

# Equity for All in European Education: What Does PISA Say?

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## Equity and fairness

Equity in education is a hotly debated topic both nationally and internationally. This has led to a view that educational equity is a problem where action needs to be taken. Our forthcoming article in the [Journal of Supranational Policies of Education](#)<sup>1</sup> investigates whether this opinion is correct. Using data from the OECD's Programme for International Student Assessment (PISA) we investigate how "fair" education is across the European Union. We measure "fairness" in this context by considering how well countries perform in PISA independent of the background characteristics of students.

## How fair are the European education systems?

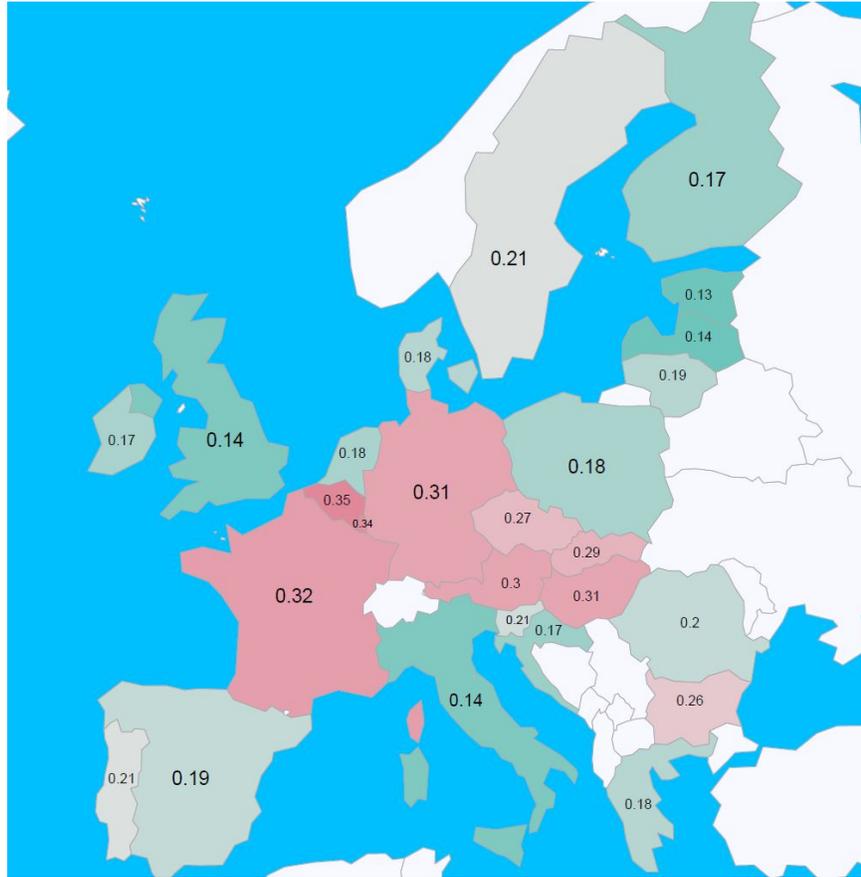
We used gender, immigration background, home language, age, and the socio-economic status of students together to predict students' PISA 2015 scores in science, mathematics and reading. We assume that the fairer an education system is, the smaller the influence that these background characteristics have upon PISA scores.

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<sup>1</sup> <https://revistas.uam.es/index.php/jospoe>



**Fig. 1** The combined influence (Cohen's  $f^2$ ) of gender, immigration background, home language, age, and the socio-economic status of students on PISA scores on science.

*Note:* The numbers on the map shows the effect sizes for each country (expressed in Cohen's  $f^2$ , a measure for effect size based on the squared multiple correlation between the background characteristics and the PISA scores).

Cohen's  $f^2$  values of 0.02, 0.15, and 0.35 are considered small, moderate, and large effects, respectively. Countries with effect sizes larger than the EU average are coloured red. Countries in which the effect size is smaller than the EU average are coloured green.

### So, what about equity?

The average influence of all background characteristics together on science scores is 0.22 in the EU, which is a moderate effect size. In Belgium, the effect size is the largest (0.35), followed by France (0.32) and Germany (0.31). Countries with relatively small effect sizes include Estonia, Latvia, the United Kingdom, and Italy.

For reading and mathematics the average influence of all background characteristics together on the PISA scores is comparable with respectively a moderate effect size of 0.26 and 0.23.

Based on these results we can conclude that there is still a long way to go before education systems in Europe can be called fair. Moderate effect sizes for science, reading and mathematics shows that there is work to be done. But countries scoring below the EU average would be foolish to rest on their laurels. The effect sizes in these countries are far from insignificant. The outcomes of this study show unequivocally that equal chances to all are still far from a reality.

For detailed information and results, please read our upcoming article (DOI: 10.15366/jospoe) mentioned above.

This text has been posted on the blog [international-education.blog](https://international-education.blog) and it is available in different languages on [international-education.blog](https://international-education.blog)

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