

Catalan
and Spanish
languages
knowledge
of students
in Catalonia





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INTRODUCTION

In accordance with current legislation, the Department of Education of the Generalitat de Catalunya (Government of Catalonia) regularly assesses the acquisition of basic skills by all students at every stage of compulsory education (primary and secondary education). These assessments are the responsibility of the Evaluation Council of the Education System (CSASE), in accordance with the provisions of Decree 305/1993 of 9th December (Official State Gazette n. 1837 of 27/12/1993). The CSASE is also responsible for coordinating and collaborating in the State assessments carried out by the National Institute of Educational Evaluation of the Ministry of Education, Culture and Sport, as well as those organized by international organizations, such as the PISA tests.

The objective of this volume is to collate the results obtained by students in Catalonia in the assessments carried out at certain stages of compulsory education in recent years in order to make comparisons between assessments and academic years. The analysis focuses on the results of proficiency tests in Catalan and Spanish, in order to determine the contribution of the Catalan educational system to the students' effective and equivalent learning of the two official languages of Catalonia once they have completed compulsory education.

The information on the evaluation results in this volume takes into account the assessments carried out by various agencies. Firstly, it focuses on the tests in the sixth year of primary education (academic years 2008-2009 to 2015-2016) and in the fourth year of compulsory secondary education (years 2011-2012 to 2015-2016), carried out by the Department of Education of the Generalitat de Catalunya. Secondly, it includes the diagnostic assessments of the Ministry of Education, Culture and Sport carried out in primary schools during the academic year 2008-2009 and in secondary schools during the academic year 20009-2010, which are the only assessments of this type that the Ministry has conducted to date. Thirdly, it considers the results of an international assessment of the significance of PISA over the five editions, in which Catalonia participated with its own samples, from 2003 to 2015. Finally, it takes into account the average grades in Catalan and in Spanish obtained by students eligible to enter university in the university entrance exams (PAU) held between 2012 and 2016. The results do not form part of the compulsory education syllabus but do reflect the same trend observed in the other assessments.

A few years ago, the Evaluation Council of the Education System published a report on language knowledge. This was the sixth volume of the 'Quaderns d'avaluació' (Assessment Logs) collection and was entitled *Language Knowledge in Catalonia*, dated September 2006. In this volume, our intention is to update these data, which demonstrate that the Catalan educational system provides equivalent knowledge of the two official languages of Catalonia. This statement is evident both when analysing the average grades of the students and when taking into account the grades of the schools themselves.

All the information about the tests can be found in the web of the Evaluation Council of the Education System: http://csda.gencat.cat/en/.

JOAN MATEO ANDRÉS
President of the Evaluation Council of the Education System

1. RESULTS OF THE ASSESSMENTS OF THE DEPARTMENT OF EDUCATION

Since the academic year 2008-2009 the Department of Education of the Generalitat de Catalunya has carried out an annual external assessment which applies to all students in the sixth year of primary school. The test assesses the basic language and mathematics proficiency that students should have achieved by the end of this educational stage. It provides information for schools and families about students' strengths and the areas that need to be improved, and facilitates the transition to compulsory secondary education. It also provides information for the educational administration about the situation of the educational system as a whole. The test results are intended purely as guidance for students as they do not determine their progression to compulsory secondary education.

During the academic year 2011-2012, the Department of Education carried out an external assessment on all students in the fourth year of compulsory secondary education for the first time. This assessment was similar to the test held in the sixth year of primary school but adapted to the level of proficiency and basic knowledge expected in the final year of secondary education. The results of this test do not determine whether or not the graduating student achieves their compulsory secondary education certificate.

The assessment instruments used to measure linguistic proficiency in Catalan and Spanish are the same in terms of their structure and the level of difficulty of the activities, as well as the criteria for implementing and marking the tests. For this reason, the results provided by these assessments on proficiency in the two languages are fully comparable. The results are expressed on a scale of 0 to 100.

The analysis of the data that these assessments provide enables us to draw various conclusions about proficiency in Catalan and Spanish of students in Catalania.

1.1. Assessment of the sixth year of primary education

The results obtained by students in the sixth year of primary education in language proficiency (Graph 1.1) are satisfactory, in terms of both Catalan and Spanish. Over the different tests, grades ranged between 70 and almost 80 points. These results are similar in both languages: the average difference over the whole period is fewer than two points on a scale of 100. In the latest edition of the test, the variation is even lower, at one point. In view of these results, we can state that **Catalan students move on to compulsory secondary education with effective and similar proficiency in both official languages**.

100 90 80 73.7 70 60 50 40 30 20 10 0 Year 2009 Year 2010 Year 2011 Year 2012 Year 2013 Year 2014 Catalan language Spanish language

Graph 1.1. Assessment of the sixth year of primary education. Average grade in Catalan and Spanish, 2009-2016

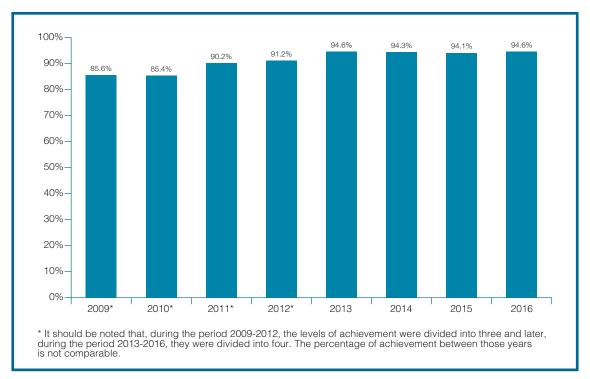
Source: Evaluation Council of the Education System. Department of Education

Graph 1.2 shows the percentage of students who, having passed the proficiency test in Catalan, also achieved basic skills in Spanish. In the different editions of the test, the vast majority of students who passed the Catalan test also passed the Spanish test. Since the academic year 2008-2009, this ratio has increased, settling at around 94% in the last four editions.

It should be noted that, in the first four editions of the test on sixth year primary school students, the levels of competence were divided into three sections (low, intermediate and high), while from 2012-2013, a fourth level was added (low, medium-low, medium-high, high). The level that indicates that the competence has not been achieved is always the low level. This is also the reason for the differences in the upward trend. However, since the time that four levels of competence have been assessed, the percentage of students who have achieved and exceeded the basic proficiency test in both Catalan and Spanish has remained stable at over 94%. This indicates that, in Catalonia, there are not two streams in terms of learning both official languages, as **students who perform well in one language generally achieve good results in the other language, too**.

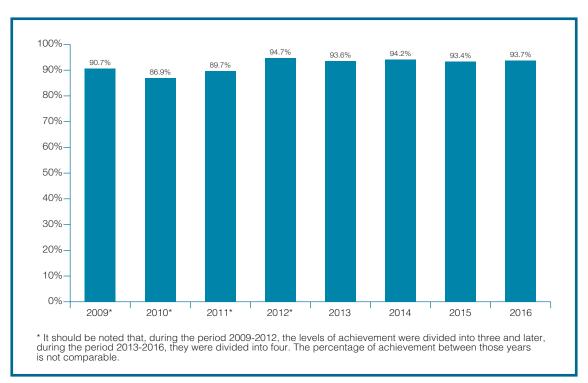
Graph 1.3 shows the proportion of students who, having passed the Spanish proficiency test, also acquired basic language skills in Catalan. The conclusions that can be drawn are very similar to those of Graph 1.2.

Graph 1.2. Assessment of the sixth year of primary education. Correlation in proficiency in Catalan and Spanish, 2009-2016



Source: Evaluation Council of the Education System. Department of Education

Graph 1.3. Assessment of the sixth year of primary education. Correlation in proficiency in Spanish and Catalan, 2009-2016



The balance between proficiency in Catalan and Spanish is maintained when considering the results of the students who get high and low grades in the tests. Leaving aside the fact that the results are relatively good, in every section of the breakdown the students achieved similar grades in both Catalan and Spanish.

To unify the data from all the assessments, the average grades of the students were distributed into four equal sections. Each quartile was allocated 25% of the data. The first quartile has the lowest 25% of the data, the second quartile goes up to 50% of the data (median) and third quartile goes up to 75% of the data.

When considering the 25% of students with the lowest performance in the tests, the difference in the results between one language and another is around 2.5 points in every edition. It is worth noting that, in the last edition of the tests, there was no difference between the results of the two languages. In the case of students who achieved average performance (the median of the distribution), the differences are 2.2 points. Of the top performing students (corresponding to the third quartile), the differences are even lower, at under two points. It should be noted that these differences have fallen, particularly in the last edition of the test, as they barely exceed one point of difference in any quartile.

Table 1.1. Assessment of the sixth year of primary education. Average grades by quartiles in Catalan and Spanish, 2009-2016

		Average grade				
Year	Competition	First quartile (25% percentile)	Median (50% percentile)	Third quartile (75% percentile)		
2008-2009	Catalan language	68.6	79.5	87.9		
2006-2009	Spanish language	65.8	76.8	86.5		
2009-2010	Catalan language	64.3	76.7	86.0		
2009-2010	Spanish language	61.2	73.5	83.6		
2010-2011	Catalan language	69.1	79.4	87.9		
2010-2011	Spanish language	64.3	75.6	85.2		
2011-2012	Catalan language	71.2	82.9	91.3		
2011-2012	Spanish language	68.4	79.4	87.8		
2012-2013	Catalan language	62.0	73.8	82.9		
2012-2013	Spanish language	65.1	75.4	84.1		
2013-2014	Catalan language	67.8	77.9	86.4		
2013-2014	Spanish language	68.0	78.3	85.6		
2014-2015	Catalan language	65.6	77.0	86.1		
2014-2015	Spanish language	68.4	78.3	85.6		
0015 0016	Catalan language	65.5	77.3	85.5		
2015-2016	Spanish language	65.5	76.4	84.5		

Source: Evaluation Council of the Education System. Department of Education

There is a high correlation between the average grades obtained by the schools in Catalan and Spanish language tests, as shown in Table 1.2 and in Graph 1.4 (with data from 2016, to give just one example). The Pearson correlation coefficient, a statistical index that captures the degree of linear association between two variables, is over 0.8 (of a maximum of 1) for the entire period analysed. In other words, the schools of students who did well in the proficiency tests for one language also achieved high grades in the other official language.

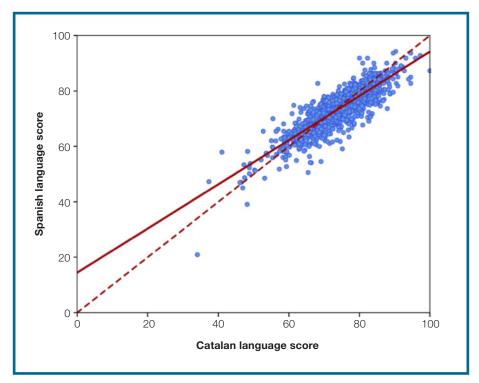
Similarly, schools with a low achievement level in one language tend to show similarly poor results in the other language. Unsurprisingly, in the sixth year of primary school, considering the data for the academic year 2015-2016, 74.6% of the factors that influence student performance were common to both languages. It is notable that there is a high degree of synergy in learning both Catalan and Spanish, whereby progress in one of the languages leads to an improvement in the command of the other.

Table 1.2. Assessment of the sixth year of primary education. Correlation between the average grades of schools in Catalan and Spanish, 2009-2016

Year	Pearson correlation coefficient
2008-2009	0.842
2009-2010	0.837
2010-2011	0.826
2011-2012	0.896
2012-2013	0.871
2013-2014	0.890
2014-2015	0.856
2015-2016	0.864

Source: Evaluation Council of the Education System. Department of Education

Graph 1.4. Assessment of the sixth year of primary education. Correlation between the average grades of schools in Catalan and Spanish, 2015-2016



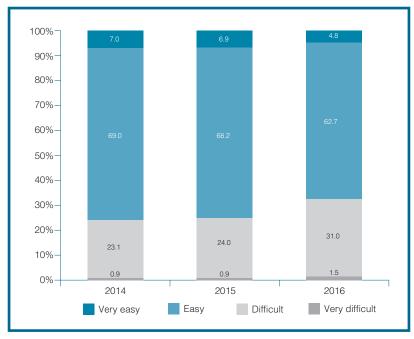
Source: Evaluation Council of the Education System. Department of Education

In Graph 1.4, each dot represents a school. The Linear $R^2 = 0.746$ and the Pearson correlation = 0.864 (74.6% in the percentage of R squared).

1.1.1. PERCEPTION OF DIFFICULTY OF THE TESTS

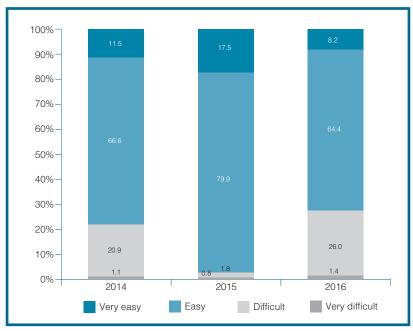
The similarity between Catalan and Spanish not only occurs in students' performance but also in their perception of the difficulty of the tests. In the last three editions of the assessment in the sixth year of primary school, the percentage of students who found the tests easy or very easy in Catalan and in Spanish is always above 70%, except in the case of Catalan in the 2015-2016 academic year, when it fell to 67.5%. In an exceptional case, it can be seen that the percentage of students who considered the tests in Spanish to be easy or very easy was 97.4% in the 2014-2015 academic year.

Graph 1.5. Assessment of the sixth year of primary education. Percentage of perceived difficulty of the Catalan language test, 2014-2016



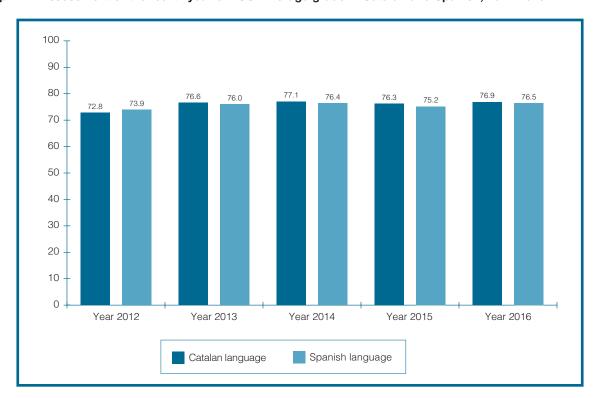
Source: Evaluation Council of the Education System. Department of Education

Graph 1.6. Assessment of the sixth year of primary education. Percentage of perceived difficulty of the Spanish language test, 2014-2016



1.2. Assessment of the fourth year of ESO

Students in the fourth year of compulsory secondary education obtained satisfactory results in both Catalan and Spanish (Graph 1.7). The average grades in both languages were very balanced, with an average difference throughout the tests of no more than one point in 100. Consequently, **the small difference between the two languages in the sixth year of primary school (1.8 points) drops even further by the fourth year of compulsory secondary education (0.8 points)**.



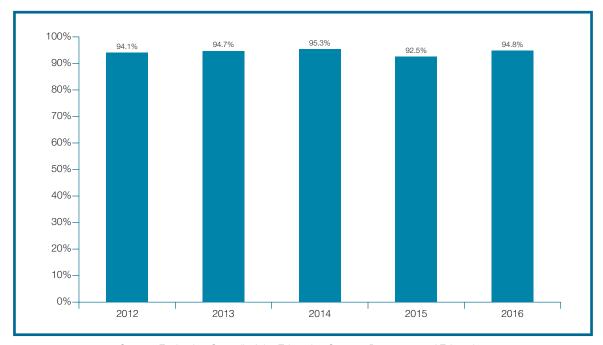
Graph 1.7. Assessment of the fourth year of ESO. Average grade in Catalan and Spanish, 2012-2016

Source: Evaluation Council of the Education System. Department of Education

In line with Graph 1.7, it can be seen that virtually all the students who passed the test in one of the official languages also did so in the other: between 92% and 95%, depending on the year, of students who passed the basic proficiency test in Catalan also did so in Spanish, as shown in Graph 1.8. This degree of coincidence is even greater than in the test conducted in the sixth year of primary school.

With regard to the percentage of students who achieved basic proficiency in both Spanish and Catalan, it is usually around 95%, except in the first edition of the test, when it was 92.2% (Graph 1.9).

Graph 1.8. Assessment of the fourth year of ESO. Correlation in passing Catalan and Spanish tests, 2012-2016



Source: Evaluation Council of the Education System. Department of Education

Graph 1.9. Assessment of the fourth year of ESO. Correlation in passing Spanish and Catalan tests, 2012-2016

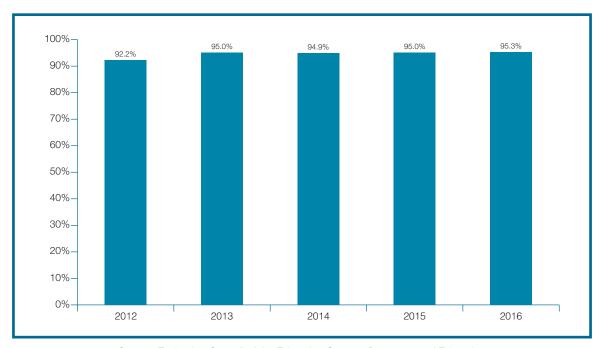


Table 1.3 shows that the progressive similarity in terms of the command of Catalan and Spanish over the course of compulsory education occurs not only in overall terms but also when analysing the grades of students with differing performance levels. The average of the differences between the two languages is around one point, both among students in the 25% quartile and those in the second and third quartile. Compared to the sixth year of primary school test, it can be seen that the disparity between the grades for Catalan and Spanish drops even further.

Table 1.3. Assessment of the fourth year of ESO. Average grades by quartiles in Catalan and Spanish, 2012-2016

		Average grade					
Year	Competition	First quartile (25% percentile)	Median (50% percentile)	Third quartile (75% percentile)			
2011-2012	Catalan language	65.7	75.2	83.3			
2011-2012	Spanish language	66.6	76.6	84.5			
2012-2013	Catalan language	70.2	79.3	86.8			
2012-2013	Spanish language	69.0	78.2	85.9			
2013-2014	Catalan language	70.5	79.9	87.2			
2013-2014	Spanish language	69.9	77.9	85.1			
0014 0015	Catalan language	68.9	79.2	87.0			
2014-2015	Spanish language	68.5	78.0	85.3			
0045 0040	Catalan language	69.4	79.7	87.5			
2015-2016	Spanish language	69.8	79.1	85.5			

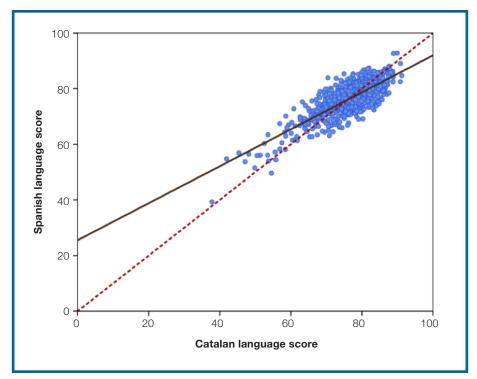
Source: Evaluation Council of the Education System. Department of Education

The schools' grades in Catalan and Spanish are strongly correlated (around 0.7 points out of one in every test), as you can see in the assessment of the sixth year of primary school. This association is positive, insofar as the higher the grade achieved by the school in one language, the better the results in the other language. The probability of a school achieving high performance in Catalan and low in Spanish is minimal, and the same applies in the opposite direction: it is very rare for a school to achieve good results in Spanish and low grades in Catalan.

Table 1.4. Assessment of the fourth year of ESO. Correlation between the average grades of schools in Catalan and Spanish, 2012-2016

Year	Pearson correlation coefficient
2011-2012	0.782
2012-2013	0.753
2013-2014	0.660
2014-2015	0.740
2015-2016	0.793

Graph 1.10. Assessment of the fourth year of ESO. Correlation between the average grades of schools in Catalan and Spanish, 2015-2016



Source: Evaluation Council of the Education System. Department of Education

In Graph 1.10, each dot represents a school. The Linear $R^2 = 0.629$ and the Pearson correlation = 0.793 (62.9% in the percentage of R squared).

An analysis of the results obtained in each territory shows that students in the fourth year of ESO present a similar performance in both Catalan and Spanish, regardless of the territory. No significant differences were found between different territories across all the editions of the tests (table 1.5).

Table 1.5. Assessment of the fourth year of ESO. Average grade in Catalan and Spanish by territorial area, 2013-2016

	20	13	20	14	20	15	20	16
Territorial area	Catalan language	Spanish language	Catalan language	Spanish language	Catalan language	Spanish language	Catalan language	Spanish language
Baix Llobregat BLL	75.1	75.5	76.8	76.9	76.3	75.1	76.1	76.3
Barcelona Comarques BCN-CO	74.0	74.1	73.7	75.3	73.4	74.0	74.8	75.7
Catalunya Central CAT-C	76.5	74.2	77.3	75.7	76.5	73.6	77.3	76.5
Consorci d'Educació de Barcelona CEB	78.6	78.5	79.4	77.7	78.5	77.9	78.5	78.3
Girona Gl	76.3	74.7	77.6	75.3	75.2	73.5	76.5	76.1
Lleida LL	75.8	77.4	78.5	78.3	78.2	75.3	78.9	76.2
Maresme - Vallès Oriental M-VO	78.2	76.8	78.0	76.2	77.0	75.2	77.5	76.6
Tarragona TRG	76.6	74.9	76.4	75.5	75.4	72.9	76.0	75.5
Terres de l'Ebre TEB	77.9	76.4	76.6	74.8	80.8	75.8	76.4	76.8
Vallès Occidental VOC	75.7	75.7	76.0	76.6	74.6	75.4	76.2	76.4

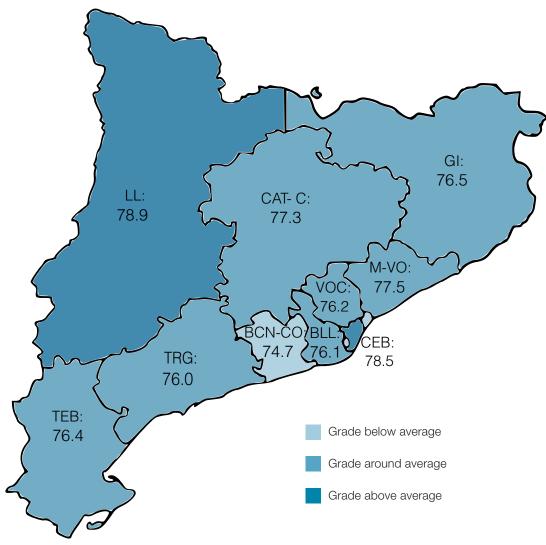
Source: Evaluation Council of the Education System. Department of Education

The analysis of the results of the ten territorial services in which the Education Department is organized shows that the average difference between the grades in both Catalan and Spanish is between 1 and 2 points with some specific exceptions in which the difference exceeds 3 points. The similarity in the proficiency of the two official languages throughout the terri-

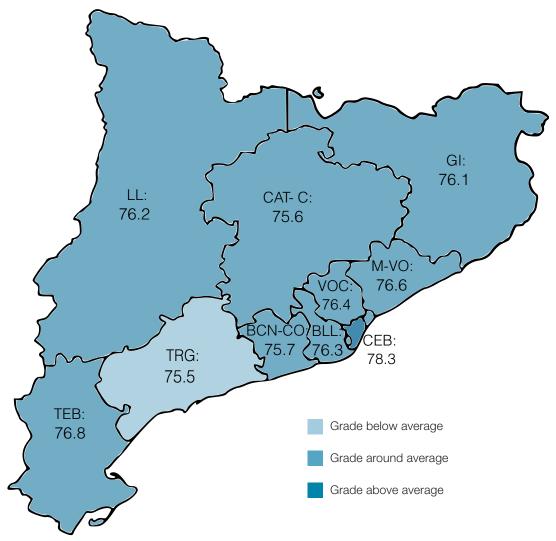
tory indicates that the Catalan Education System guarantees a good knowledge of both Catalan and Spanish at the end of compulsory education, irrespective of the social use made of the languages in the different territorial areas.

The maps below show the average grades obtained in Catalan and Spanish in the assessment of the fourth year of ESO in 2015-2016.

Map 1.1. Assessment of the fourth year of ESO. Average grade in Catalan by territorial area, 2015-2016



Map 1.2. Assessment of the fourth year of ESO. Average grade in Spanish by territorial area, 2015-2016



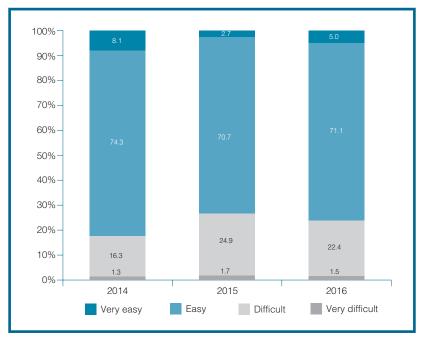
Source: Evaluation Council of the Education System. Department of Education

1.2.1. PERCEPTION OF DIFFICULTY OF THE TESTS

The similarity between Catalan and Spanish not only occurs in students' performance but also in their perception of the difficulty of the tests. In the fourth year of ESO, there is a very similar pattern to that observed in the assessment of the sixth year of primary school.

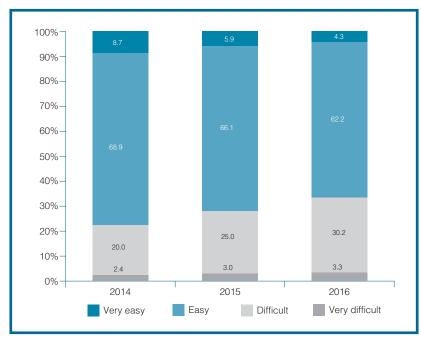
In Catalan (Graph 1.11), more than 70% of the students considered that the test was easy or very easy. In Spanish (Graph 1.12), more than 70% of students considered that the test was easy or very easy, apart from the 2015-2016 academic year when this percentage dropped to 66.5%.

Graph 1.11. Assessment of the fourth year of ESO. Percentage of perceived difficulty of the Catalan language test, 2014-2016



Source: Evaluation Council of the Education System. Department of Education

Graph 1.12. Assessment of the fourth year of ESO. Percentage of perceived difficulty of the Spanish language test, 2014-2016



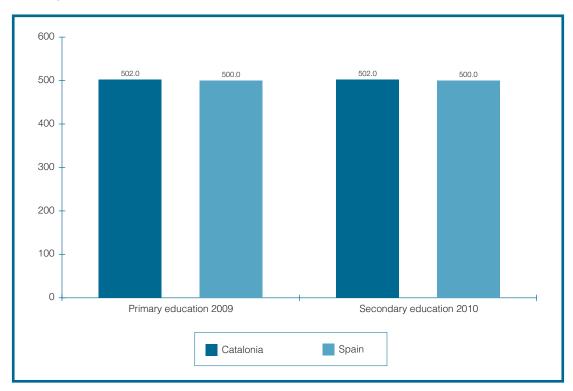
2. RESULTS OF THE ASSESSMENTS OF THE MINISTRY OF EDUCATION, CULTURE AND SPORT

The general diagnostic assessments (EGD), carried out under the provisions of Organic Law 2/2006, of 3rd May 2006 on Education, aim to periodically assess proficiency in basic skills of students in the fourth year of primary education and the second year of compulsory secondary education (ESO). The EGD assessments have only been implemented once for each school year. The preparation, management and correction of tests is the responsibility of the Ministry of Education, Culture and Sport.

The EGD, which were applied to a representative sample of students and schools throughout Spain, evaluate language skills, mathematics, and knowledge of and interaction with the physical, social and civic worlds. In all the autonomous regions, proficiency tests were conducted in Spanish, so the results of Catalan students are directly comparable with those of the rest of Spain. It is for this reason that these data are taken into consideration, rather than the diagnostic assessments used by the Department of Education in Catalonia only during the 2011-2015 period.

The EGD were carried out in primary schools (fourth year) in 2009 and in secondary schools (second year) in 2010. The analysis of data from the abovementioned assessments allows conclusions to be drawn on the proficiency in Spanish of students in Catalonia.

Graph 2.1. General diagnostic assessment. Average scores for linguistic proficiency in Spanish. Catalonia and Spain, 2009 and 2010

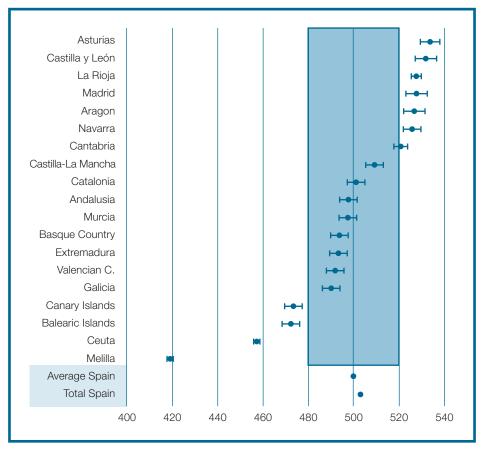


Source: Based on data from the National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

As shown in Graph 2.1, the results of the proficiency in Spanish of students in Catalonia do not differ significantly from the average scores in Spain.

In the evaluation of primary education in 2009, Catalonia obtained 502 points, a result similar to that of communities such as Castilla-La Mancha, Andalusia, the region of Murcia and the Basque Country. Catalonia is one of the autonomous regions with its own language that achieved the highest scores in Spanish language proficiency, ahead of the Balearic Islands (471), Valencia (491) and Galicia (489), and with a level similar to the Basque Country (494). These data show that, by the fourth year of primary education, **students in Catalonia already have a command of the Spanish language comparable to the average in Spain**.

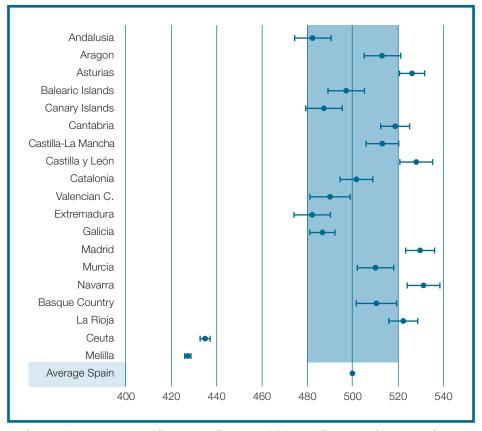
Graph 2.2. General diagnostic assessment of primary education. Average scores in Spanish. Autonomous communities of Spain, 2009



Source: National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

In the assessment of secondary education in 2010, the score of Catalan students was also 502 points, which is similar to the score of students in Aragon, the Balearic Islands, the Canary Islands, Cantabria, Castilla La Mancha, the Valencian Community, Extremadura, Galicia, Murcia and the Basque Country.

Graph 2.3. General diagnostic assessment of ESO. Average scores in Spanish. Autonomous communities of Spain, 2010

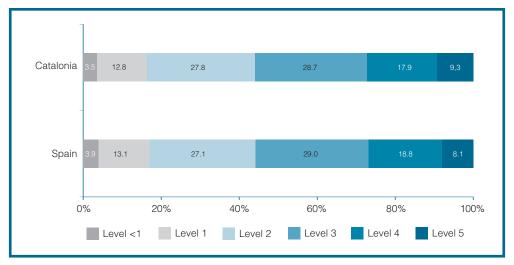


Source: National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

The distribution of Catalan students by performance levels in terms of proficiency in Spanish is very similar to the average for Spain in terms of both primary and secondary education. The percentage of students with a lower performance level (levels <1 and 1) is significantly lower in Catalonia than the national average in both educational stages. It can therefore be concluded that **the proportion of students who are lagging behind in learning Spanish is not attributable to the linguistic model applied in compulsory education in Catalonia, given that this percentage is very similar to the rest of Spain**. In the upper levels of proficiency (levels 4 and 5), there are no significant differences between the average of students from Catalonia and the Spanish average.

In the EGD conducted in primary schools in 2009, 16.3% of students in Catalonia fell within the lower levels of proficiency (levels <1 and 1), while the percentage of students in the rest of Spain was 17%. The percentage of students in the highest level of proficiency (level 5) was 9.3 for Catalan students, compared to 8.1 for Spain as a whole. The percentage of students placed at intermediate levels (levels 2 and 3) was also very similar. Consequently, **in the fourth year of primary school, students in Catalonia demonstrated that they have the same knowledge of Spanish as other students in Spain**.

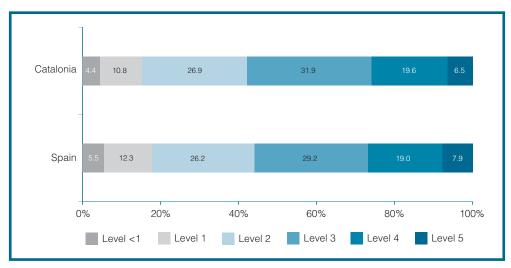
Graph 2.4. General diagnostic assessment of primary education. Percentage of students by performance level in Spanish. Catalonia and Spain, 2009



Source: Based on data from the National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

The distribution of students by performance level in Spanish in EGD tests in secondary schools in 2010 shows data similar to those observed in the EGD conducted in primary schools the year before. It can therefore be concluded **that second year secondary school students in Catalonia have the same knowledge of Spanish as all other students in Spain**.

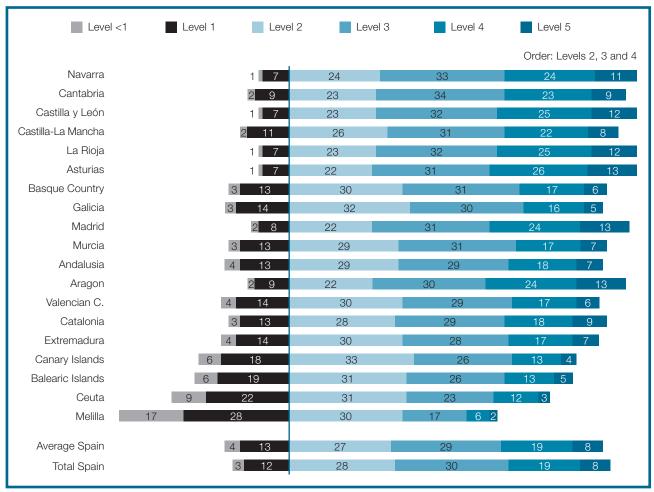
Graph 2.5. General diagnostic assessment of ESO. Percentage of students by performance level in Spanish. Catalonia and Spain, 2010



Source: Based on data from the National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

The two graphs below show the percentage of students in all the autonomous regions divided into five proficiency levels. In the case of the EGD in primary schools (Graph 2.6), it can be seen that the percentage of students in Catalonia at the lower levels (<1 and 1) are similar to those in the Basque Country, Galicia, the Valencian Community, Murcia and Extremadura. The percentage of students placed at the highest level (level 5) coincides with that of Cantabria. The percentage of students at the third level is close to 30% in all regions except Ceuta and Melilla.

Graph 2.6. General diagnostic assessment of primary education. Percentage of students by performance level in Spanish. Autonomous communities of Spain, 2009

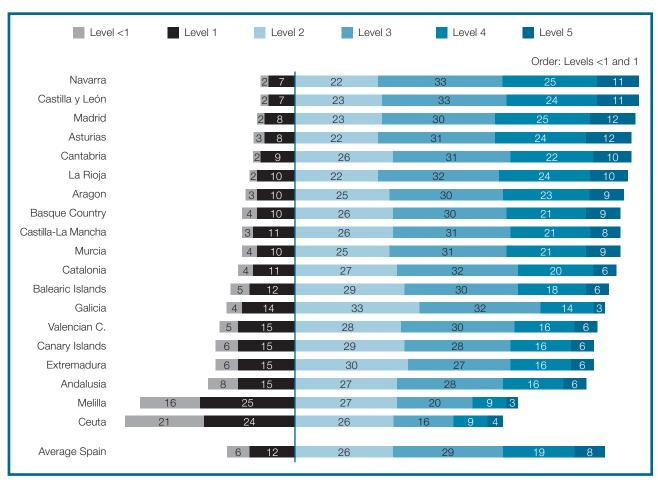


Source: National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

In the EGD in secondary schools (Graph 2.7), it can be seen that the percentages of students in Catalonia at the lower end of the scale (levels <1 and 1) are similar to those in the Basque Country, Galicia, Aragon, Murcia and Castilla-La Mancha. The percentage of students placed at the highest level (level 5) coincides with the Balearic Islands. It can also be seen that, as in the EGD tests in primary schools, the percentage of students at Level 3 is around 30% in all the autonomous regions except Ceuta and Melilla.

Data from the general diagnostic assessment, administered by the Ministry of Education, Culture and Sport, show that **the education system in Catalonia has no negative influence whatsoever on the learning of Spanish by students in Catalonia**.

Graph 2.7. General diagnostic assessment of ESO. Percentage of students by performance level in Spanish. Autonomous communities of Spain, 2010



Source: National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

Taking into consideration the total variance of the results from the EGD in primary schools (Table 2.1), it can be seen that Catalonia has a significantly higher dispersion than the Spanish average. However, in Catalonia, **the variability of the results is mainly due to the variance within schools, rather than the differences between schools**. The limited dispersion between schools shows that language proficiency in Spanish is equally widespread in all types of schools. **The Catalon education system guarantees that no school will fall behind in terms of proficiency in the two official languages**.

By analysing the variance explained by the socioeconomic and cultural indicators of the families (ISEC), it can be seen that the influence of this factor on student performance is higher on average in Spain than in Catalonia, whether looking at the variance between schools or within schools. These results indicate that, in Catalonia, Spanish language learning is less determined by family status than in the rest of Spain.

Table 2.1. General diagnostic assessment of primary education. Variance in the results of Spanish language proficiency. Catalonia and Spain, 2009

	Total variance	Total variance	Total variance	Variance explained by the ISEC		
	Total variance	between schools	within schools	Between schools	Within schools	
Spain	100.0	15.8	84.1	6.0	4.1	
Catalonia	107.4	6.5	100.8	3.9	3.5	

Source: Based on data from the National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

In contrast to the results from primary schools, in the EGD carried out in secondary schools (Table 2.2.), the dispersion of results is lower in Catalonia than in Spain on average. This is essentially due to the drop in the variance within schools, as the dispersion between schools continues to be low. These data allow us to confirm that, throughout compulsory education, the Catalan educational system is capable of minimizing the differences in Spanish language performance that occur within the same school. In secondary education, the impact of a family's socioeconomic and cultural level remains low and is now similar to the Spanish average.

Table 2.2. General diagnostic assessment of ESO. Variance in the results of Spanish language proficiency. Catalonia and Spain, 2010

	Total variance	Total variance	Total variance	Variance explained by the ISEC		
	Total variance	between schools with		Between schools	Within schools	
Spain	100.0	16.6	83.4	6.5	4.0	
Catalonia	95.6	12.0	83.6	4.6	4.5	

Source: Based on data from the National Institute of Educational Evaluation. Ministry of Education, Culture and Sport

3. RESULTS OF THE PISA INTERNATIONAL ASSESSMENTS

One of the international studies that is most widely acclaimed for its rigorous methodological approaches, as well as the widespread participation of countries and economies, is the *Programme for International Student Assessment*, known by the acronym PISA and promoted by the OECD. Every three years, the programme evaluates the skills of a representative sample of 15-year-old students in reading, mathematics and science.

Since 2000, when the first PISA tests were held, six assessments have been carried out. Since 2003, Catalonia has taken part in the study with an expanded sample, in accordance with the Ministry of Education, Culture and Sport, in order to obtain more accurate data on the region. Over the years, this practice has been extended to other autonomous communities in Spain.

It is worth noting that, in Catalonia, the reading comprehension test is performed in Catalan.

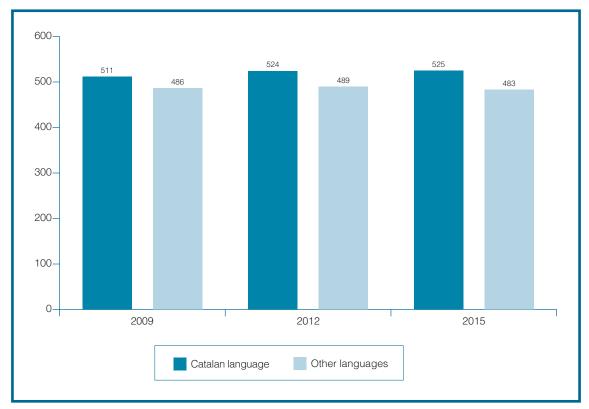
In all the editions of PISA in which Catalonia has had its own sample, the average scores in reading comprehension have been higher than those for Spain as a whole. For example, there were 2 points of difference in PISA 2003, 16 points in PISA 2006, 17 points in PISA 2009, 13 points in PISA 2012 and 4 points in PISA 2015.

Catalonia Spain

Graph 3.1. Evolution of the average score in reading comprehension. PISA 2003-2015

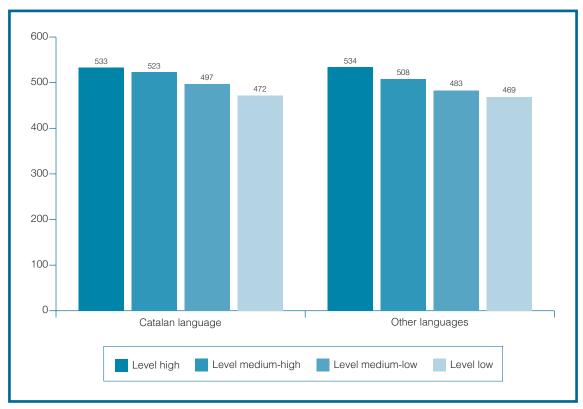
One might assume that the fact that some Catalan students speak a different language at home from the one used for compulsory education (Catalan) would limit the opportunity for these students to perform well in tests such as the PISA assessment. Graph 3.2 shows the average scores obtained in reading by students in Catalonia in the last three cycles of PISA, broken down by the language spoken at home. Students who speak Catalan at home obtained an average score of over 500 points, while students who speak other languages achieved an average score of less than 490 points.

Graph 3.2. Average score in reading comprehension according to the language spoken at home. PISA 2009, 2012 and 2015



However, in Graph 3.3 (with data from PISA 2009 that could be extrapolated to another cycle), it can be seen that the potential differences in performance are not only attributable to the language students speak at home, but also, and most importantly, to the cultural and socioeconomic status of their families. Thus, among students with a high socioeconomic and cultural level, the grade is very similar, regardless of whether they usually speak Catalan or other languages at home. The same is true when considering students from families with a lower socioeconomic and cultural status (where the gap is just three points). It can be concluded, therefore, that **the language of habitual use of Catalan students does not determine their chances of performing well in reading comprehension tests**, but rather that the determining factors are primarily due to the cultural and socioeconomic status of their families.

Graph 3.3. Results of reading comprehension tests according to socioeconomic background and cultural level. PISA 2009



4. RESULTS OF UNIVERSITY ENTRANCE EXAMINATIONS (PAU)

A good indicator of the knowledge of Catalan and Spanish among students in Catalonia is the results of the university entrance examinations, known as the PAU. They do not form part of compulsory education, but do demonstrate proficiency in the language at a crucial stage of the educational system, i.e. the end of high school and before entering university.

Table 4.1. shows the results obtained in the PAU in the subjects of Catalan language and literature, and Spanish language and literature over the last five years. **The results are comparable in the two official languages of Catalonia and very similar over the five year period** both in Catalan and Spanish language, slightly exceeding six points, on a scale from 0 to 10. The average grades in Spanish are always a few tenths higher than in Catalan.

Table 4.1. Average scores in Catalan and Spanish of students eligible to enter university. PAU 2012-2016

	2012	2013	2014	2015	2016
Catalan language and literature	6.12	6.17	6.23	6.35	6.09
Spanish language and literature	6.38	6.23	6.53	6.42	6.17

Source: Inter-University Council of Catalonia. Offices for University Entrance. Secretariat for Universities and Research.

Department of Business and Knowledge

The results obtained in university entrance examinations over the last five years show that the Catalan education system provides a similar grounding in both Catalan and Spanish.

5. CONCLUSIONS

Having analysed the results of students in Catalonia for both Catalan and Spanish in different assessments that have been designed and implemented by different assessment agencies, the following conclusions can be reached about the acquisition of the two languages:

Assessments of the Department of Education of the Generalitat de Catalunya (2009-2016)

- a) Catalan students get very similar results in the Catalan and Spanish language tests implemented by the Department of Education in the sixth year of primary education. Students move from primary to secondary school with an effective and similar command of both official languages.
- b) The convergence in performance between Catalan and Spanish when students reach the fourth year of ESO is even higher, which shows that the Catalan education system guarantees equal proficiency in both languages by the end of compulsory education.
- c) The high correlation between the grades in Catalan and Spanish indicates that there is a great complementary factor in learning both languages, whereby proficiency in one language has the effect of improving proficiency in the other.
- d) In Catalonia, there are not two communities divided by learning the two official languages, as the balance between command of Catalan and Spanish remains even when considering the results of students who get high or low grades in the two tests.

Assessments of the Ministry of Education, Culture and Sport (2009 and 2010)

- e) According to the general diagnostic assessments (EGD) of the Ministry of Education, Culture and Sport, the results of Catalan students' language proficiency do not differ significantly from the Spanish average. This pattern is the same in both primary and secondary education.
- f) Catalonia is one of the autonomous communities with its own language to achieve the highest scores in the EGD tests in both primary and secondary education.
- g) The proportion of students who fall behind in learning Spanish is not attributable to the linguistic model used by the Catalan educational system, as this percentage is very similar in the rest of Spain.
- h) According to the EGD tests, in Catalonia, Spanish language learning is less influenced by the cultural and socioeconomic status of families than in the rest of Spain.
- i) Throughout compulsory education, the Catalan educational system is capable of reducing the differences in Spanish performance that occur within the same school.

PISA assessments (2003, 2006, 2009, 2012 i 2015)

j) According to the PISA study, the differences in student performance in reading cannot be attributed to the language that students speak at home, but rather to their families' socio-economic background and cultural status.

PAU examinations (2012-2016)

k) The results in Catalan language and literature and Spanish language and literature over the last five years have been the same in both.

6. INFORMATION SOURCES

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- «Estudi PISA 2009. Avançament de resultats». Quaderns d'avaluació, 19. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, abril de 2011.
- «L'avaluació de sisè d'educació primària 2011. Síntesi de resultats». *Quaderns d'avaluaci*ó, 20. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, setembre de 2011.
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- «L'avaluació de sisè d'educació primària 2012. Síntesi de resultats». *Quaderns d'avaluació*, 23. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, setembre de 2012.
- «L'avaluació de quart d'ESO 2013». Quaderns d'avaluació, 25. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, abril de 2013.
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- «Els resultats de PISA 2012 a Catalunya. Avançament de resultats». *Quaderns d'avaluació*, 27. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, gener de 2011.
- «L'avaluació de quart d'ESO 2014». Quaderns d'avaluació, 28. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, abril de 2014.
- «L'avaluació de sisè d'educació primària 2014». Quaderns d'avaluació, 29. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, setembre de 2014.
- «L'avaluació de quart d'ESO 2015». Quaderns d'avaluació, 31. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, abril de 2015.
- «L'avaluació de sisè d'educació primària 2015». Quaderns d'avaluació, 32. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, setembre de 2015.
- «L'avaluació de quart d'ESO 2016». *Quaderns d'avaluació*, 34. Barcelona: Departament d'Ensenyament, Consell Superior d'Avaluació del Sistema Educatiu, abril de 2016.
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