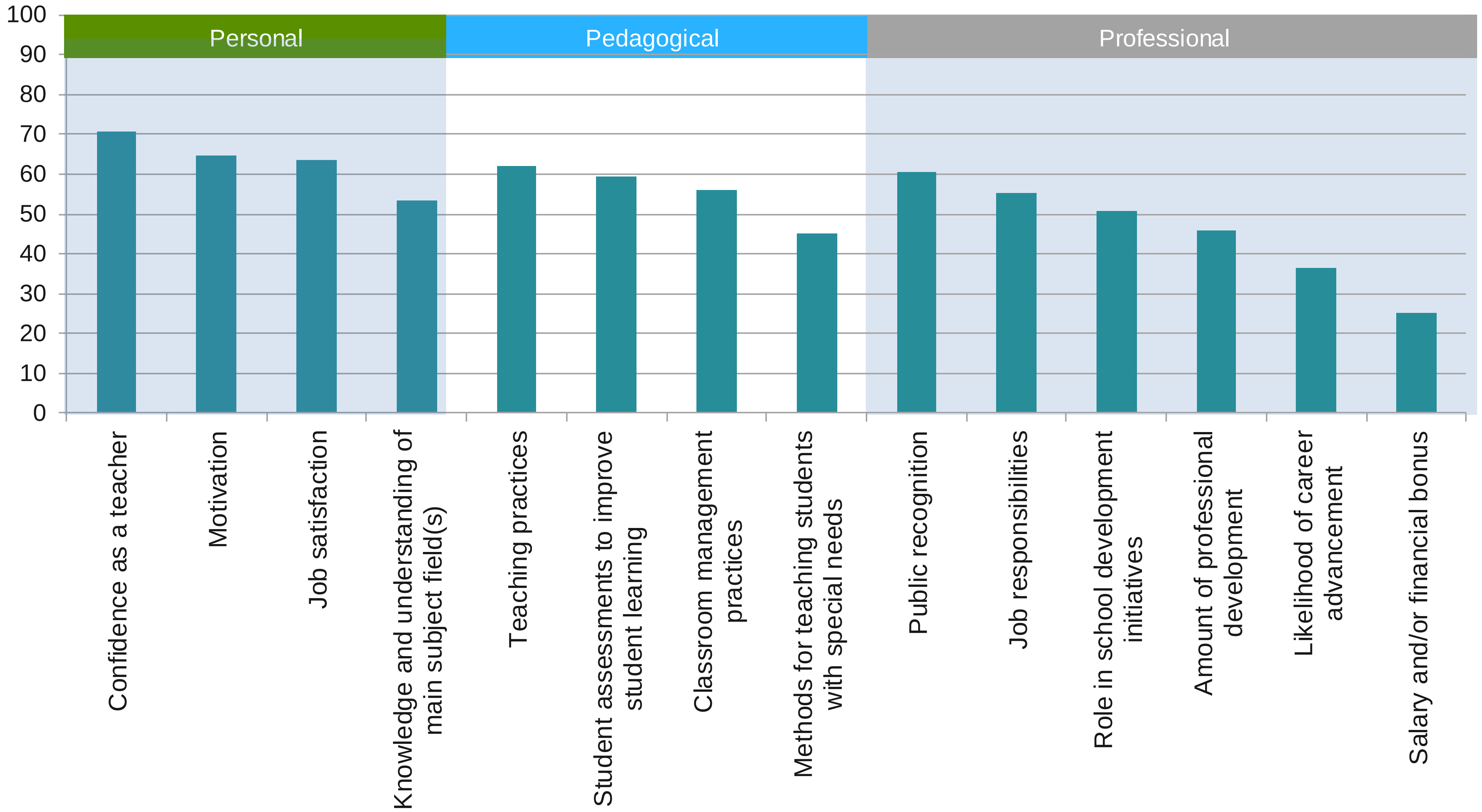
Participation in professional networks

Percentage of lower secondary teachers participating in a network of teachers formed specifically for the professional development of teachers 12 months prior to the survey

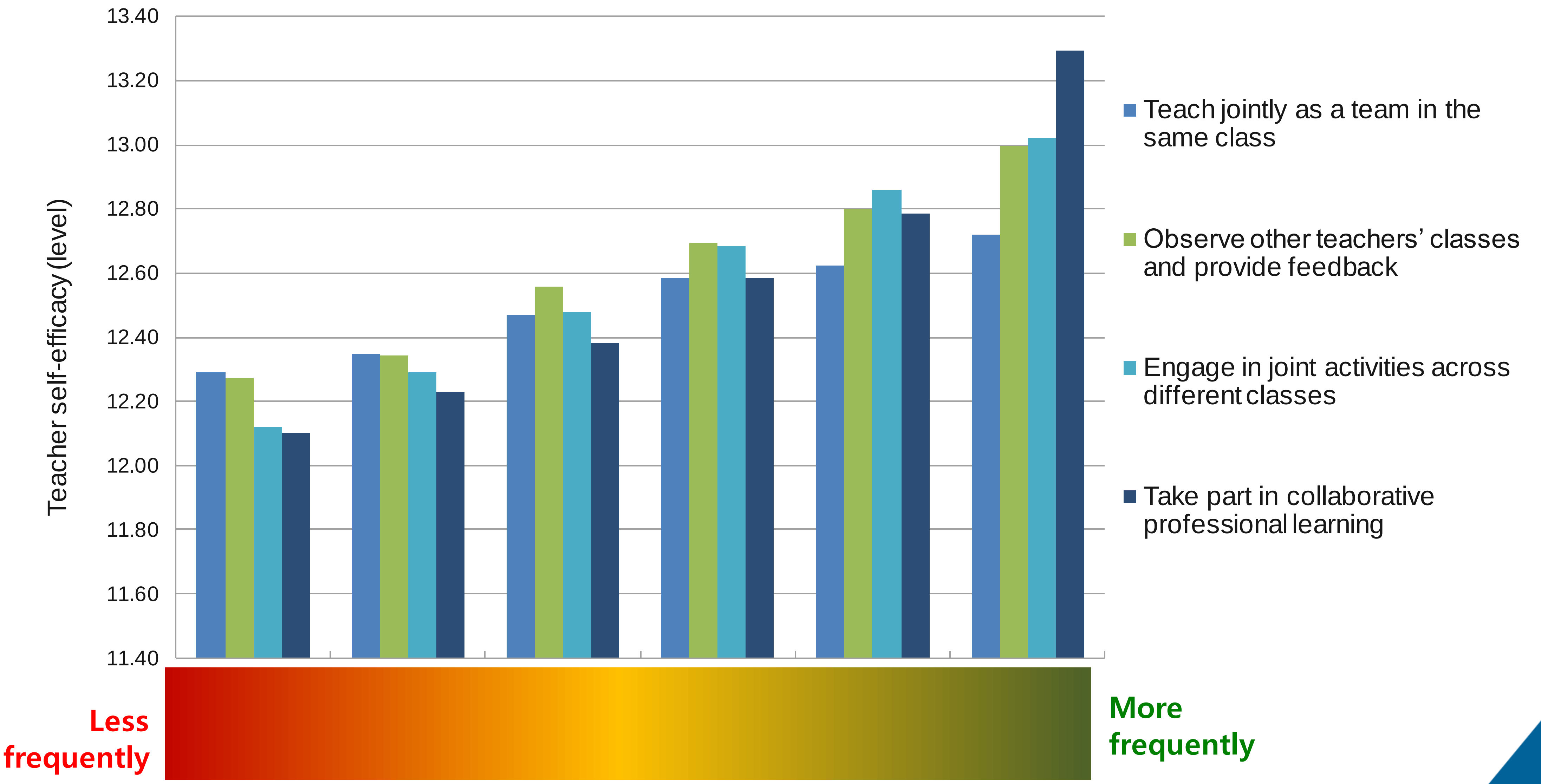


The power of feedback

Percentage of lower secondary teachers who report a "moderate" or "large" positive change in the following after they received feedback on their work



More professional collaboration is associated with greater self-efficacy



Teacher Professionalism index and teacher outcomes

The relationship between overall teacher professionalism and teacher outcomes

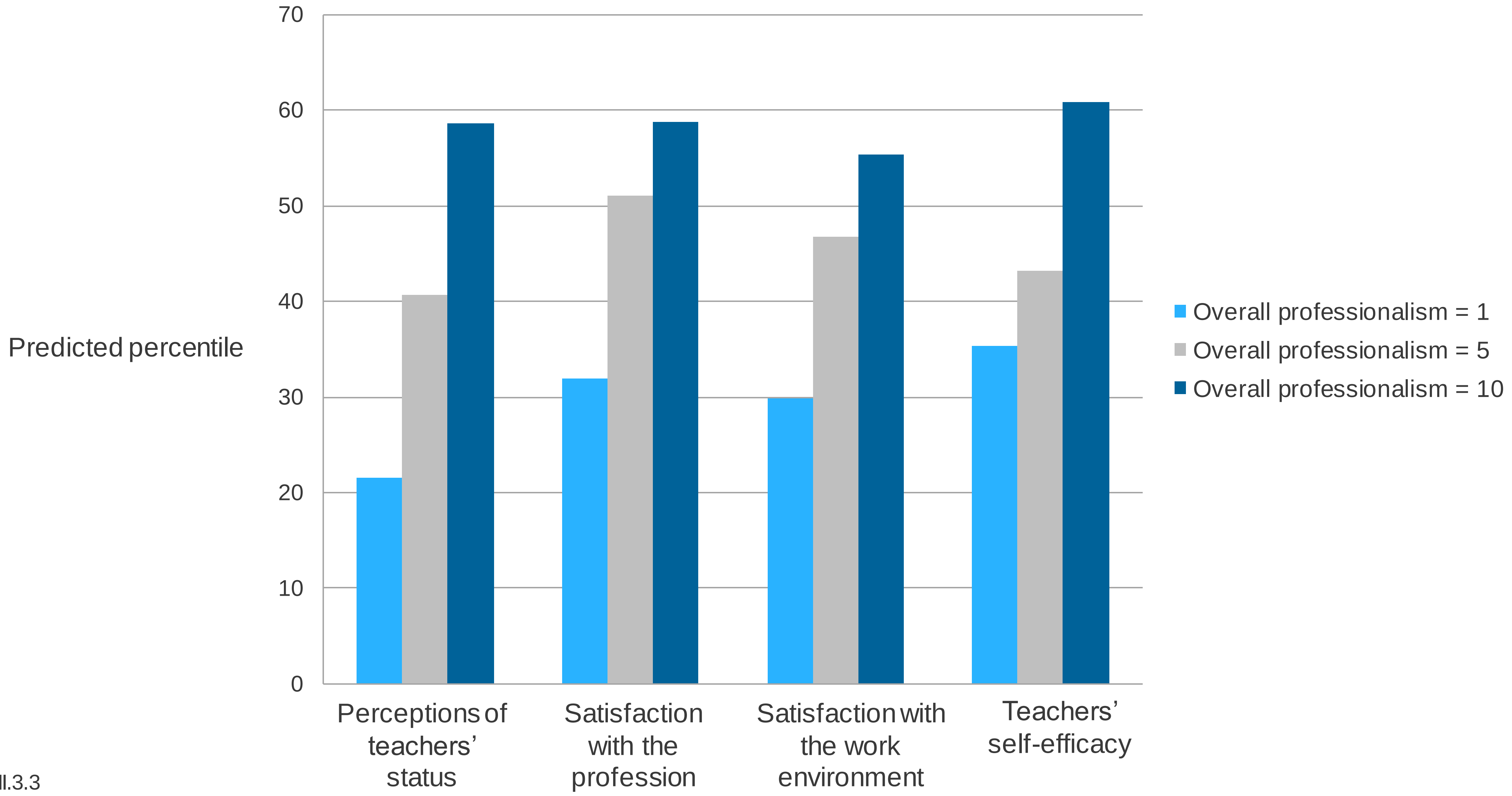
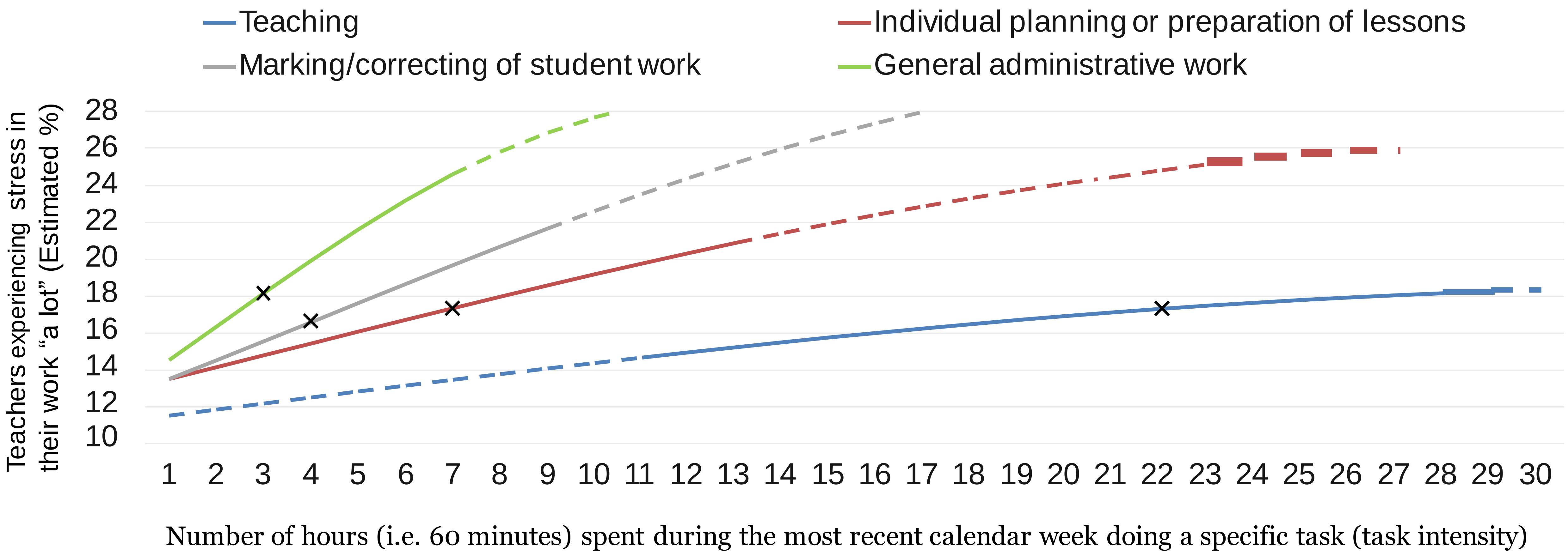


Fig II.3.3

Caring about teachers' well-being

Estimated percentage of teachers experiencing stress in their work "a lot", by task intensity (OECD average-31)



Note: the "X" in the figure represents the share of teachers experiencing stress in their work "a lot", given an average task intensity (OECD average-31)

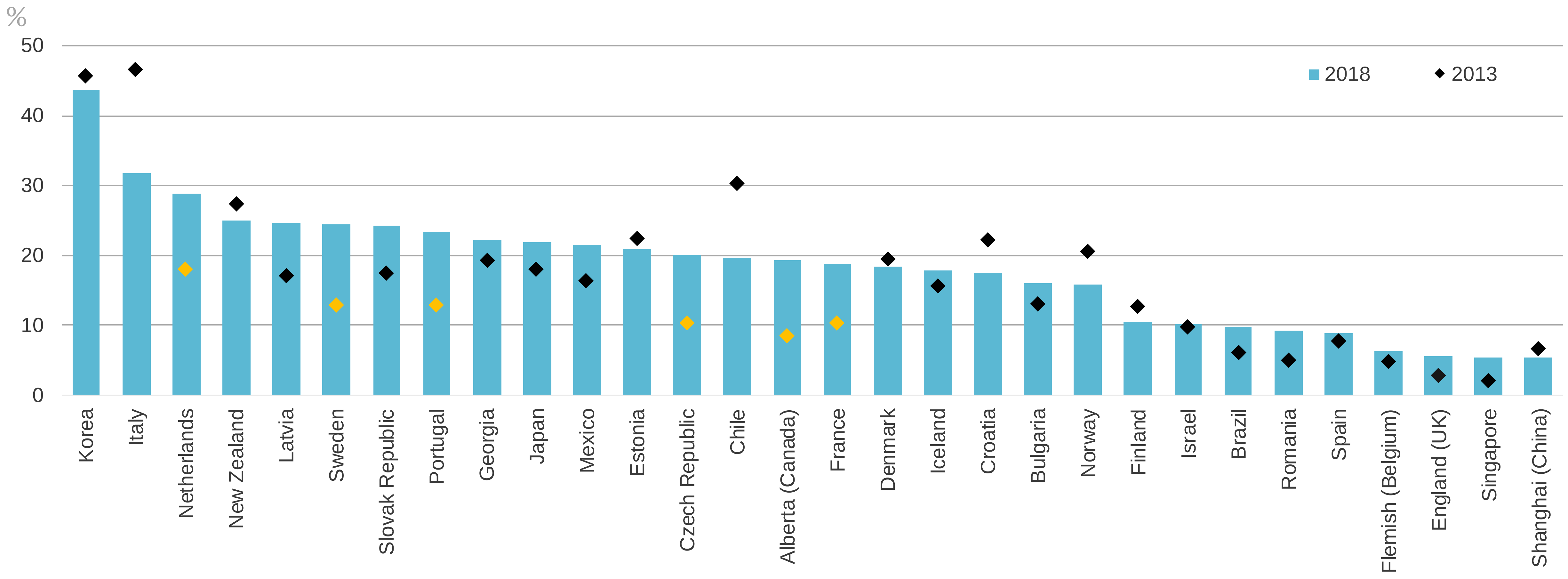
TALIS 2018, Fig II.2.10

EDUCATION & SKILLS

Preparing, developing and growing as leaders

Who are you? Does age matter?

Percentage of principals aged 60 and above



TALIS 2018, Fig I.3.3

How does your identity shows up in your leadership?

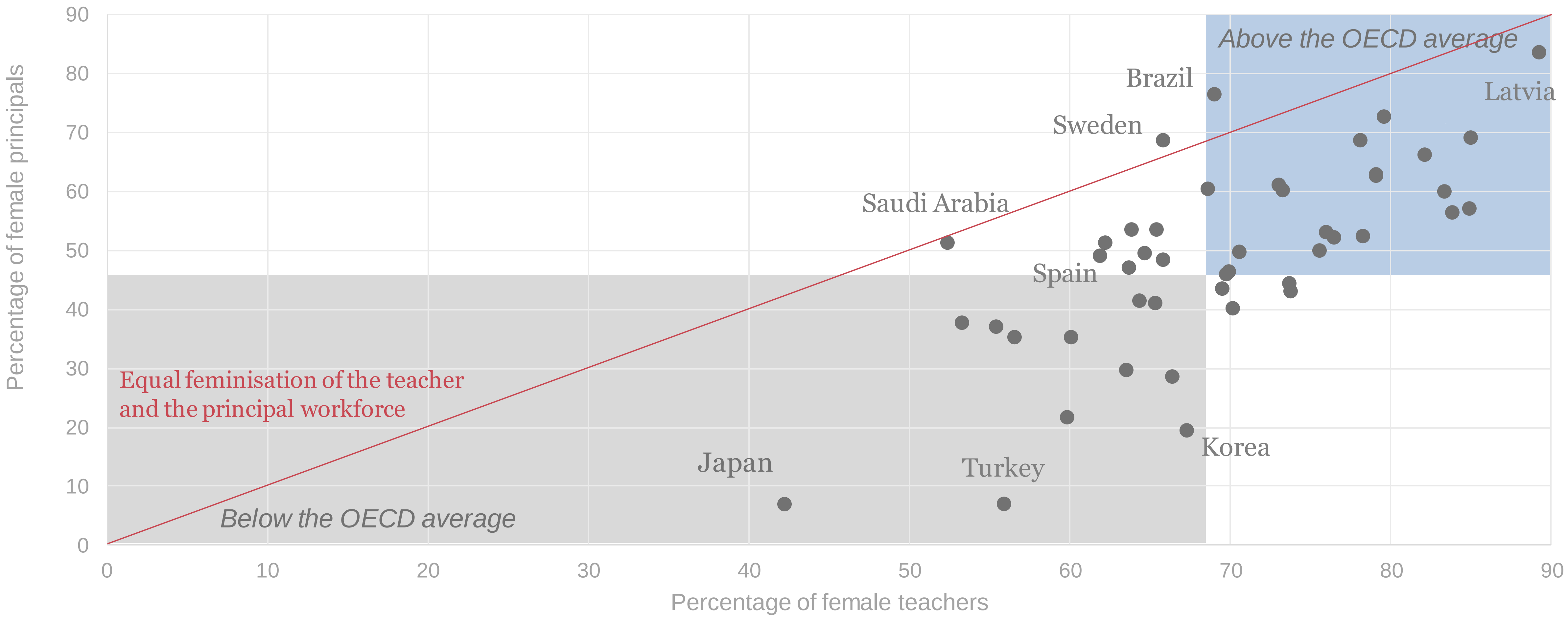
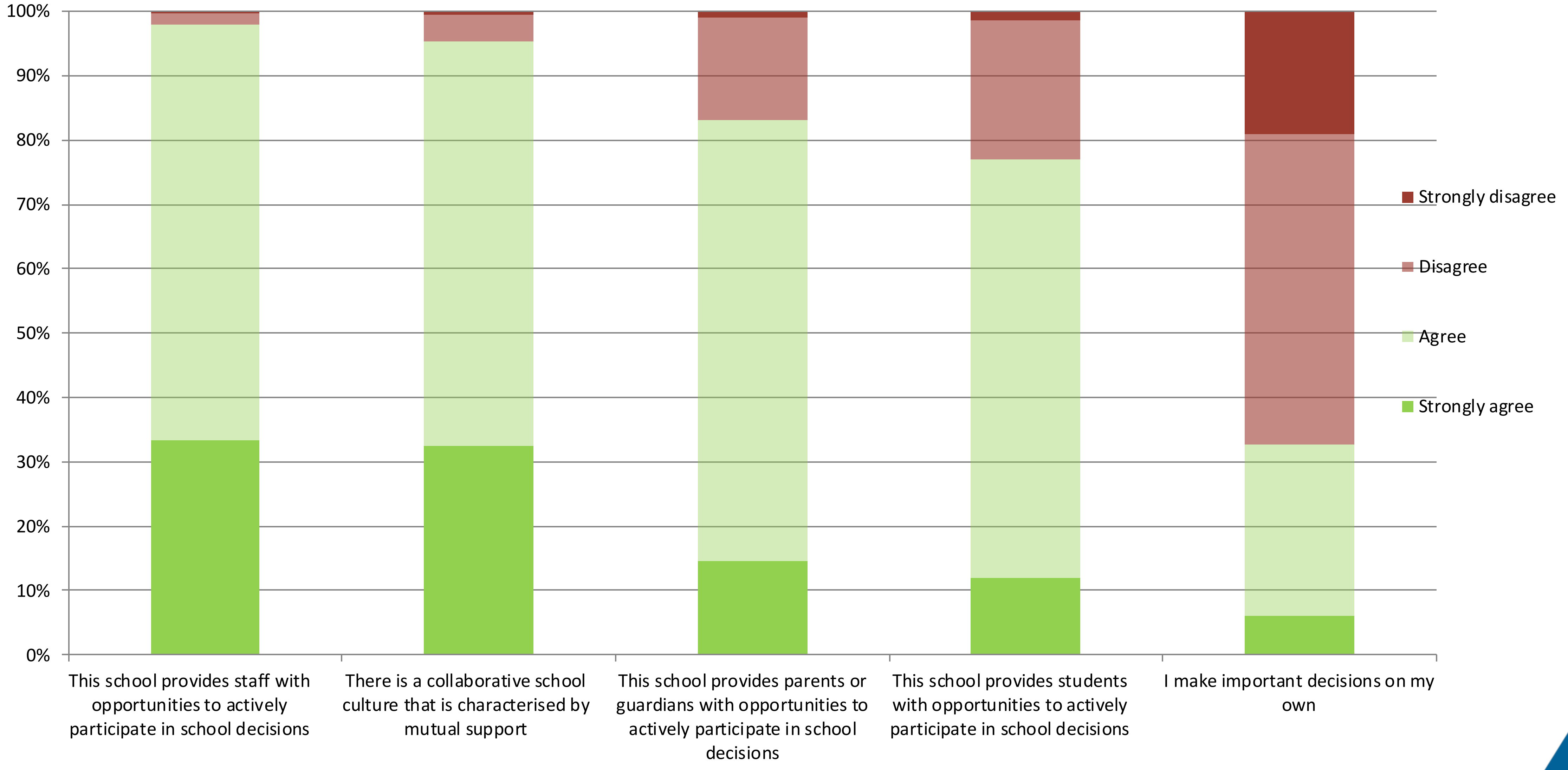


Fig I.3.5

Is leadership a lonely job?

Percentage of lower secondary principals who "strongly disagree", "disagree", "agree" or "strongly agree" with the following statements about their school



Preparing school leaders for the role

Percentage of principals for whom received training before taking up their role as a principal

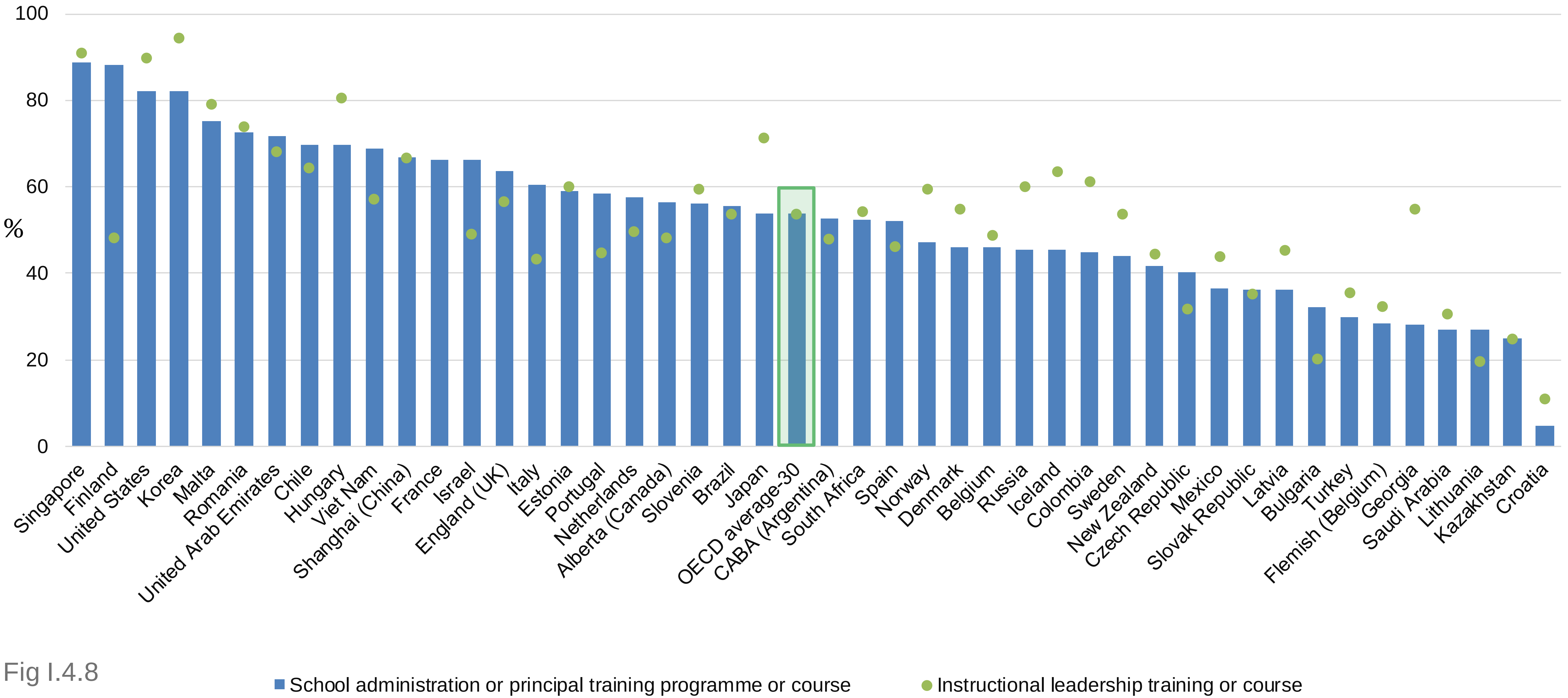


Fig I.4.8

Instructional leadership is important to quality education

Percentage of principals reporting that the following shortages of resources hinder the school's capacity to provide quality instruction "quite a bit" or "a lot"

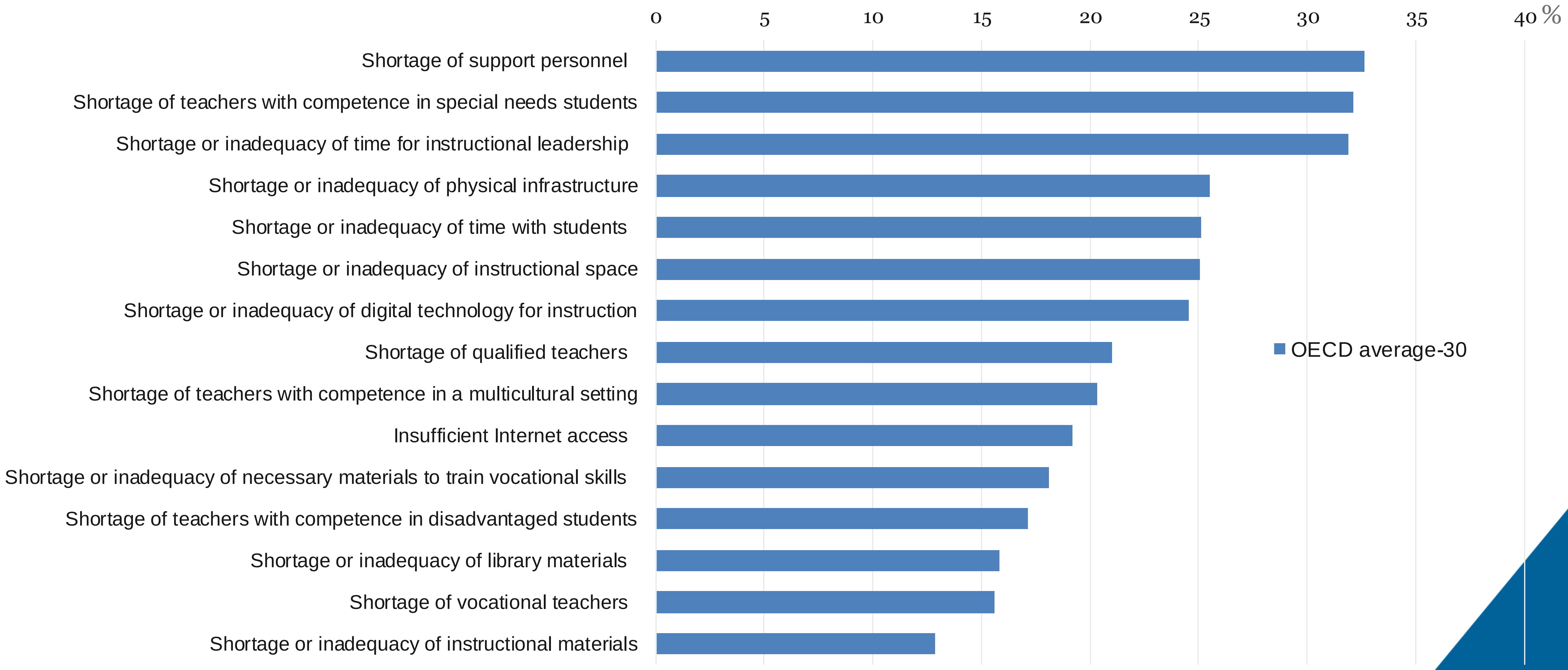
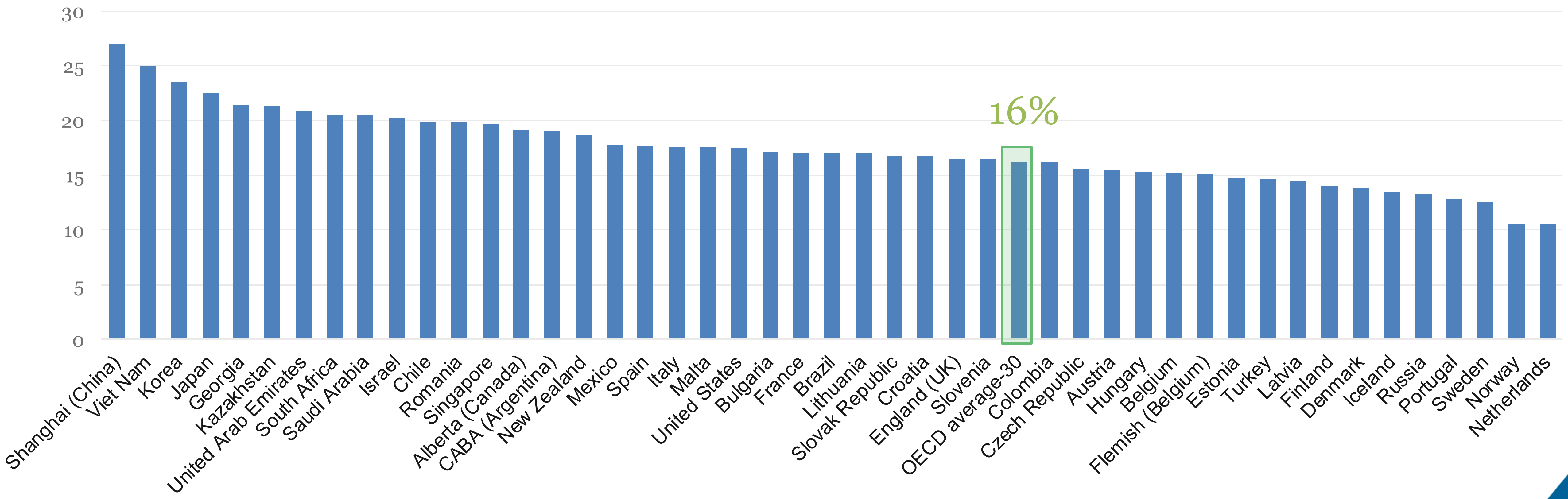


Figure I.3.15

..but instructional leadership is often relegated

Average proportion of time principals report spending on curriculum and teaching-related tasks and meetings

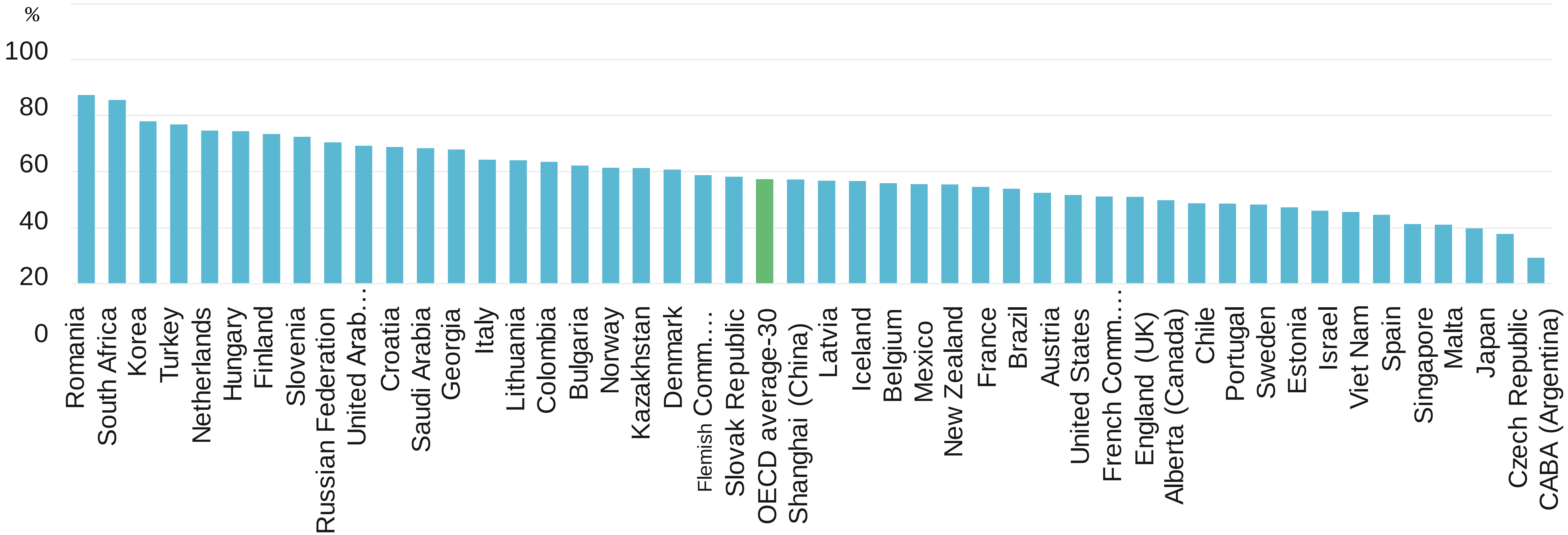


% of working time

Fig I.2.11

Principals’ collaboration with other principals

Percentage of lower secondary principals who have "often" or "very often" engaged in collaborating with principals from other schools on challenging work tasks in the 12 months prior to the survey



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Thank you

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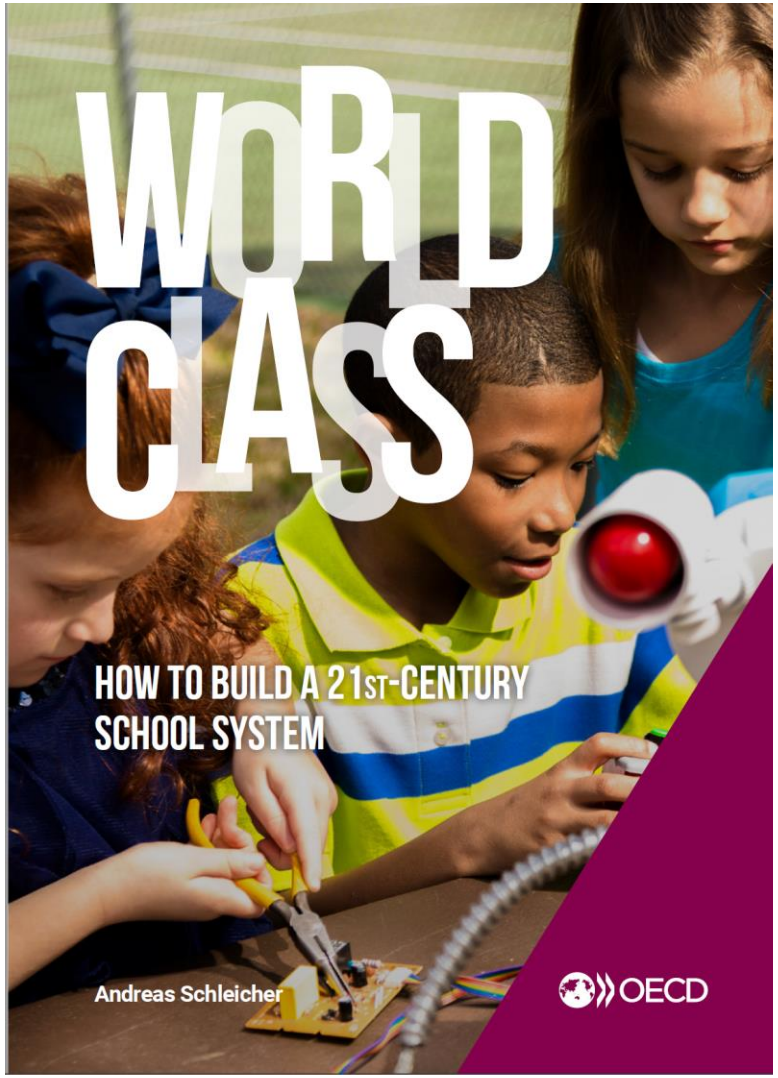
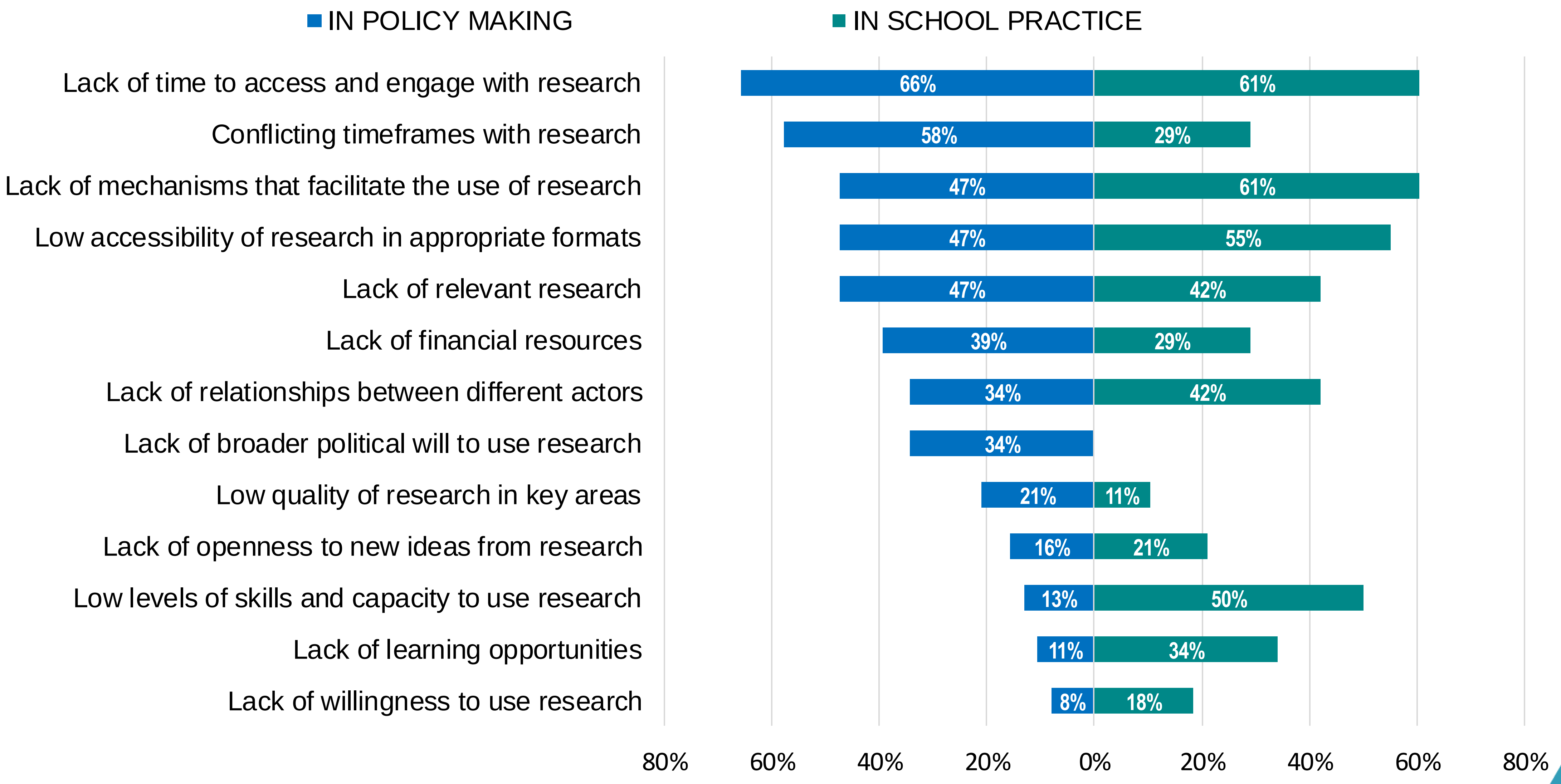
ANNA PONS VILASECA

Further reading



Many disconnects between research, practice and policy

Using education research evidence in policy and practice

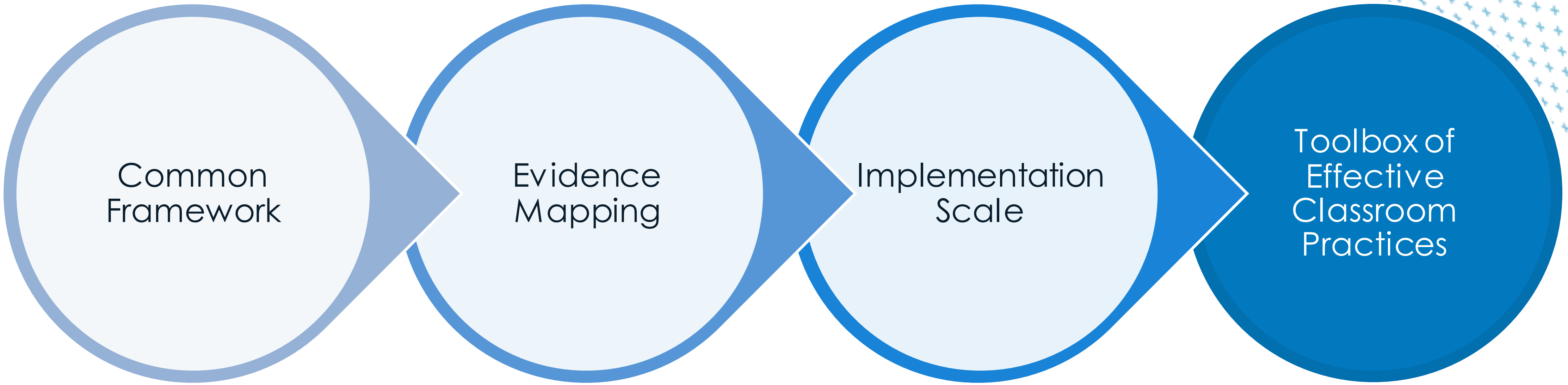


Source: OECD/CERI *Strengthening the Impact of Education Research* project policy survey Who cares about using education research in policy and practice?

Key domains of teaching

Quality of Subject Matter	Classroom Interaction	Assessment and Feedback	Cognitive Engagement	Social-Emotional Support
Making connections	Collaboration	Eliciting student thinking	Facilitating student sense-making	Fostering a nurturing climate
Patterns and generalisations	Questioning	Feedback	Multiple representations and perspectives	Relationship-building ▪ Students-students ▪ Teachers-students
Procedures and methods	Explanations and elaboration	Aligning to student thinking	Practice opportunities	Explicit skills teaching (e.g., self regulation)
Epistemic knowledge	Discussion and dialogue	Learning goals	First-hand experiences	Active development opportunities
Clarity and accuracy			Meaningful, real-world contexts	

Developing a Toolbox of Effective Classroom Practices for Schools



Map out current definitions of pedagogy to develop a coherent set of definitions that work across contexts.

Synthesize and examine the strength of evidence on each pedagogical dimension.

Gather schools' expertise on enabling conditions for their effective implementation and tangible examples of practice.

What is the profile of participating schools?

- Each participating network is invited to nominate 5-10 schools by **September 21** that are:
  - Primary and/or secondary schools from different geographical areas and socio-economic groups.
  - Among the most pioneering establishments in their respective networks.
  - Experienced in collecting and using evidence to make decisions and interested in education research.
  - Engaged in innovation and inspiring other schools to take initiatives to scale.
  - Passionate about shaping global education, sharing expertise and co-creating new solutions.
- There will be additional opportunities for more schools to participate as the work unfolds.