



The Portuguese experience with the curriculum profile

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with the cooperation of [Isabel Hormigo](#) – Portuguese Mathematical Society

IBE



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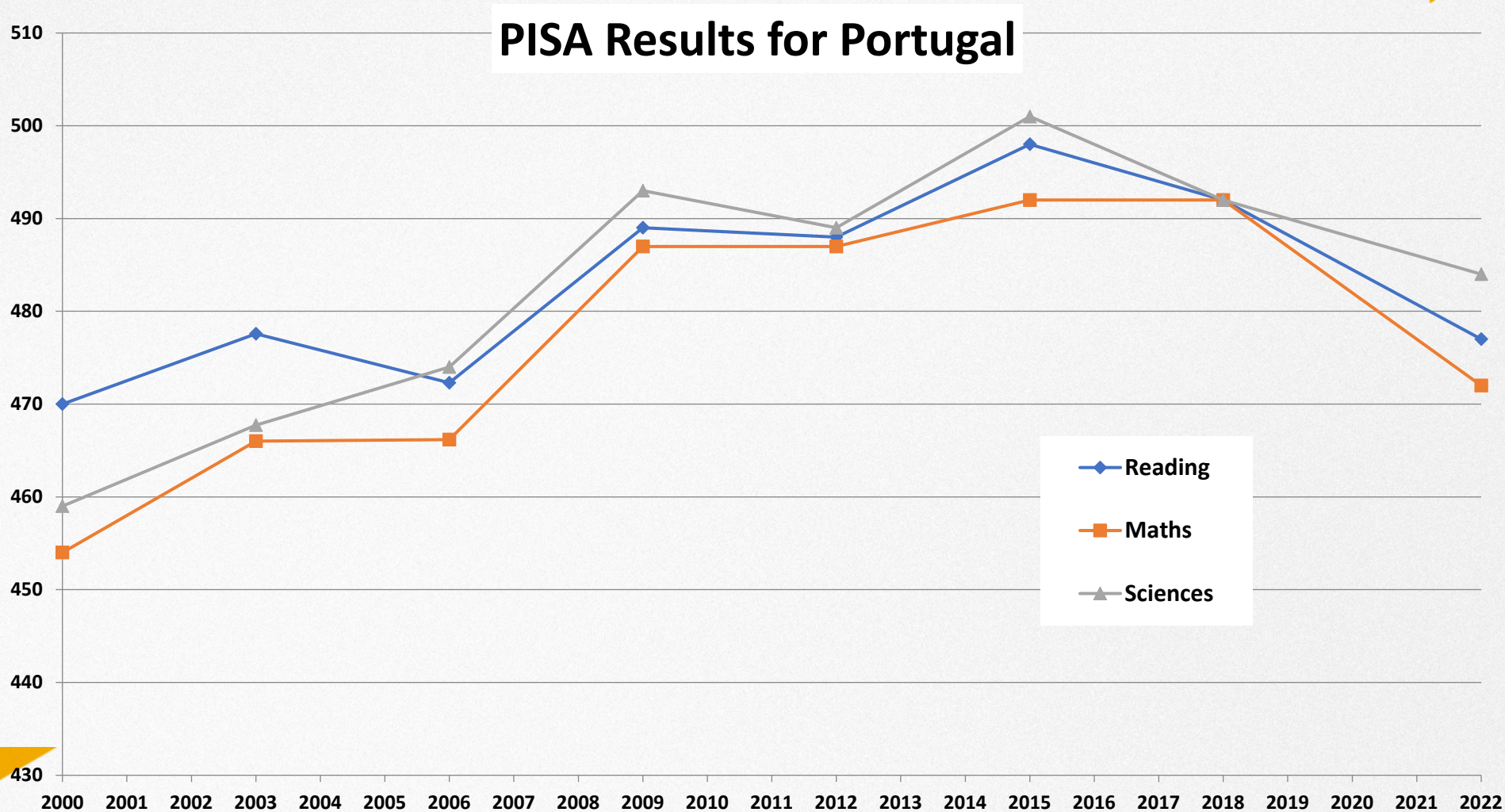
Educational Research Institute, Warsaw, September 6, 2024

- 
- Portuguese education periods
 - Education improvement factors
 - Knowledge and skills curriculum
 - Main pillars of success
 - Curriculum design challenges



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idealistic period 1974 - 1995/2000	pragmatic period 2000/2003 - 2011	knowledge curriculum 2011 - 2015	constructivist competences 2016 - 2023	??? 2024 - ...
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I don't know what *competences* are!
 Competences = skills?
 Competences = everything?

Knowledge-led curriculum

Disciplinary subjects
 Progress follows knowledge structure
 Applications associated with content
 Active learning from integrated knowledge

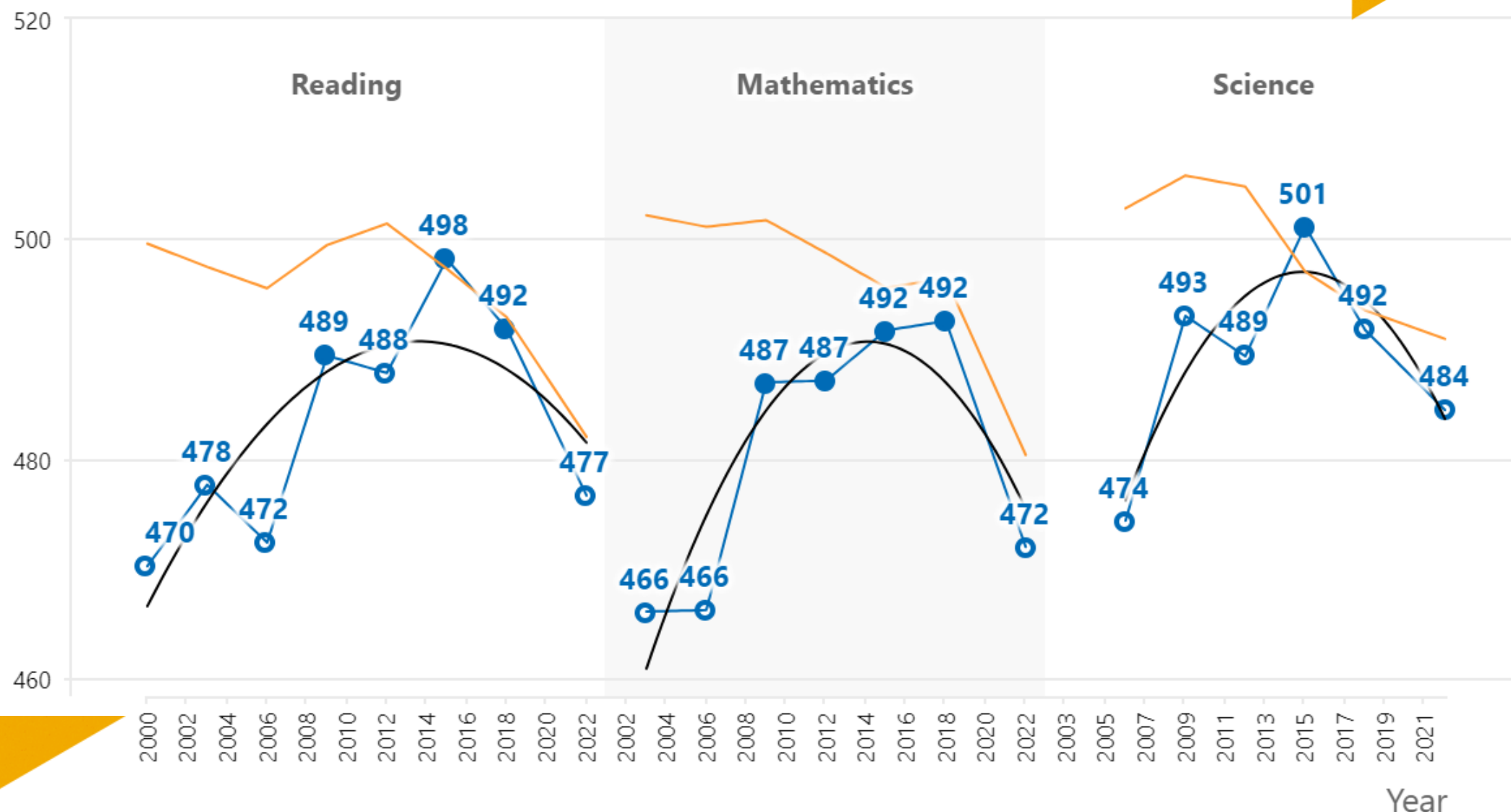
Constructivist competences

Application-competences lead
 Only values what students discover
 Progress follows for applications
 Active learning from projects

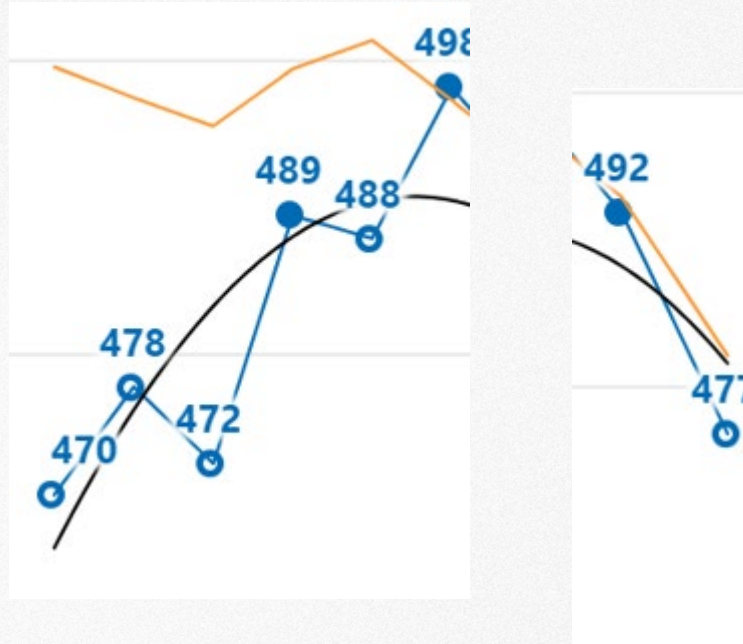
Portugal

Score points

● Mean performance — Best-fitting trend — OECD Average (23 countries)



The experience of Portugal



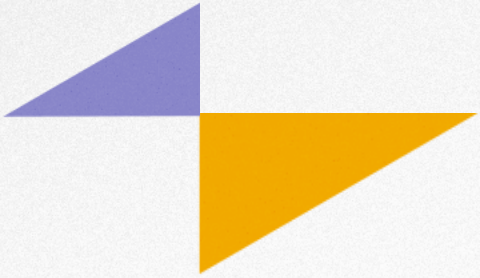
Curriculum centred on

- disciplinary **knowledge**
- **main** subjects, reading, math,...
- rigorous **assessment**
- **cognitive** support to struggling students (not only socio-emotional)

Activities geared towards

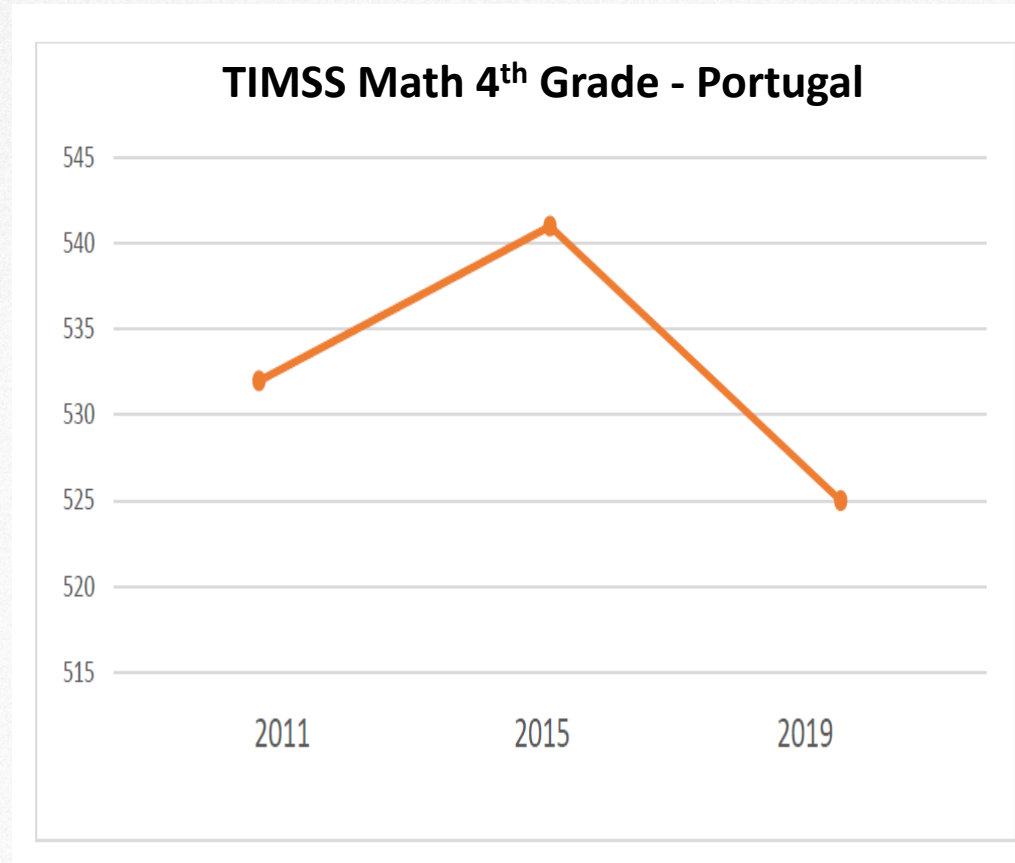
- **creativity** and critical thinking
- Interdisciplinary **skills**
- all subjects are born equal...
- assessment **avoidance**
- **socio-emotional** non-cognitive support to students

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The experience of Portugal

Percentage de high- vs low-performers

PISA - Portugal					
	2009	2011	2015	2018	2022
Science: High-performers	4.2	4.5	7.4	5.6	5.0
Low-performers	16.5	19.0	17.4	20.2	22.0
Maths: High-performers	9.6	10.6	11.4	11.6	7.0
Low-performers	23.7	24.9	23.8	23.3	30.0
Reading: High-performers	4.8	5.8	7.5	7.3	5.0
Low-performers	17.6	18.8	17.2	19.6	23.0
High performers > 4; Low Performers < Level 2					

TIMSS 4th Grade Math - Portugal			
	2011	2015	2019
High Performers	8	12	9
Low Performers	20	18	26
High performers = level 4; Low Performers ≤ Level 1			

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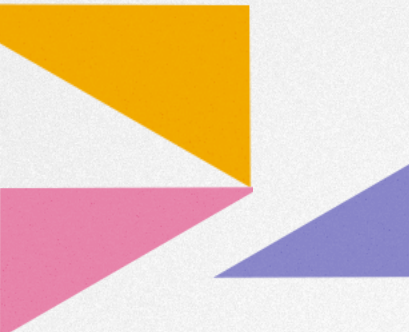
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Changes in Portugal

2001: Each school aggregated results made public
2005: Exams for 9th grade in Maths and Portuguese
2006: 4th and 6th grade low-stakes standardised evaluations
2007: Special action programs for Maths and Portuguese
2008: Textbook assessment and certification system initiated
2010: First learning goals designed
2011: Competences-centred approach rejected
2012: Better learning goals
2012: Started compulsory schooling extension to 12th grade
2012: 6th grade medium-stakes standardised evaluations
2012: Tutoring and support for struggling students
2013: New vocational offers
2013: 4th grade medium-stakes standardised evaluations
2014: 9th grade optional English exam with Cambridge

2016: 4th and 6th grade evaluations abolished
2016: Vocational courses track cancelled
2017: Textbook assessment and certification interrupted
2017: “Essential learnings” started
2017: Competence profile for compulsory education approved
2018: “Essential learnings” mandatory
2019: All previous curricular documents abolished
2020: No 9th grade examinations
2020: 12th grade examinations become non mandatory

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What do we want for our youth?

GREAT IDEALS

- ▶ CREATIVITY
- ▶ CRITICAL THINKING
- ▶ TEAMWORK
- ▶ INTERDISCIPLINARITY
- ▶ ...

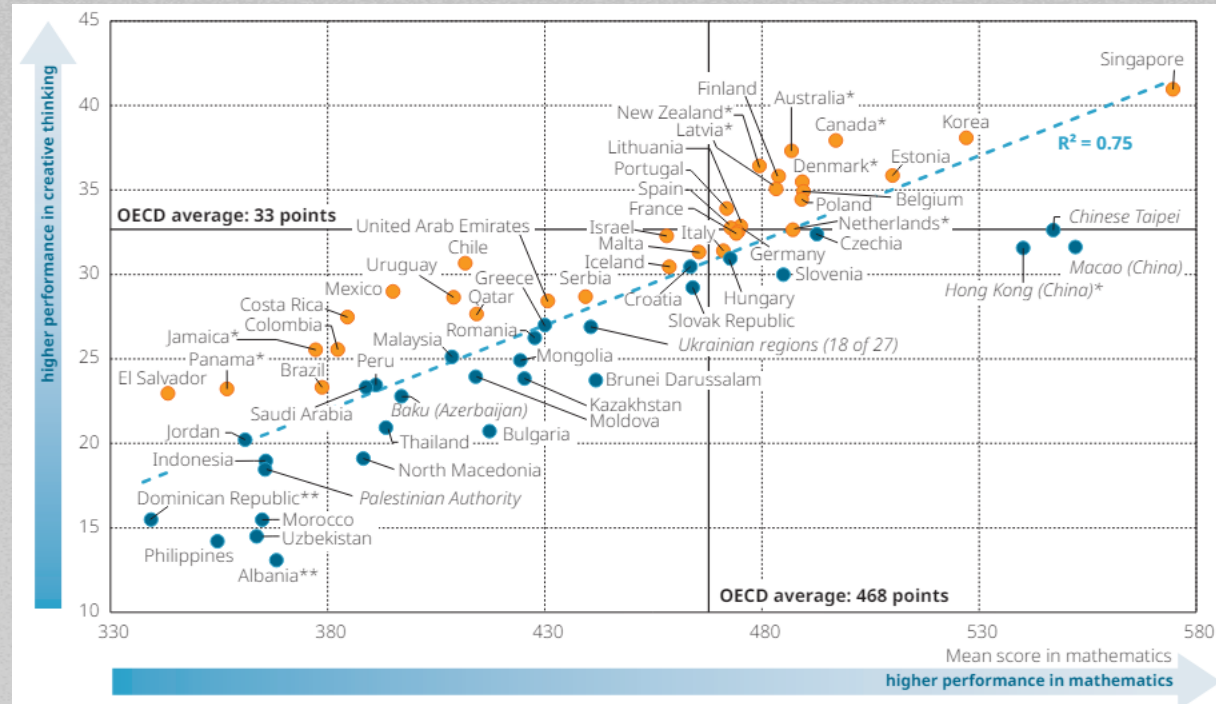
DISCIPLINARY CONTENT

- ▶ CORE KNOWLEDGE SUBJECTS, APPROPRIATE PROGRAMMES
- ▶ FREQUENT ASSESSMENT – STANDARDIZED NATIONAL AND LOCAL, FORMATIVE AND SUMMATIVE, INDEPENDENT
- ▶ TUTORING AND SUPPORT TO STRUGGLING STUDENTS

Just do both?

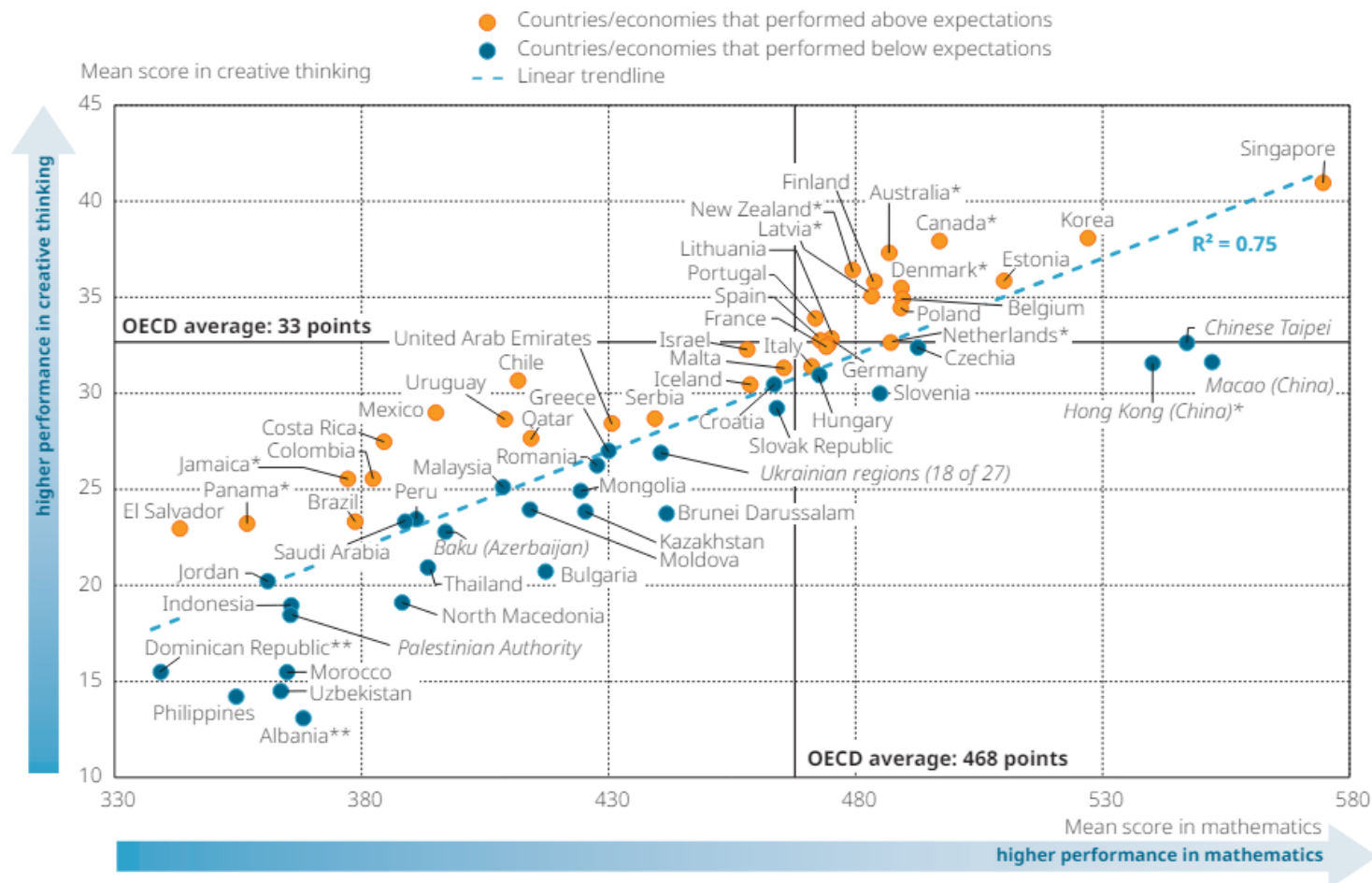
Just mix?

- ▶ **COGNITIVE SCIENCES:** There are no generic skills without knowledge
- ▶ **PISA and other international studies:** Singapore, Korea...
- ▶ **EDUCATION:** Structured knowledge leads to meaningful learning
- ▶ **Now CREATIVITY ASSESSMENT in PISA 2022...**



Just mix
two separate
components?

Figure 1. Mean creative thinking and mathematics performance



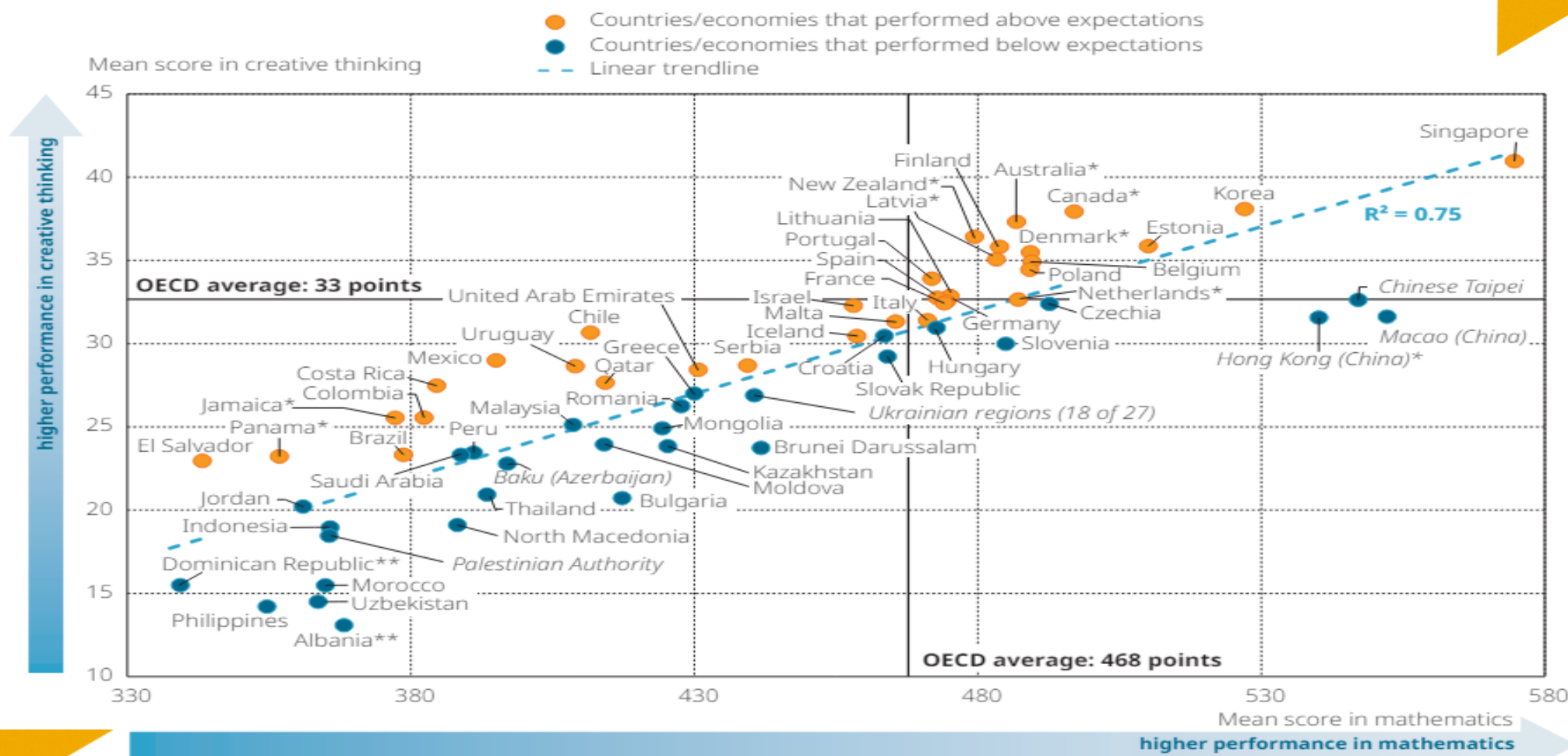
Notes: Only the 64 countries and economies that implemented the creative thinking cognitive test are shown.

A student's relative performance in creative thinking is defined as the residual obtained upon a cubic polynomial regression of the student's performance in creative thinking over his or her performance in mathematics or reading. The regression is performed at an international level, pooling data from all countries and economies that participated in the creative thinking assessment.

Source: OECD, PISA 2022 Database, Tables III.B1.2.1. and III.B1.2.4.

StatLink  <https://stat.link/o12kl>

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Everything starts with the curriculum

A demanding curriculum

Centred on the essential subjects

Structured, progressive, and detailed standards

Frequent assessment

Formative and summative

Internal and external

They compare and reinforce

Program to fight failure

Intervention at first difficulties

Special hours

Temporary groupings

School autonomy

Credits to schools to support students with difficulties

Incentives based on progress

Alternate paths

Vocational paths in middle school

Two vocational pathways

Businesses support from start to finish

Knowledge at the base

Evaluation as an incentive

Everybody can reach a reasonable level

Evaluating results
= freedom of processes

Alternatives make all progress



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Curriculum design orientation

Identify the knowledge and skills for all students

Respect the order of **progression**

Respect the acquisition of knowledge and skills principles

Specific to each discipline

Formulated so teachers know exactly what is intended to be learned

Means of support for the planning and organization of education

A reference for **assessment** (internal and external)

Principles

Learning goals should be **unique**, and must be achieved by all students

The **learning level** is a compromise between the medium and the high level, for promoting the development of all

Organization

Teams with:

- Teachers
- Curriculum experts
- Academic experts

Consulting other experts

Timeline

Months 1-10: Team constitution + teamwork

Months 11-12: Review by consultants

Months 11-12: Public consultation and discussion

Months 13-14: Approval and publication

Months 14-36: Teacher training

Months 14-26: Textbook publication

Months 25- ...: Implementation

Difficulties


Human resources – curriculum design difficulties

Ideology: some people are never convinced

Professional groups

Assessment teams

Politically motivated opposition



*“We arrived at appoint that no longer were the
disagreements that caused hostility,
but it was hostility that caused disagreements”*

Lev Tolstoy, *The Kreutzer Sonata*, 1889



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Strengths

Explain clearly – speak out!

Teachers saw their task simplified

Teachers felt support in their teaching efforts

Parents understanding

Textbook authors

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X-Twitter

@CratoNuno

The slide features a dark blue background with several small, colorful geometric shapes scattered around the edges. These include triangles in shades of purple, yellow, white, and teal. The text "Thank you !" is centered in a yellow, italicized font.

Thank you !

