



# The Impact of Grade Repetition in Student Performance in Reading Literacy

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## Abstract

Since 2000 that PISA has been provided information of the Portuguese school system in what concerns the competences of the Portuguese 15-years-old students.

From 2000 to 2006 the Portuguese students performed modestly in all three competences evaluated: reading literacy, mathematics literacy and scientific literacy. However in 2009 Portugal results have increased reaching the OECD average in reading literacy and so far the results have remained at the OECD average.

A first exploration of the 2009 PISA database showed a big change in the distribution of the Portuguese students by grade. The typical grade of a 15-year-old student in Portugal is the 10th grade, the first grade of ISCED 3, although in Portugal in 2006 almost 50% of the students who participated in PISA were in the 9th grade or less. And these students have been affected by the phenomenon of grade repetition and some of them have been repeating the same grade more than once. From 2006 to 2009 Portugal has made an effort to reduce the high grade repetition rates in all levels of education from 19.1% in ISCED 2 and 30.6% in ISCED 3 in 2006 to 13.8% in ISCED 2 and 18, 7% in ISCED 3 in 2009. The problem of grade repetition in Portugal is not only due to the high rates, one of the highest in the OECD countries [4], but also this phenomenon is even more serious because often a student who repeats a year tends to repeat once again entering into what is known as a cycle of repetition. This difficult the students recovery and progress in education and before 2006, when several educational measures were implemented, these cycles of repetition were the major cause of drop-outs from school [1][2][3]. The PISA Student Questionnaire collects information about this phenomenon in two different ways: one indirectly, asking students in what grade they are and other directly, asking students how many times they repeat a grade. With this analysis we intend to answer the following questions:

(a) What is the association between grade repetition and reading performance?

(b) How can we characterize grade repetition in Portugal compared to other countries that participated in PISA 2000, 2009 and 2018?

(c) What are the characteristics of students retained in Portugal in terms of cultural and socio-economic status, gender, type and location of school, immigrant status, household income and expenditure on education?

(d) What is the effect of being retained on the student's performance in reading? And how it evolved from 2000 to 2018?

**Keywords:** Student assessment, grade repetition, international assessment, PISA

## 1. Introduction

Several studies have analysed the phenomenon of retention both as a macro-level social problem, indicating the ineffective use of resources as its main argument and, as a micro-level problem, indicating the negative impacts on students' motivation and self-esteem as well as the early withdrawal from the education system.[1][2][3] From an economic point of view, an education system is more efficient if each student progresses through the grade each year, as each student who repeats has the economic effect of adding a new student to the system and from this point of view retention thus appears as a waste of resources. [4]

From an individual point of view, retention is associated with low levels of school performance and trajectories of failure and early school leaving. [3] However, unnecessary retention persists because many school principals, teachers and parents believe that repeating a grade is preferable when students have failed to achieve the academic goals set for that grade.

Given that the incidence of school failure is greater among economically disadvantaged groups of students, the promotion of success, by countering this phenomenon, has a very relevant impact on the creation of equal opportunities. Several studies report a significant association between repetition and its socio-economic and cultural context, in which students from families with low socio-economic and cultural resources are more likely to be affected by the phenomenon of retention. Parents of retained



students, on average, have lower levels of education and lower occupational levels. According to PISA, “Students who had repeated a grade tend to perform less well in school and hold more negative attitudes towards school at age 15 than students who had not repeated a grade in primary or in secondary education” and “...students who had repeated a grade are more likely to drop out of high school”. [5] This study intends, through PISA data, to better understand the relationship between retention and the demographic, social and economic characteristics of students. [4]

## 2. Grade repetition and reading performance

### 2.1 The Portuguese context

In Portugal, the debate around the issues of retention and school failure has been frequent, although not unanimous. In the national education system only in the 1st grade of primary school there is an automatic transition mechanism to the following grade. In the remaining grades, students can be retained in the same grade without a legally established number of times until they reach the levels of school performance necessary to transit to another grade.

The phenomenon of retention in Portugal reaches very high values, with around 21,000 students retained in primary education in the 2018/19 school year (which represented 3.8% of the total number of enrolled students) and around 50,000 students in the secondary education (which represented 13.1% of enrolled students), according to official data. On average, between 2000 and 2018, between 4% and 24% of enrolled students were retained annually, depending on the level of education. The dimension of this problem meant that it was integrated into the 2015 Program objectives with the following goals for 2015: to reduce repetition rates to 2% in the 1st cycle, 5% in the 2nd cycle, 10% in the 3rd cycle and 12% in the secondary.

In most OECD countries the system for the progression of students in their academic path consists of the transition from one grade to another based on their academic performance. According to data from the PISA 2018 report, there is considerable variability in retention rates between OECD countries, and it should be noted that this indicator is obtained by calculating the percentage of 15-year-old students in each country that is not attending the modal (or reference) grade for your country. Portugal has a percentage of 27% of students who have repeated at least one grade, more than twice the OECD average of 13%. Portugal is also the country with the highest percentage of students who had repeated twice or more than a grade in primary school (6% in 2018, against less than 1% in the OECD average), making Portugal the first OECD country with the most early school failures.

### 2.2 Characteristics of students retained in Portugal

When we analyze the structure of the Portuguese PISA samples we realize that, mainly due to the phenomenon of school failure, Portugal has almost half of their students enrolled in a different grade than the modal grade. In Portugal the modal grade for 15-year-old students is the 10<sup>th</sup> grade but the distribution of students by grade in the national sample in PISA 2018 showed that only 57% of the participating students were enrolled in the 10<sup>th</sup> grade.

When comparing the performance of the 10<sup>th</sup> grade Portuguese students with the performance of the students enrolled in a grade below we conclude that students from modal grade achieved a performance 100 points higher in reading than students enrolled in 9<sup>th</sup> grade and 184 points higher than students enrolled in 7<sup>th</sup> grade. PISA data show that not only this difference between students from the modal year and students from years of schooling below is very high, as it has also worsened between 2009 and 2018.

According to PISA 2018 data, grade repetition seems to affect more boys than girls: 58% of the Portuguese students reporting that have repeated one or more than a grade during their school career were boys.

More than 60% of Portuguese students who reported having repeated one or more than a grade during their school career had parents with lower secondary education qualifications.

It's important to refer that the majority of these students were enrolled in public schools located in a small town or a town.

### 2.3 The effect of being retained on the Portuguese student's performance in reading

In Portugal the effect of being retained according to PISA 2018 has a significant negative effect on the students' performance in reading. Students who reported never had repeated a grade during their school career achieved better performance in reading than students who reported having repeated one grade and even more than students who reported having repeated twice or more than a grade during their school career.



More than half of the Portuguese students (56.3%) who reported having repeated one or more than a grade during their school career could not achieved level 2 of proficiency against only 7.2% of the Portuguese who reported never having repeated a grade during their school career.

According to OECD, “At Level 2, students begin to demonstrate the capacity to use their reading skills to acquire knowledge and solve a wide range of practical problems. Students who do not attain Level 2 proficiency in reading often have difficulty when confronted with material that is unfamiliar to them or that is of moderate length and complexity. (...). In the context of the United Nations Sustainable Development Goals, Level 2 proficiency has been identified as the “minimum level of proficiency” that all children should acquire by the end of secondary education”. [5]

### 3. Some conclusions

Comparing Portugal with the other OECD countries, it is possible to observe that Portugal is among the countries with the highest retention rates, occupying the top positions for some of the indicators presented in this study. And when we analyze the evolution of these indicators over the PISA cycles, despite a positive evolution, Portugal still presents figures very far from the OECD average.

Among the groups most likely to be retained in Portugal are boys, immigrants, those who attend public schools, or schools situated in smaller municipalities and with lesser economic resources.

This study also points out that in Portugal being retained is a more powerful predictor of students' performance than socio-economic and cultural status.

### References

- [1] Conboy, J. (2011). “Retention and science performance in Portugal as evidenced by PISA”. in *Procedia Social and Behavioral Sciences* 12 (2011) 311-321, Elsevier
- [2] Brophy, J. (2006). Grade repetition. Retrieved from <http://unesdoc.unesco.org/images/0015/001520/152038e.pdf>
- [3] Xia, N., & Kirby, S. N. (2009). Retaining students in grade: A literature review of the effects of retention on students' academic and nonacademic outcomes. (Technical Report TR-678-NYCDOE). Retrieved from [http://www.rand.org/pubs/technical\\_reports/2009/RAND\\_TR678.pdf](http://www.rand.org/pubs/technical_reports/2009/RAND_TR678.pdf)
- [4] OECD (2011). *PISA IN FOCUS*, 2011/6 (July). Paris: OECD
- [5] OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/5f07c754-en>