



PISA POWER: THE IMPACT ON PORTUGUESE EDUCATION POLICIES & RESULTS

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Introduction

Portugal in PISA

from 2000-2022

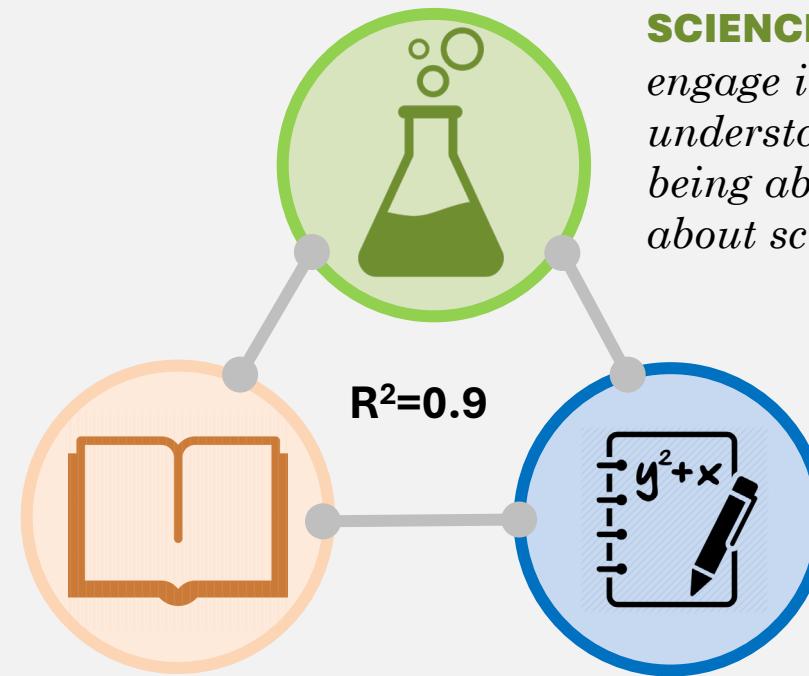


What is PISA?

Programme for International Student Assessment

“Measures 15-year-olds’ ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges”. (OECD, 2022).

READING LITERACY *An individual's ability to understand, use, reflect and engage in the reading of written texts to achieve their goals, to develop their knowledge and potential, and to participate in society.*



SCIENCE LITERACY *An individual's ability to engage in questions about science and understand scientific ideas, as a reflective citizen, being able to participate in a rational discourse about science and technology.*

MATH LITERACY *An individual's ability to formulate, apply and interpret mathematics in diverse contexts and to formulate judgments and decisions in a reasoned manner, as a participatory, committed and reflective citizen.*

•2000 First Participation of Portugal on PISA (15-year-olds)

OECD's Programme for International Student Assessment

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● 2015 Sixth Participation of Portugal on PISA (15-year-olds)

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*Only seven of the 79 education systems analyzed [in PISA 2018] saw significant improvements in the reading, mathematics and science performance of their students throughout their participation in PISA, and **only one of these, Portugal, is a member of the OECD.***



(OECD, 2019. PISA 2018 Results (Vol. I). p. 3)

OECD Secretary-General Angel Gurria



Running in hot weather

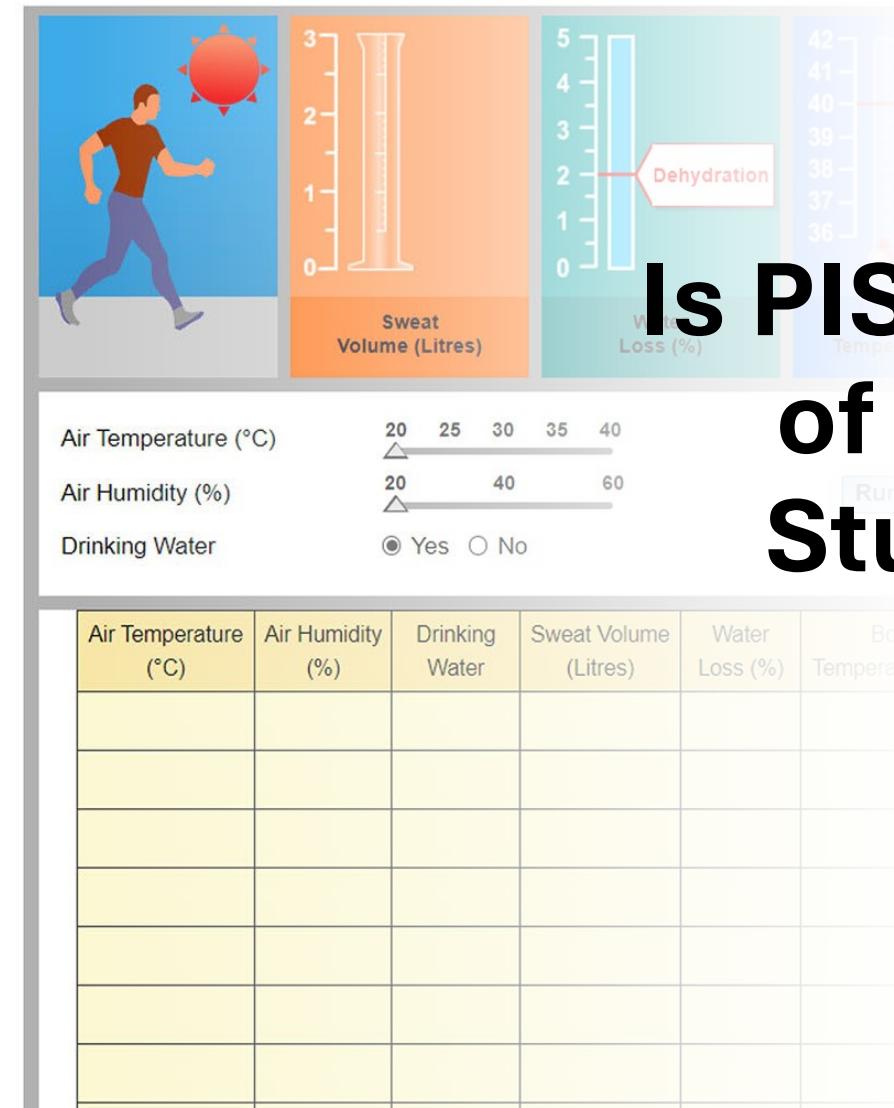
on is based on a model that calculates
of sweat, water loss, and body
of a runner after a one-hour run.

All the controls in this simulation work,
steps:

the slider for **Air Temperature**
the slider for **Air Humidity**
either “Yes” or “No” for **Drinking**

the “Run” button to see the results.
that a water loss of 2% and above
dehydration, and that a body
ature of 40°C and above causes heat
The results will also display in the

results shown in the simulation are
simplified mathematical model of how
ctions for a particular individual after
one hour in different conditions.



Is PISA a valid measure of the Portuguese Students' Literacy

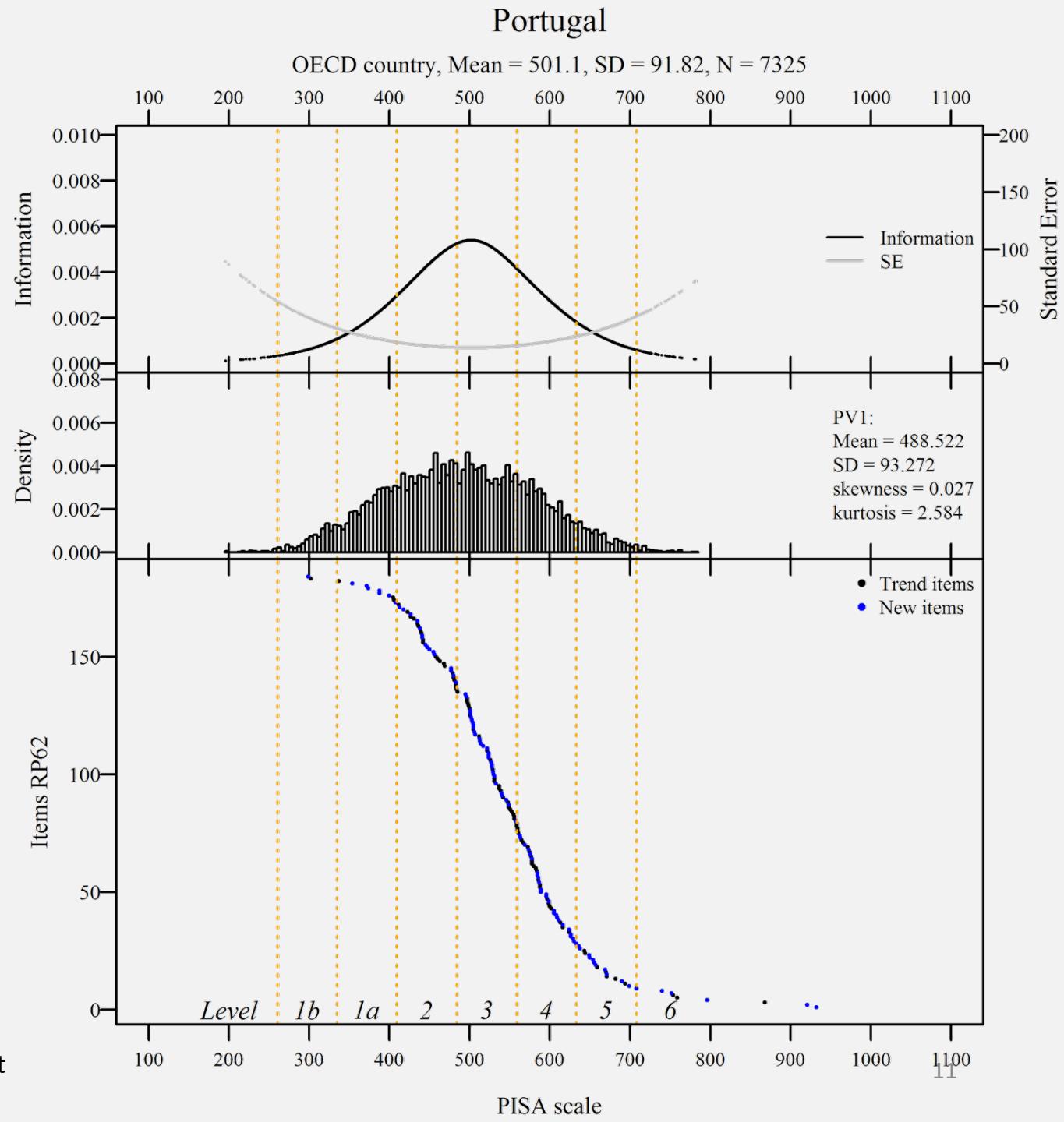




Item-person maps

PISA 2015

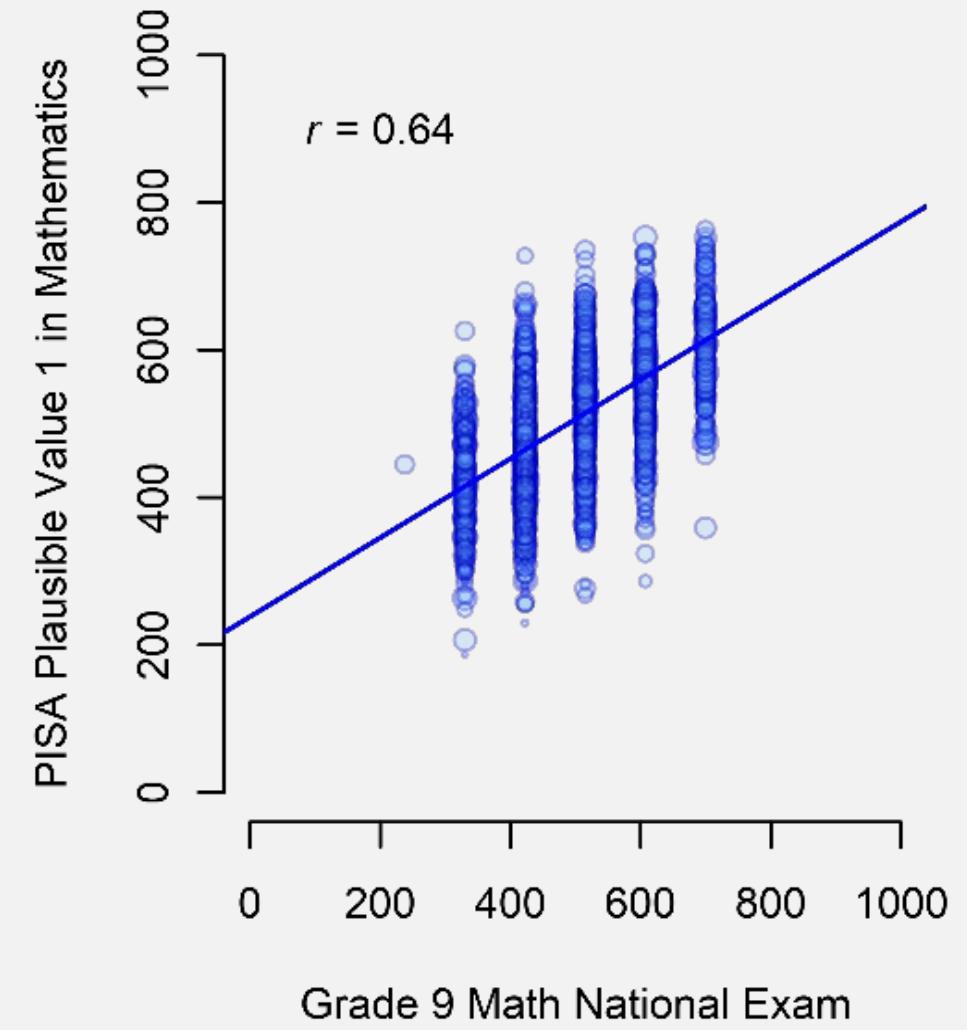
PISA is well aligned with the Portuguese Students skills!



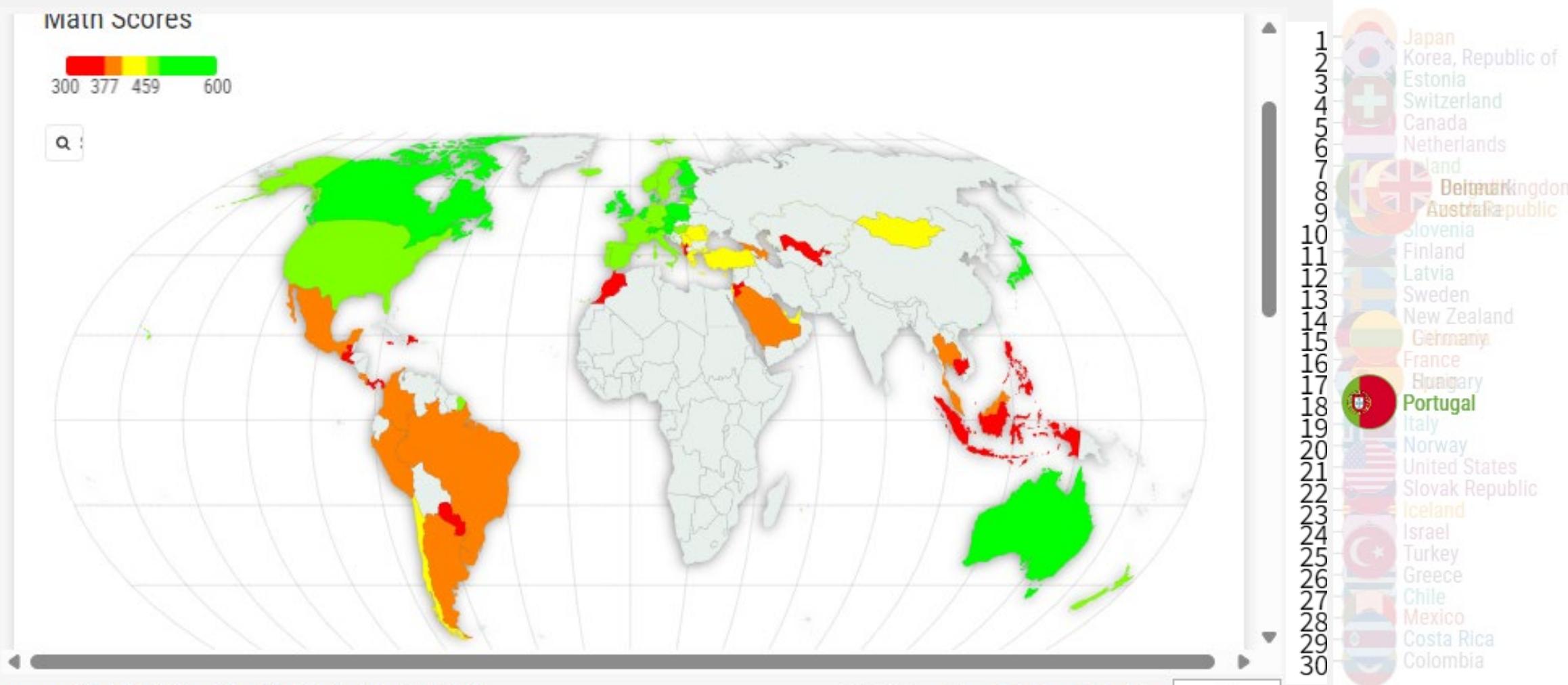


PISA 2015 Math

	PISA 2015	National Exam
Content Domains	% items	% items
Quantity	25.0	12.0
Space and Shape	25.0	40.0
Change and relationships	25.0	35.0
Uncertainty and data	25.0	13.0
Cognitive Domains	% items	% items
Knowing	-	37.0
Formulating	25.0	-
Applying	50.0	38.0
Interpreting/Reasoning	25.0	25.0



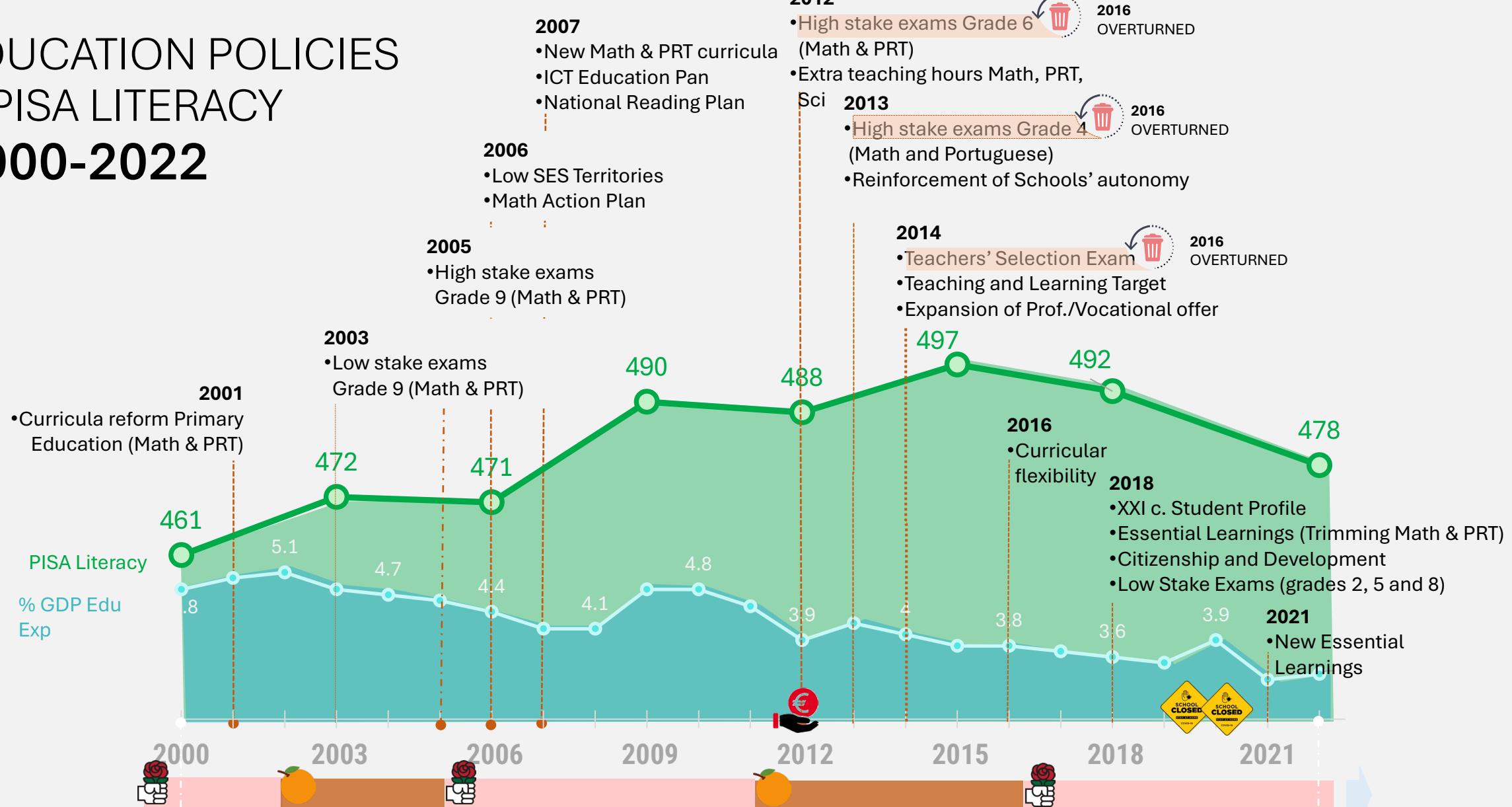
• 2022 Eight Participation of Portugal on PISA (15-year-olds)



A close-up photograph of a person's hand holding a small, blue and white globe. A black graduation cap with a gold tassel is resting on top of the globe. The background is blurred, showing warm, golden light.

PISA's driven Education Policies...

EDUCATION POLICIES & PISA LITERACY 2000-2022



Mean Income of households: **25.4 k€**

Tertiary Education: **13%**

Upper Secondary Schooling: **58.8%**

Pre-school Coverage: **73.3%**

Mean Income of households: **39.2 k€**

Tertiary Education: **47%**

Upper Secondary Schooling: **85.7%**

Pre-school Coverage: **96.2%**



Concluding remarks: What may explain the Portuguese Evolution?



10 Possible explanations...

FAMILIES & STUDENTS

1. Improvement in **parents' education** (mothers)
2. Improvement in families' **financial health**
3. Motivation and drive to **finish secondary studies** and tertiary education

POLICIES

2000-2015

1

4. 9 and then **12 years mandatory schooling**
5. **Curricula reforms** to align national curricula to best international practices: **Knowledge based**
6. Alternative **non-regular tracks** (vocational, professional,...)
7. Improvement in **teachers' training** and pedagogy (B.Sc. to M.Sc.)
8. High Stake exams (**Students and Schools accountability**)
9. **ECEC coverage** to almost 100%
10. Better school **autonomy and organization**

POLICIES

2015-2022

2

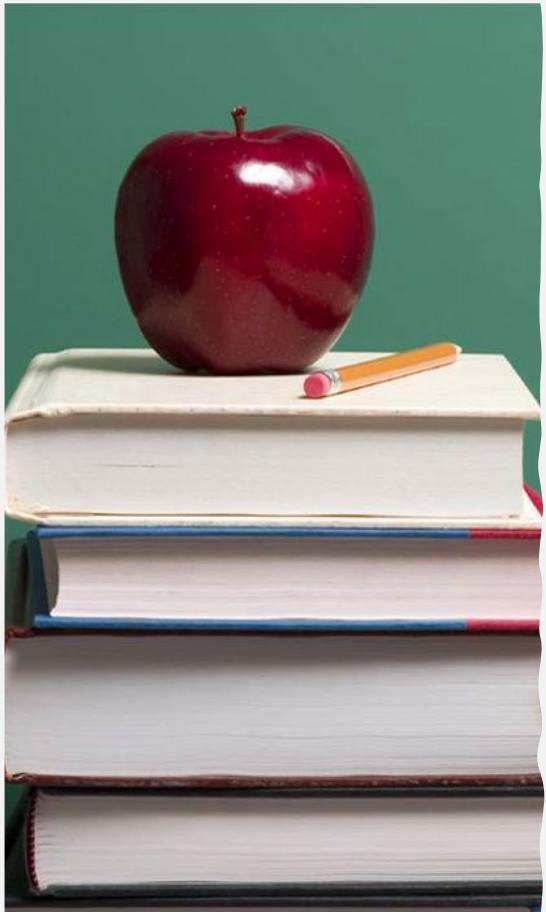
4. **Anti student retention** policies.
5. **Curricula reforms: Essential Learning, Curricular Flexibility: Competences based.**
6. **Lack of teachers' and teachers' retention**
7. **Teachers strikes** (recovery of salary)
8. **No Students and Schools accountability** (4º, 6º High Stake Exams -> Low Stakes Tests)
9. **COVID-19 Lockdown (2018-2022)**
10. **Learning Losses Recovery Programs**



5 main lessons from PISA...

1. Strategic Use of Assessment Data
2. Balancing Accountability and Holistic Development
3. Continuity and Stability in Policy Implementation
4. Adaptability and Flexibility in Response to Challenges
5. Investment in Quality Education and Equity

Thank you!



Questions, comments?

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Further information:

- Marôco J. (2021). *The PISA Effects on Portugal's Education*. In: Crato, N. (ed.). Improving a Country's Education. https://doi.org/10.1007/978-3-030-59031-4_8
- Marôco, J. (2024). *Portugal: COVID-19 Learning Losses Through the Lenses of ILSA and Local Low Stake Assessments*. In: Crato, N., Patrinos, H.A. (eds) Improving National Education Systems After COVID-19. Evaluating Education: Normative Systems and Institutional Practices. Springer, Cham. https://doi.org/10.1007/978-3-031-69284-0_10