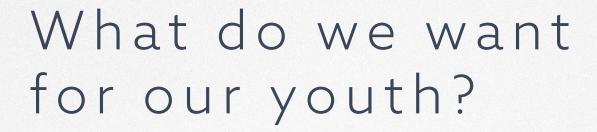


Inaugural conference for Graduate Profile - What to Teach in the 21st Century Schools? Educational Research Institute, Warsaw, June 19, 2024

Systemic solutions in Portugal:
A case study

Nuno Crato

Portugal Minister of Education and Science 2011-2015



GREAT IDEALS

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

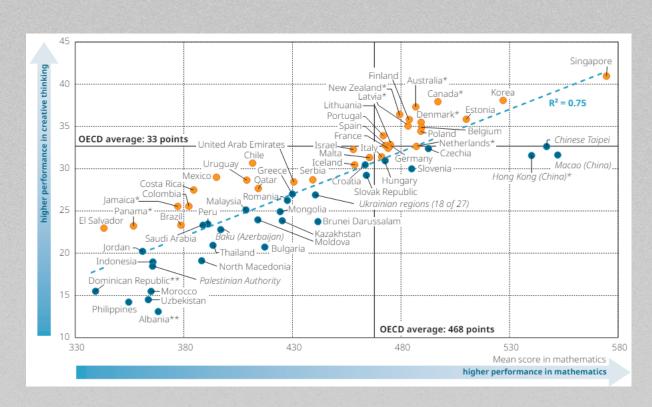
DISCIPLINARY CONTENT

- PROGRAMMES

 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?

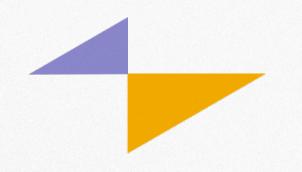
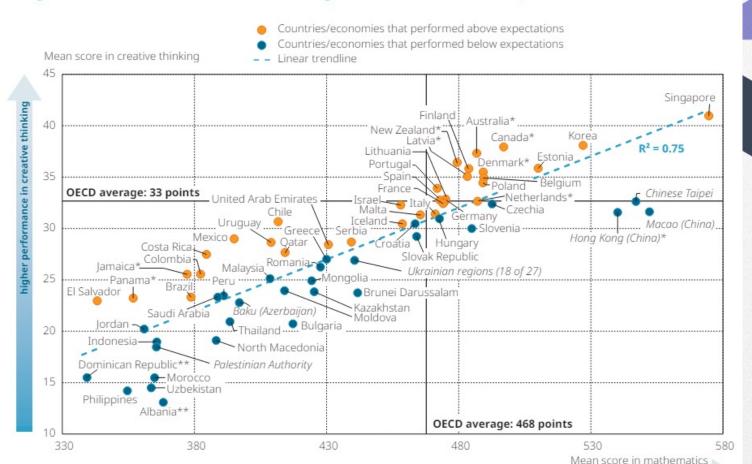


Figure 1. Mean creative thinking and mathematics performance



higher performance in mathematics

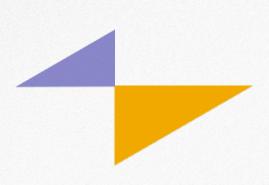
Notes: Only the 64 countries and economies that implemented the creative thinking cognitive test are shown.

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.

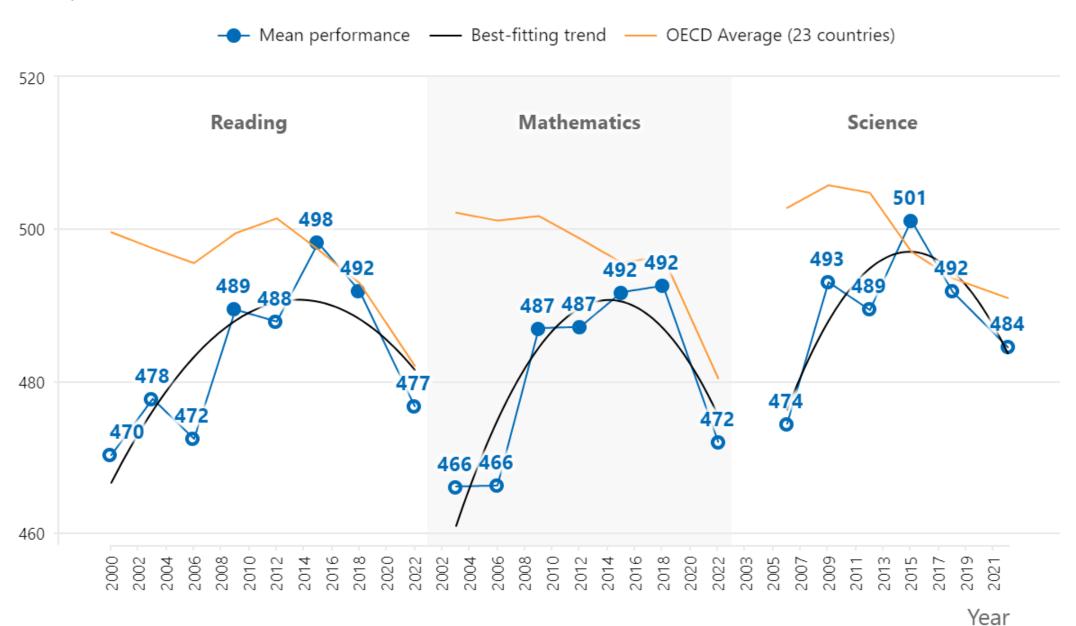
StatLink Islam https://stat.link/o12ktl

The experience of Portugal

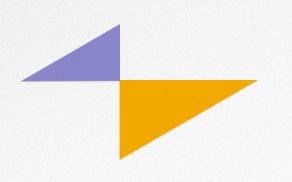


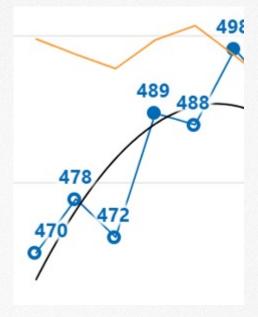
Portugal

Score points



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

Knowledge-based curriculum

Skills developed with knowledge

Creativity on-the-task building knowledge



More information in www.iniciativaeducacao.org



X-Twitter

@CratoNuno

Thank you!