# European Survey on Language Competences ESLC 

## SECONDARY RESEARCH

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# European Survey on Language Competences ESLC 

## SECONDARY RESEARCH

## MINISTERIO DE EDUCACIÓN, CULTURA Y DEPORTE

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## EUROPEAN SURVEY ON Language Competences ESLC

Secondary Research

## Foreword

"Without data, you are just another person with an opinion". This is the phrase with which Andreas Schleicher, Director of Education of the OECD, closes all of his emails. This institution has set as one of its objectives to carry out education policy analysis based on empirical evidence, and indeed that education policy must consider the principal results and conclusions of the most reputable research in its decision making.

With this goal of linking education policy to the research of empirical evidence, the Spanish version of the European Study of Competence in Languages (ESCL) has been structured into two volumes. In the first volume, conducted by the National Institute for Educational Evaluation (INEE), of the Ministry of Education, Science and Sport, the most prominent data from the international report are presented and those of Spain compared in detail with the rest of the participating countries and regions. In the second volume the INEE has relied on the studies of four Spanish research groups specialised and interested in education in order to exploit the findings of rigorous and detailed analysis in decision making. Professors from various universities in our country have had the opportunity to work with the database resulting from the EECL ${ }^{1}$ and to concentrate on specific aspects that have great relevance to linguistic competence and thus to draw conclusions of major interest through the use of sound statistical models. This source of information is released at the same time as the publication of the report and made available to the entire research community. The Ministry of Education, Culture and Sport has the firm intention of carefully considering the lessons that can be learned from the studies of research groups on education. "Evidence in Education: Linking Research and Policy" was the title of the major OECD publication of 2007 and of which this Volume II of the EECL wants to be an example.

This volume complements the report by including four chapters conducted by outside researchers who delve into the analysis of the results and focus on certain specific aspects.
${ }^{1}$ The database used in this volume is the one corresponding to the main sample and does not include data from the enlarged samples.

- In the first chapter Sara de la Rica and Ainara González establish the determinants of academic achievement in English competence in Spain. In order to do this they explore how English learning comes about in our country using the results of the ESCL study, and comparing the results of Spanish students with those in Sweden, who show a better performance in this study.
- The second chapter investigates the environmental exposure and use of the foreign language in non-formal contexts as an element for improvement in listening comprehension. José Manuel Vez, Esther Martínez and Alfonso Lorenzo look over the data of the ESCL study regarding the results of the best performing countries, focusing on the environmental contact available in each country.
- Attributing importance to the dimensions of competence in examinations and performance in English is the central axis to the third chapter, in which Eva Expósito, Esther López, Enrique Navarro and José Luis Gaviria analyse assessment as a fundamental element of the teaching-learning process, classifying the teachers' attitude towards assessment in distinct models which influence the results of the students participating in the study in different ways.
- The fourth and final chapter of this volume has been produced by Brindusa Anghel and Maia Güell. In it the authors reflect on the determinants of French learning in Spain, starting with the essential characteristics of learning this language in our country in which, in most cases, it is an optional subject, and thus something which entails some differentiating and specific rules.

Today more than ever it is essential to have adequate training in languages like English and French for students who in the near future will face a world with a labour market characterised by globalisation and the need for communication in diverse fields: commerce, industry, tourism and all types of international relations in general. Language exchanges are rooted in cultural and international relations and make it an essential requirement to know the languages close to our surroundings. This research highlights the importance of making young people, their families and society at large aware of the huge importance of acquiring language skills in languages other than their mother tongue.

Today English is the most widely used language as a first or second language, placing it not only as an alternative or complement to training, but as a requirement on a personal level for achieving a full development in multiple fields of life. The current labour market, which is increasingly demanding, tough and competitive, and where businesses operate on an international level, establishes the need for an international language, a "lingua franca", a role which English has adopted on its being used by a wide range of people, regardless of their origin and nationality.

Below is a brief summary of the authors of the studies included in this volume:

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# Chapter 1 

Determinants of Academic Performance in
English proficiency in Spain
Keys for Improvement

Sara de la Rica*<br>Ainara González de San Román*<br>* University of the Basque Country (UPV-EHU)

Knowing the determinants of the academic performance on linguistic skills in a given country is of crucial importance for the design of efficient education policies. In particular, the learning of languages such as English must constitute a prime concern for the people responsible in decision-making in education, given its growing use in all areas of the human knowledge and development. Curren tly, the English language is considered the universal or international language - it is the first language - Hence, it has become a formative requirement both on a personal level, which facilitates communication in an increasingly globaised world, and of course at a professional level, which increases the chances of finding a good job in an increasingly demanding and competitive labour market. It is therefore necessary to look for the most efficient way to encourage its learning from early on, being able to identify educational systems whose teaching methods, with regards to linguistics, work better and thus creating a social conscience which helps to promote its use.

In this chapter we explore the determining factors of learning English as a foreign language in Spain using data from the European Survey on Language Competences (ESLC). This survey has been designed by the European Commission (2011) for the assessment of foreign language proficiency of students in the final year of secondary education ${ }^{1}$ in several European countries, and therefore aged between 13 and 16 years. Approximately 53,000 students, enrolled in schools of the 16 participating institutions, were evaluated. Each participating institution carries out the test for the two most widely taught foreign languages to the students who have completed at least one academic year in the language being assessed - in the case of Spain, the 4th year of ESO (compulsory secondary education): English and French, and in turn in three different skills: reading, writing and oral. In addition to the test results, and to facilitate comparison of language policies and teaching methods, additional context questionnaires were administered to the evaluated students, their foreign language teachers and school heads.

The results of the survey show huge differences in the scores of students from the different participating institutions. In particular, the Spanish students get very low results in the three English skills that are evaluated, as will be discussed in detail in the next section, especially when compared with the results of other participating countries that also have English as their first foreign language, as the case of Sweden. This causes a growing concern centred on the search for possible measures to improve the performance of our students in English. More so when the poor performance of the Spanish students is also present in other areas of knowledge. Specifically, the Program for International Student Assessment (PISA) conducted by the OECD since 2000, and whose methodology is similar to that of the present survey, already revealed that the Spanish educational system was yielding worse results than the European average in the three areas of knowledge that were evaluated there - maths, reading and science ${ }^{2}$. Also Nordic countries such as Finland also were among the best in the PISA ranking of results between the participating European countries.

The question, therefore, is how far the good performance of these countries can help us understand the limitations in language subjects that we have in Spain. For this reason it is extremely important to be able to discern the factors that more intensely affect the results in English language learning, and that therefore

[^0]are not entirely generalizable to other areas of knowledge. This study has two fundamental aims. First, to examine the results obtained by Spanish students in English and compare them to the results obtained by the students of the participating country with the best performance which also has English as a first foreign language - Sweden. And secondly, to analyse the determinants of the results in Spain and to measure their effects, in order to be able to identify the keys to performance improvement.

The chapter is organized as follows: Section 2 provides a detailed description of the differences observed in the results between Spain and Sweden, taking as reference the average results of the participating countries. These differences are described not only at the average but also graphically throughout the distribution of results. Section 3 identifies and describes a broad set of features drawn from the additional questionnaires of the survey, both at the individual student level and at the environmental level - parents, teachers and school centres - as potential determinants of the outcomes. It also shows estimates of standard regression models - Ordinary Least Squares (OLS) - that measure the extent to which these characteristics help to explain the scores in the three evaluated skills. We conclude with a summary of the results in the last section, as well as possible implications of educational policy that we believe key for improvement.

## The data: Descriptive evidence

This section provides a detailed description of the data with particular emphasis on the differences in the test results between Spain and Sweden. It should be taken into account that the differences in the educational systems between the two countries, as well as other institutional and legislative differences, make any comparison between them difficult. However, for the purpose of this study and taking into account the design of the survey, both countries share two fundamental characteristics that, in a way, validate the comparison. On one hand, Swedish is the mother tongue and the only official language in Sweden. In addition, English is a compulsory subject during secondary education, and after that students can choose a second foreign language - German, French or Spanish -. Nevertheless, a clear limitation on the comparison lies on the differences in diffusion and use of the mother tongue: while the Swedish language is spoken by between 9 and 14 million people, Spanish is one of the most widely spoken
languages in the world - a fact that undoubtedly affects the learning needs for English of Spanish and Swedish people. However, given the compulsory learning of English for the collective of people purpose of our study we believe that this should not be a determining factor in the differences, as we shall see, that are observed between the two countries.

The sample provided by ESCL is stratified in two stages. First, education centres within each country or participating institution are selected at random. Secondly, within each centre, the students who will have to perform the tests are randomly chosen. Finally, each student is examined randomly in two of the three language skills evaluated: (I) oral comprehension (listening), (II) reading comprehension and/or (III) writing. To be more precise, for Spain the sample consists of 1,734 students from 78 centres. Likewise, the sample for Sweden includes 1,579 students from 60 different centres. We selected native students representing 89.19\% and $92.68 \%$ of the samples from Spain and Sweden, respectively, to avoid a potential selection problem for any differences in mother tongue between foreign students as well as the differences associated with cultures and customs of the different countries of origin.

As we have already mentioned in the introduction, Spain is below the average of the participating institutions ${ }^{3}$ in the results of the three tests of English and, at the same time, a long way off the best performing country, Sweden. To confirm these facts, Table 1.1 shows the average score and standard deviation in listening, writing ${ }^{4}$ and reading for Spain, Sweden and the average, as well as the differences between Spain, Sweden and that average. The weights of each student for each of the language skills have been used to calculate the statistics of interest reported in the table, as well as the first of the five plausible values ${ }^{5}$ in each case.

[^1]Table 1.1. Average Score and Deviation of the three linguistic skills

|  | LISTENING |  | WRITING |  | Reading |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average | DEVIATION | Average | DEVIATION | Average | DEVIATION |
| SPAIN | 0.234 | 1.096 | -1.432 | 2.927 | 0.356 | 1.241 |
| Sweden | 2.376 | 1.114 | 1.668 | 1.893 | 2.019 | 1.298 |
| AVERAGE | 0.467 | 1.282 | -1.427 | 3.095 | 0.320 | 1.319 |
| SPAIN-SWEDEN | -2.142 | -0.018 | -3.1 | 1.034 | -1.663 | -0.057 |
| SPAIN-AVERAGE | -0.233 | -0.186 | -0.005 | -0.168 | 0.036 | -0.078 |

Source: Prepared by ESLC 2011.
In the fourth row of Table 1.1 we can see that the differences in the results of Spain with respect to Sweden are particularly high in oral comprehension and writing, also being substantially lower in reading comprehension, though they turn out to be statistically significant in all cases. Comparing Spain with the average of the 13 institutions that have assessed English as a first foreign language - the last row of the table - we can see differences in the average of any of the three tests on a much smaller scale, with the greater distance in oral comprehension in this case. For a graphic analysis of the differences in the results, Figures 1.1, 1.2 and 1.3 show the distribution of scores in English of students in Spain, Sweden and the average, respectively, in each of the three evaluated skills.

Figure 1.1. Density if the results oral comprehension - Listening


Source: Prepared by ESLC 2011.

Figure 1.2. Density of the results in reading comprehension


[^2]Figure 1.3. Density of the results in writing - combined


Source: Prepared by ESLC 2011.

The first thing to notice from a quick inspection of any of the figures is that Spain is long way off Sweden in the three language skills, with relatively minor differences in reading comprehension, just as we observed in Table 1.1. If we compare the distribution for Spain with the corresponding average for the participating institutions which evaluated English as the first language we can observe major differences in the top end of the distribution of results - especially in oral comprehension - suggesting that the poor performance of Spanish students in the English language with respect to the average, is present not only at the average, but also among the best students, showing, just as in the case of recent related studies like PISA, the difficulties faced by the Spanish educational system to achieve excellence among its students.

> Determinants of the performance in English proficiency

In this section we analyse in detail the possible determinants of the low scores in English language of the Spanish students. There is extensive literature based on the main determinants of children's academic performance. See Coleman
(1966) and Heckman (2006). The factors are usually grouped into three broad categories: (I) individual characteristics of the students such as gender, age, motivation, etc., (II) their family background - the education of the parents or their employment status, among others, and (III) the characteristics of the schools where they study as well as the corresponding educational system. These factors are considered as inputs of a production function for the student whose output is his or her own academic performance - usually measured by the score on a given test.

Following this line of reasoning, we now provide a first descriptive part of the most commonly used inputs in the already mentioned educational literature and of those we have in the context questionnaires, in order to later carry out an econometric analysis in greater depth which allows us to isolate and quantify the effects of each of the inputs on the results in English language of the Spanish students of our sample.

Descriptive Analysis

Making use of the additional surveys that were completed by students, teachers and headmasters, Table 1.2 presents the descriptive statistics ${ }^{6}$ of the variables considered as relevant inputs that could affect scores, and for some of which the differences between Spain and Sweden are statistically significant. We then summarise the most outstanding aspects of this descriptive information. Firstly, if we look at the student variables there are basically the same number of boys as girls and the average age is around 15 years in both samples.

[^3]Table 1.2. Descriptive Statistics of the relevant variables - Spain against Sweden


Note: Variables with superscript " $c$ " are continuous. The rest are binary ( $0 / 1$ ) and equal to 1 in each case for the condition that accompanies each variable.

Source: Prepared by ESLC 2011.

In relation to the family environment of the students we observe significant differences between the two countries. First, the percentage of Spanish mothers working full-time is much less than in Sweden - 45\% against 70\%. In addition, the percentage of parents in Spain with the highest level of education, measured by having achieved ISCED 5A, 5B and 6, is lower than in Sweden: more than $50 \%$ of the parents of Swedish students who performed the assessment tests are highly educated, levels that in the case of Spain do not exceed 35\%. Finally, the knowledge of English of parents in Sweden, measured as the percentage of those who know English quite well or well, is much higher than in Spain, in the order of 60\% more in each case, which particularly attracts our attention and is a first sign of the enormous differences which exist in the context or environment between Swedish and Spanish children.

If we focus on the variables related to the dedication to the English language, it can be observed that Spanish students spend much more time doing English homework and attend to more extra classes for English expansion than the Swedish. In contrast, the Swedish students spend more time preparing for English examinations than the Spanish. There is a major difference in the point at which English language learning starts - in Spain it is around three years before that in Sweden. In fact, Spain is the only country of those participating in the evaluation program, along with the German community in Belgium, in which the teaching of a first foreign language is compulsory from Primary Education. In addition to starting very early in life, the students receive more hours of English per week than in Sweden - about 50 minutes more on average.

Regarding the variables related to teachers, it can be observed that those in Sweden work more hours per week, but in turn give fewer class hours in general and also in English. Furthermore, teachers in Spain set much more homework than in Sweden and believe that students should devote more hours to homework, which somewhat explains the fact that Spanish students devote more time to English homework.

Then we try to answer to what extent differences in the groups of factors described in this section affect the observed variability in the results of the three English tests among the Spanish students in our sample.

## Econometric Analysis

In this section linear models are estimated by Ordinary Least Squares (OLS) for the ESLC sample for Spain7 where the dependent variable is the first plausible value of the result in listening, writing and reading respectively. As explanatory

[^4]factors we include a broad set of observed characteristics as described in the previous section. It should be stressed that the survey does not allow us to establish any link between teacher and student, so that the characteristics of the teachers can only be summarised as averages within each centre. Therefore two different specifications are used for the analysis depending on the set of variables:
[1]Includes individual characteristics on the one hand, demographics such as gender and age of the child ${ }^{8}$, and on the other, characteristics concerning their family background, such as education and employment status of the parents, as well as their level of English. In order to measure the dedication to English the survey includes the time spent doing English homework, the amount of hours of English per week, the number of years they have been studying English and finally, if they go to extra English classes. It also includes the time spent on Maths homework as a way of controlling the average ability and/or effort of the child. With this variable included in the regression, by interpreting the effect of doing more English homework on the results we make sure that we are comparing students of similar ability and/or effort levels.
[2]Fixed effects of each education centre are added to the determinants already included in [1], which in some way help to summarize the key features of the different centres and could be interpreted as the added value of them. This is why this specification does not include the main characteristics of the teachers because, as we have already mentioned, those can only be considered as averages at the level of the centre.

Table 1.3 presents the determinants of the scores in the three skills evaluated which come from each of the two specifications described.

[^5]Table 1.3. Determinants of the performance on the three linguistic skills for Spain

|  | Listening |  | Writing |  | Reading |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [1] | [2] | [1] | [2] |
| Girl | 0.110 | 0.095 | 0.271 | $0.350^{* *}$ | 0.094 | $0.134^{*}$ |
|  | (0.066) | (0.061) | (0.174) | (0.163) | (0.077) | (0.071) |
| Age (years) | $-0.289^{* * *}$ | $-0.214^{* *}$ | -0.913*** | $-0.766^{* * *}$ | $-0.347^{* * *}$ | $-0.324^{* * *}$ |
|  | (0.041) | (0.037) | (0.111) | (0.096) | (0.046) | (0.047) |
| Mother full time | 0.012 | -0.070 | -0.243 | -0.311* | -0.099 | -0.058 |
|  | (0.072) | (0.063) | (0.172) | (0.174) | (0.080) | (0.073) |
| Father full time | $0.143^{*}$ | 0.076 | $0.800^{* * *}$ | $0.534^{* *}$ | $0.201^{* *}$ | $0.212^{* * *}$ |
|  | (0.077) | (0.065) | (0.212) | (0.202) | (0.088) | (0.079) |
| Mother University | 0.333*** | $0.192^{* *}$ | 1.098*** | $0.648^{* *}$ | $0.538^{* * *}$ | $0.298{ }^{* * *}$ |
|  | (0.083) | (0.075) | (0.230) | (0.216) | (0.109) | (0.094) |
| Father University | $0.167^{* *}$ | -0.019 | $0.389^{*}$ | 0.194 | 0.179 | -0.047 |
|  | (0.082) | (0.077) | (0.222) | (0.219) | (0.110) | (0.098) |
| Mother knows English (quite well or well) | $0.295^{* *}$ | $0.193^{* *}$ | 0.347 | $0.416^{* *}$ | 0.035 | 0.036 |
|  | (0.097) | (0.087) | (0.221) | (0.204) | (0.107) | (0.102) |
| Father knows English (quite well or well) | 0.475** | 0.304*** | 0.889*** | 0.475** | $0.384^{* * *}$ | $0.205^{* *}$ |
|  | (0.094) | (0.092) | (0.221) | (0.227) | (0.113) | (0.101) |
| Homework time in Maths | 0.053 | 0.044 | 0.270 | 0.210 | 0.055 | -0.019 |
|  | (0.069) | (0.061) | (0.177) | (0.161) | (0.083) | (0.077) |
| Homework time in English | $-0.246^{* * *}$ | -0.123* | -0.672*** | $-0.558^{* * *}$ | -0.260** | -0.189** |
|  | (0.075) | (0.069) | (0.188) | (0.169) | (0.089) | (0.079) |
| English hours per week | $0.094^{* *}$ | $0.086^{*}$ | $0.166^{*}$ | 0.131 | 0.084 | 0.108 |
|  | (0.038) | (0.052) | (0.088) | (0.105) | (0.052) | (0.099) |
| Previous years with English | 0.079** | $0.038 * *$ | 0.254** | $0.133^{* *}$ | $0.116^{* * *}$ | 0.079*** |
|  | (0.013) | (0.014) | (0.039) | (0.041) | (0.016) | (0.017) |
| English extra classes | 0.207** | $0.123^{*}$ | $0.586^{* * *}$ | $0.322^{*}$ | 0.198** | 0.120* |
| (attends) | (0.069) | (0.063) | (0.172) | (0.148) | (0.081) | (0.071) |
| Constant | $3.143^{* *}$ | 1.924*** | $8.312^{* *}$ | $6.296^{* *}$ | $3.903^{* * *}$ | $3.709^{* * *}$ |
|  | (0.704) | (0.678) | (1.898) | (1.699) | (0.810) | (0.982) |
| Centre fixed effects | No | YES | No | YES | No | YES |
| Observations | 973 | 973 | 950 | 950 | 998 | 998 |
| R-Square | 0.290 | 0.545 | 0.331 | 0.542 | 0.281 | 0.501 |

Notes: Robust standard errors in brackets ${ }^{* * *} p<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$. All estimates are weighted by the values of each student for each of the skills. The variables of parental education defined as university group the two levels shown in Table 1.2-ISCED 5A, 5B and 6. The reference categories for binary variables in order of appearance are the following: boy, mother/father works part-time work, is looking for work, or doesn't work, mother/father without higher education, mother/father knows little or no English, and finally, the student does not attend extra English classes.
Source: Prepared by ESLC 2011.

Now we summarise the most important conclusions that can be drawn from the table above. First, the results of both specifications are, in general, to be expected ${ }^{9}$. Regarding the demographic characteristics of the students, the first thing that can be observed is that girls outperform boys in English, even when this is checked against family characteristics and the centre in which they study, consistent with related studies where it is generally found that girls do better than boys in areas such as reading ${ }^{10}$. These gender differences are statistically significant for two of the three skill areas assessed, except for oral comprehension. Secondly, the fact that age could adversely affect the result could be associated with the student's ability if we consider that being one year older in our sample implies a greater probability of being a repeater student, and therefore having worse performance in English and also, almost certainly, in other areas of knowledge.

With regard to the family background of the students, the education of the mother, not that of the father, has a positive effect on the score of the three English tests, although it is reduced by almost half when centre fixed effects are included, it remains significant and relatively of bigger impact on the writing test. Second, the employment status of the father (who works full-time versus part-time or not working), and in this case, not that of the mother, perhaps because of the high correlation between the two, is a determining factor for a beter result in both reading comprehension and writing and not for the listening skill. Along the same lines, Chapter 4 of Volume I indicates that countries with a greater socioeconomic and cultural ${ }^{11}$ index generally obtain better results in the tests, being also the weakest link in oral comprehension.

However, in Table 1.3 we can also observe that this skill is the one most affected by the fact that the father has a good level of English, once centre fixed effects are included. This is a clear evidence of the importance of the use of the English language in the child's home environment so that it can develop a listening ability from an early age, and thus improve its performance in English language comprehension, something which obviously also leads to an improvement in the other evaluated skills, though not significantly ${ }^{12}$. In fact, this

[^6]is a very important difference between Sweden and Spain: the percentage of parents with good English in Sweden is $78 \%$ while in Spain is $20.4 \%$.

We can refine, by a simple quantitative exercise, how much the gap in average scores between Spain and Sweden could be reduced if the proportion of Spanish parents with a good level of English were equal to the corresponding proportion in Sweden, keeping all the other features and performances constant (ceteris paribus). To do this, we calculate the absolute contribution of this variable - the father knows English - to the result in each of the three skills, as the product between the estimated coefficient associated to the same in each case ${ }^{13}$ and the difference in the proportions of parents who know English between the two countries ( -0.578 ). The relative contribution is computed as the ratio between the result of the previous calculation and the difference in average results between both countries that were reported in Table 1.1. This simple exercise reveals that the differences between Spain and Sweden would be reduced in each of the skills by approximately $8 \%$ if, ceteris paribus, there were the same proportion of Spanish parents with a good level of English as in Sweden.

It is true that this result does not contain in itself a clear implication of educational policy beyond recognising the importance of the family context for developing an adequate skill in the foreign language learning. However, it is crucial to resolutely defend, from the institutions, the importance of the knowledge of foreign languages, in a way which promotes their today's learning and use among current generations, thus making the English language much more internalised in families and societies in general by the next generations.

If we focus on the characteristics related to the dedication to English on the part of the students, the first thing which attracts attention is that the more time they spend doing English homework - once we compare students with similar dedication to Mathematics, and therefore, compare individuals with similar skills and/or levels of effort - the worse the average scores. This result deserves some reflection, even more if we compare the amount of time spent by Spanish students doing English homework to the corresponding figure in Sweden. In particular, Swedish students spend much less time doing English homework, specifically $13 \%$ less of Swedish students reported spending two or more hours a week to it, and they are still the ones who obtain the best scores in the evaluation program.

[^7]Another suggestive fact that we should point out is that Swedish teachers of English believe that their students should spend an average of 1.80 hours per week on average on English homework, compared to 3.11 hours - nearly twice as much what the Spanish teachers consider necessary. Furthermore, the result from the estimates in Table 1.3 suggests that even considering students with similar skill and/or effort levels, an increase in the number of hours spent on English homework does not increase the scores in any of the skills assessed, but rather the opposite. Although we interpret this evidence with caution, somewhat counter-intuitively, it does seem to indicate that more effort is needed to understand the dynamics of working and learning the English language followed in our country, especially when we compare ourselves with other countries whose results are much better than ours.

Another interesting result is the significant and positive association between the number of previous years the student has spent studying English and his/her results in the three evaluated skills. This is somewhat in line with the previous result, though it highlights the importance of the exposure to the language in the long run. It seems that in our country children exposed to English at an earlier age obtain better aptitudes for its learning. This contrasts somewhat with the Swedish case, where students begin learning English at older ages, with an average exposure time of 6.56 years compared to 9.38 in Spain. One of the reasons that might exacerbate these differences could be related to the knowledge of English of the children's parents, which as we have already seen is much higher in Sweden than in Spain. It may be a fact that in Swedish schools children do not begin their exposure to English until they are older, but the fact that they may be more exposed to the language at home, either through the parents' own knowledge or by other means such as television, offsets the earlier exposure to English of Spanish students in school, which is accompanied by much less exposure to it at home, either by parents or by other means.

Furthermore, the number of hours of English per week taught in the centre seems not to affect significantly the performance, especially in reading and writing. There appears to be, however, a small positive effect on oral skill, for which, possibly, the exposure to the language is a more important factor than for writing and reading, and consequently, this is the only skill for which an increase in the number of class hours leads to a better performance ${ }^{14}$. However, the extracurricular English classes, which approximately 43\% of the Spanish students

[^8]from our sample say they attend, considerably improve the results in the three evaluated skills. The fact that this type of class does increase the knowledge of the language while classes taught at school hardly cause a positive effect seems to indicate that the extra classes may possibly follow a different dynamic to those of the school. It could be the case, though this is barely exploratory, that these extra classes base the learning on a less traditional methodology, that they are more didactic and/or entertaining, and therefore more motivating for the children, so they achieve better performance in English learning.

The comparison of the extra classes inSpain and Sweden also deserves a comment: Swedish students make practically no use of these types of classes - only $11 \%$ of them reported attending extra English classes. This difference, along with the lower load of English homework for Swedish as opposed to Spanish children, makes us think that maybe it lies more in the motivation within the classroom and the school's timetable, without the need to attend to extracurricular English classes to improve results, as happens in Sweden. Something could be failing in the methodology in the Spanish classrooms, perhaps having an approach which is still too traditional.

In this chapter we explore the determining factors of the learning of English as a foreign language in Spain using data from the European Survey on Language Competences (ESLC) for 2011, the understanding of which is of crucial importance for the design of effective educational policies aimed at improving performance. The results highlight the poor performance of Spanish students, in the final year of secondary education, in the three assessed skills - listening, writing and reading - especially when compared with the results of other participating countries which also have English as a first foreign language, as the case of Sweden. The good performance of this country - the best performing participating institution - serves as a comparative framework in order to be able to understand the limitations that exist in Spain with regards to language.

The descriptive analysis of the variables that we have identified as potential determinants of students' English learning reveals important differences between the sample of Spain and the corresponding sample of Sweden. First, it
is noteworthy that the knowledge of English of parents in Sweden is much higher than in Spain. It also highlights the differences regarding the dedication to the language during hours which are not strictly part of the school timetable: Spanish students spend much more time doing English homework, mainly because their teachers believe they should devote more hours per week than their Swedish counterparts and they also go to more extracurricular English classes. In addition, the exposure to the language in school starts at a considerably earlier age in Spain than in Sweden. These differences are a clear sign of the huge differences in the context between Swedish and Spanish children, the latter having much stronger exposure outside home, while the Swedish are much more exposed to English within it.

The econometric analysis presented in the last part of the chapter allows us to isolate and quantify the effects of each of the inputs on the results in English of the Spanish students of our sample. Several interesting results emerge. First, the education of the mother and the employment status of the father positively affect the results, the impact being relatively greater in reading. Second, we emphasize that the father having a good level of English appears as one of the most important determinants of the results, above all in listening, pointing again to the importance of the use of the English language in the child's environment so that it can develop a hearing capacity from an early age. A simple quantitative exercise reveals that differences between Spain and Sweden in the average scores would be reduced by about 8\% if, keeping everything else constant, the proportion of Spanish parents who know English were the same as in Sweden. We therefore consider it necessary to try to disseminate and promote the use of English from the educational institutions to achieve its greater internalisation by the students of today who will be parents in the medium term.

Interestingly an increase in the number of hours devoted to English homework does not increase the scores in any of the skills assessed, but rather the opposite. Also, a greater number of English classes a week at school seem not to affect performance. This evidence, somewhat counterintuitive, suggests the need to make a greater effort in understanding the working and learning dynamics of the English language in Spain, above all when comparing ourselves with other countries such as Sweden whose results are much better than ours and where in turn both the homework time and the number of hours of English classes at the centre is much less.

Finally, both the number of previous years that the student has spent studying English as well as the extra English classes considerably improves the results in the three skills assessed. The first effect again highlights the importance of the exposure to the language for performance in the long term, and the second seems to suggest that the extracurricular classes have something different with respect to those taught in the school - perhaps methodology, capacity of motivating students, etc. We should therefore be trying to influence more the motivation within the classrooms as well as reviewing the dynamics of English learning in Spanish education centres.

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## Chapter 2

# Environmental exposure and use of the foreign language in NON-FORMAL CONTEXTS IMPROVE ITS ORAL COMPREHENSION 

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The specialist scientific literature in the field of foreign languages collects, throughout the 20th century, the intense debates about the benefits and disadvantages that stem from the development of curriculum design and a teaching methodology in the classroom which is more oriented towards the communicative dimension of language and less focused on its grammatical system. In this way, the attention with regards to the success or failure in the acquisition of good competence in a language has been limited, in the past century, to the activities carried out in the classrooms of the education system, and to what happens in its formal context.

But the beginning of the 21st century, illuminated by the publication of the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (hereafter CEFRL) (Cervantes Institute, 2002) marks a paradigm shift in this trend. The concept of "student" is now complemented by that of "user" of the language (or languages) and what begins to be of interest is not only what the student knows about the language but also what he/she can do as a

[^9]user of it. In this way we move away from a paradigm focused exclusively on the student, the teacher, the classroom and the foreign language curriculum and we enter a new paradigmatic stage characterised by also meeting the general and communicative competences of the language users (see Chapter 5 of the CEFRL). This look at the student-individual as a user with bilingual or multilingual competences opens a horizon of new factors of research in the field of foreign language learning that gravitate towards languages as a form of existential behavior.

CONCEPTUAL FRAMEWORK OF THE HYPOTHESIS

As the formal contexts of the European education systems gain ground in the effective implementation of more and better shared methodological guidelines (approaches for tasks and projects, integrated learning of content and foreign languages, early and sustainable initiation, linguistic immersion and submersion programs, etc.) and as the traditional differences between conceptions and practices of curriculum development in foreign languages begin to narrow (Eurydice, 2001, 2005), the question that now arises is:

Why, with more common and covergent formal educational practices, are there still differences in the results of language learning between our European students?

Which is why much of the research on school achievement in foreign languages is starting to ask whether the time has come to direct our investigations towards what happens outside the classroom space and to analyse, in an experiential setting, the differences of achievement of students with better and worse competence results.

The arrival, in the scientific field of foreign language learning, of the results of reports and macrostudies carried out on a European level, which are more focused on what good language learners do outside school rather than on what they study and know, has led the researchers in this field to direct their expectations towards the environmental settings of the use of foreign language beyond the classroom setting. Evidence from the European Survey on Language Competence (hereafter ESLC), the subject of this report, also allow us to verify whether the best achievements of competences in oral comprehension of
foreign languages of European students are directly related to activities of exposure and oral use that the students carry out "outside" the classrooms: in extracurricular activities, through ICT, in the home, through access to audiovisual products in original-version, in communicative interactions with speakers other than classmates, visits to other countries, etc. Factors which are drawn from some of the questions from the contextual survey filled out by students from the sample group and which, in part, are labeled in the ESLC under the index of "Language-Friendly Living Environment".

In short, our contribution to the report presented here by the National Institute for Educational Assessment aims to verify the hypothesis that environmental exposure and use of the foreign language (specifically, English as the first foreign language of the students in the sample) in non-formal contexts, with an involvement of the individuals in experiential behaviour activities in situations of language immersion or submersion, entails performance results in oral comprehension higher than those of other individuals who do not participate in this type of activities in the same way.

We detail here some of the results of reports and macrostudies which have a bearing on the evaluation of competence performance in English oral comprehension of the Spanish students through the promotion of contact with the foreign language in non-formal contexts.

Within the framework of the Special Eurobarometer 243 (64.3), Europeans and their languages (2006), 28,694 citizens of EU member states were asked about their experiences of and views on multilingualism. As for the everyday situation of following foreign programmes or films in their original version the data of this Eurobarometer show that in countries where subtitles are commonly used the vast majority of those polled prefer to watch foreign films and programmes in the original language. This is how $94 \%$ of Swedish and Danish and $93 \%$ of Finnish respondents answered. The Spanish, together with the French, Germans and Czechs, are among those who reject, with the highest average percentage ( $73 \%$ ), the option of following foreign programmes and films in their original version with the help of subtitles. The study suggests that the use of subtitles can encourage and facilitate language learning.

For its part, the report entitled The assessment of pupils' skills in English in eight European countries (Bonnet, 2003), commissioned by The European Network of Policy Makers for the Evaluation of Education System, reaches similar conclusions ${ }^{1}$. In relation to the content of the questionnaire which refers to environmental contact with English, Spanish students, who make up a sample of 2,950 individuals, are those who least practice English outside the classroom when talking with their families, listening to the radio, watching TV shows or movies in this language, or reading magazines, newspapers or books in English, and when travelling abroad. The report points out a great difference in terms of the English proficiency of their parents in relation to the other participants of the study in other countries: 49\% of Spanish students said that their parents do not speak any English at all, $21 \%$ said that they speak it badly and only $13 \%$ said that they speak it well or very well. The percentages are much higher in the responses of students from other countries. This is something that corresponds to the evaluation carried out in the contribution of Sara de la Rica and Ainara González to the NIEA2 report when they assert that "the English language knowledge of parents in Sweden, measured as the percentage of those who speak quite a lot or a lot of English, is much higher than in Spain". The study supervised by Bonnet concludes by evaluating that the environmental context in English is very low throughout the Spanish state, followed only by France which ranks last. But the achievements of the sample of Spanish students are quite high, above average, in terms of linguistic and grammatical knowledge.

Also in relation to environmental contact, and specifically to the value of subtitling, the data provided by a recent study commissioned by the European Commission (2011): Study on the use of subtitling, ${ }^{3}$ are of special interest. The data show that oral mastery of English is much higher in countries with a tradition of original version with subtitles as opposed to those with a culture of dubbing, as is the case of Spain. In terms of preference between dubbed or subtitled original versions, a correlation can be seen between the age factor and the number of languages spoken: the younger the individuals (range 12-18 and 1825) and the more languages mastered, the more pronounced is the preference for subtitling as opposed to dubbing. In the Spanish student population aged 1218 years, positive attitudes towards original version with subtitles are far greater than among other older groups. In this population range, most students are in

[^10]favor of the subtitled original version of audiovisual products and, furthermore, they understand that this type of context significantly improves foreign language learning. The majority state that they would not change the audio channel on their remote-control if movies or documentaries in the original version with subtitles were offered on TV.

Elaborating on the relationship of subtitling on television with good performance in English, the empirical study titled TV or not TV. Subtitling and English Skills ${ }^{4}$ identifies a very positive effect in favor of the subtitled original version, and against dubbing, which corresponds approximately to an average of between four and twenty years of studying English in the school context. Through the use of regression analysis techniques and the use of "Ordinary Least Squares" (OLS), they question the fact that most of the variables that have traditionally been considered important in assessing the quality of performance competence in English for an individual, like, for example, the number of years that students have studied English in the school system, stop being relevant ${ }^{5}$ compared to the affinity between English and the native language of the individual and, very significantly, in relation to the prevalent supply system of audiovisual products in that country. With their results, the authors come to the empirical evidence that, ceteris paribus, the quality of English is better in those countries where television offers products in subtitled original version and, furthermore, students from these countries benefit more from English classes in the formal school system.

Finally, we should take into account the interest shown by the European Commission in the creation of language living environments (at work, in the home, during leisure time...), designed to be welcoming for linguistic interactions between citizens of different languages: the so-called "Language-Friendly Living Environments". ${ }^{\text {P Policies for the promotion of language learning carried out at the }}$ request of the European Commission seek to add value to the informal exposure of European students to direct contact with native speakers in the contexts of their natural use of the languages. And, aware of the difficulties in generalizing this form of exposure to the language in contextual uses, the promoters of these policies are turning their attention to the mass media and consumption of audiovisual products with a special emphasis on the use of subtitles in movies

[^11]and other audiovisual products offered on television which, as indicated by the research already mentioned, help to improve language learning. In this sense, it can be concluded that the Internet and entertainment programmes can have a positive influence on the improvement of foreign language proficiency of our students given that not only do they provide exposure to and reinforce the pragmatic dimension of the context, but also that they allow the use of the language by way of MSN, chats, blogs, video calls, online games, etc.

As we know, of the three levels of competence which the ESLC is looking at, orality is limited to the activity of "comprehension" since "oral expression" tests, left to a later date, are not included in the commission of this study. ${ }^{7}$ As reflected in the results concerning the levels of achievement in all three proficiency measurements, there are very marked differences between those referring to the first and second foreign languages of the individuals. The comparison between participating entities also proves that the gap between "high" and "low" achievements on the scale of the CEFRL is closely related to the type of linguistic-communicative activity in question (reading comprehension, written expression, oral comprehension).

In general, the analysis of the language test results reveals that in the second language lower levels are obtained than in the first. However, students from Spain diverge from this pattern and show better results for all three competences in French (second foreign language) than in English (first foreign language), as reflected by the comparison between countries (See Chapter 3 of Volume I).

The lower results obtained by Spanish students, compared with those of other participating entities, are concentrated in its English listening competence, ranking second to last followed by France which comes bottom (See Chapter 3 of Volume I). Finding possible causes that affect the most negative value of the language competence of Spanish students thus becomes our priority considering the hypothesis mentioned at the beginning that, in the Spanish context of exposure to English, the circumstances are different than those that in other countries lead to better results in the activity of listening.

[^12]Being that the first foreign language - English in the case of Spanish students poses greater difficulties to obtaining satisfactory achievements in the listening activity (between B1 and B2) at the end of compulsory schooling, we limit our investigation to the following variables: English (countries with English as a first foreign language) and oral comprehension ('listening'). On the other hand, in order to achieve more uniformity in the comparative analyses, we limit the field of study to participating entities that have implemented the tests and questionnaires in ISCED level 2 (the majority of the 16 groups which make up the ESCL sample) which is equivalent to the final year of Compulsory Secondary Education. In order to do this we will use only the main sample, excluding the data from the ACs (Autonomic Communities) that enlarged the sample.

## Study sample

Starting with these characteristics, the sample was composed of a total of 11 entities out of the 16 initially participating in the ESCL. The Flemish-speaking Belgian community and the German-speaking community, as well as England, were excluded on account of having French as their first foreign language, and the French-speaking Belgian community and Bulgaria were also excluded since in those cases the students that had participated were from school level corresponding to ISCED 3 - Non-compulsory Secondary Education. Moreover, given that, as just noted, our focus is on the activity of listening, we did not take into account for this sample selection any students who had not completed this type of competence test.

Thus our initial sample is composed of 11,363 individuals, all studying at a similar academic level, with English as the first foreign language, and participating in the "listening" test. This starting sample was set based on the sample weights, allowing us to adjust the representation of the sample and the estimation of the parameters thus avoiding bias (Asparouhov, 2006) (see Table 2.1 of the Appendix). This weighting can be interpreted as a measure of the number of people in the population represented by each individual (Pérez Cañizares et al., 2004).

As shown in Table 2.1, we have a balanced sample in terms of the percentage
of men and women, and with an average age of between 14 and 15 years, the expected age based on the level of selected studies, but with differences in the number of academic years that the students have been studying the English language - based on the data provided by the student - since, as we can see, in Spain the average is nine years as opposed to four years in France.

Table 2.1. Principal characteristics of the sample

| COUNTRY | PERCENTAGE OF <br> WOMEN | AVERAGE AGE OF <br> STUDENTS | AVERAGE NO. OF <br> YEARS STUDYING <br> ENGLISH |
| :---: | :---: | :---: | :---: |
| ESTONIA | 52.9 | 15.36 | 7.03 |
| GREECE | 51.4 | 14.30 | 5.96 |
| SPAIN | 50.6 | 15.60 | 9.20 |
| FRANCE | 51.6 | 14.41 | 4.22 |
| CROATIA | 51.4 | 14.11 | 6.90 |
| MALTA | 47.7 | 15.21 | 9.17 |
| NETHERLAND | 52.3 | 15.23 | 4.95 |
| POLAND | 50.3 | 15.31 | 7.46 |
| PORTUGAL | 52.5 | 14.6 | 6.01 |
| SWEDEN | 50.3 | 15.25 | 6.53 |
| SLOVENIA | 48.7 | 14.17 | 6.18 |

Based on what was shown above, we selected a set of questions from the student questionnaire relating to contact and use with/of the foreign language (in this case English) in a non-formal environment, ie: in situations outside not only the curricular context but also of the school itself, and relating mainly to activities carried out in the family and social environments. In this way we take four indices as independent variables, generated from four of the questions from the consultation instrument, which were considered in the ESCL report given their relevance for investigating the dimension called "Learning of the language in informal contexts", as well as an item relating to the dimension "Possibilities of cultural contact" (see International Report, Chapter 5).

Table 2.2. Selected indices and items

| INDEX | LABEL <br> QUESTION <br> No. of items | ScAle <br> OF THE <br> ITEMS <br> NING THE LA | SCALE OF THE INDEX AND CALCULATIONS GUAGE IN NON-FO | Content <br> MAL CONTEXTS |
| :---: | :---: | :---: | :---: | :---: |
| Parental KNOWLEDGE OF <br> THE FOREIGN LANGUAGE | Parental knowledge <br> Question 28 <br> 2 items | $\begin{aligned} & -0 \text { a } 3 \\ & -0= \\ & \text { nothing } \\ & -3=\text { a lot } \end{aligned}$ | Average in both items. | -The student gives his/her opinion regarding the knowledge that his/her mother and father have of English. |
| Contact with <br> English in the <br> EXTRACURRICULAR <br> ENVIRONMENT | Contact <br> English <br> Question 29 <br> 7 items | $\begin{aligned} & -0=\text { no } \\ & -1=\text { yes } \end{aligned}$ | Add together the affirmative answers in the 7 items | - In this question we want to know if the student has or not (yes or no) contact with English outside the classroom, in diverse situations: email, with friends or family members who speak English, with tourists through the Internet, or during their holidays. |
| Use of English in the EXTRACURRICULAR ENVIRONMENT | Use of English <br> Question 30 <br> 6 items | -0 to 4 <br> $-0=$ never <br> -4= several <br> times a <br> week. | Average in the 6 items. | -In this question we want to know if the student uses English outside school in similar situations to those of question 29 , indicating the frequency of times, from never to several times a week. |
| Contact <br> WIth English <br> through the <br> COMMUNICATION MEDIA | Media <br> Question 31 <br> 9 items | -0 to 4 <br> $-0=$ never <br> -4= several <br> times a <br> week. | Average in the 9 items. | -In this question we want to know with what frequency the student has some contact with English: listening to songs, watching movies in English, subtitled or not, watching programmes in English, using computer games in English, reading in English or visiting websites. |
| CULTURAL EXCHANGES |  |  |  |  |
| Travel to <br> AN English- <br> SPEAKING <br> COUNTRY | Trips <br> Item 45.3 | -0 to 3 <br> $-0=$ never <br> $-3=$ three <br> times or <br> more |  | -Number of times that the student travelled with the famly to an English-speaking country in the last 3 years. |
| "ESCS" INDEX |  |  |  |  |
| Socioeconomic <br> AND CULTURAL <br> status | ESCS |  | Continuous. <br> Between -6 and + 4 points. | -Calculated from 3 indices: <br> Household possessions, occupations of the parents and studies of the parents. |

While in the first of these dimensions the International Report includes other indices, we have selected those whose own content focuses on the contact and use of the foreign language referred to. Table 2.2 displays these indices and items indicating the scale of the reference question in the questionnaire of context and the calculation of the index.

As reflected in Table 2.2, the index called ESCS - economic, social and cultural status was also considered, having been calculated previously in the ESCL from the other three indices covering: household possessions, occupations of the parents and academic studies of the parents (see Technical Report).

Our interest is in assessing which part of the students' oral proficiency can be explained by the predictive variables mentioned above. As is already the case in the PISA studies and others which follow similar methodological guidelines, each student is assigned five 'plausible values' for each of the skills for which he/ she is evaluated. The plausible values are not actual scores obtained for these. Each one responds to a limited number of items of a specific competence, from which their responses are considered within the total of the items that make up the full test of that skill.

In order to do this a single score is not predicted, but rather an a posteriori distribution of values with their associated probabilities is generated from which five values called "plausible values" are randomly drawn (Martínez Arias, 2006: 118-119). Using these values allows the calculation of the standard errors in complex sample designs as is the case in this study ( $\mathrm{Wu}, 2005$ ).

## Data analysis

In response to our goal, focused on assessing the extent to which the oral comprehension of students from the participating countries can be explained by the use and contact with the English language in the non-formal environment, we conducted a heirarchical-type multiple regression analysis for all of the eleven countries of the study, first introducing the variable "socioeconomic and cultural status" before the explanatory variables presented in Table 2.2. First of all descriptive analyses of the variables and correlational analysis between the different explanatory variables and between them and the competence in listening were carried out, both globally and by country. To perform these analyses we used the statistics package SPSS version 17 and for the calculation of the associated standard errors we used Replicates module - version 7.21 using the Jackknife method. The population statistics were estimated using each of the five plausible values, the obtained population statistic being the average of the five statistics.

The performance in the activity of listening in English in all the eleven countries analysed, if we consider the average percentages obtained in each of the expected levels of the CEFRL, is very modest: $28.3 \%$ do not reach the minimum level of A1. This level is achieved by $27.5 \%$. At levels A2 and B1 we find $12.4 \%$ and $12.2 \%$ respectively, and $19.6 \%$ reach the highest-rated level - B2. Therefore, it can be said that, as a whole, only $32 \%$ of students reach or exceed a B1 level in oral comprehension of English, when this language is studied as a first foreign language.

Graph 2. 1. Oral comprehension in English:
Percentage by country in European competence levels


The detailed results by country allow us to find out the position occupied by each within the whole set that we have analysed. Graph 2.1 shows the significant discrepancies between them. France and Spain come out on top in the percentage of students with - A1 and A1 levels over 60\%. Poland borders on $57 \%$ at these levels. At the other extreme Malta and Sweden have more than $70 \%$ of their students in the highest level B2, followed by the Netherlands with $60 \%$. These results confirm those obtained in the other previous international studies which we have already seen above.

If we look at the averages of each of the eleven countries selected in our study in the five explanatory variables, Malta and Sweden obtain the highest in three of them: knowledge of English of the parents, use of English through the communication media, and frequency of travel to English-speaking countries (see Table 2.3).

In the case of Spain, the "Parental knowledge of the foreign language" is below that of all eleven countries except Poland, thus confirming the results of the study "The assessment of pupils' skills in English in eight European Countries", which we have referred to in the background section. Spain gets an average of 0.92 on a scale of 0 (nothing) to 3 (very much) - in this item of the questionnaire, as opposed to Malta and Sweden which both get over two points. The relevance of this index is explained in more detail in the study of Sara de la Rica and Ainara González which forms part of this same INEE report.

Table 2.3. Averages and standard errors by country in the explanatory variables of study

|  | Parental KNOWLEDGE |  | CONTACT WITH ENGLISH |  | UsE OF ENGLISH |  | CONTACT COMMUNICAT. MEDIA |  | Travelling |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SCALE | 0 to 3 <br> $0=$ nothing <br> $3=$ a lot |  | From 0 to 7 <br> $0=$ no in the 7 <br> items <br> $7=$ yes in the 7 items |  | 0 to 4 <br> $0=$ never <br> 4= several times a week |  | 0 to 4 <br> $0=$ never <br> 4= several times a week |  | $\begin{gathered} 0 \text { to } 3 \\ 0=\text { never } \\ 3=\text { three times } \\ \text { or more } \end{gathered}$ |  |
|  | $\bar{X}$ | SE | $\bar{X}$ | SE | $\bar{X}$ | SE | $\bar{X}$ | SE | $\bar{x}$ | SE |
| France | 1.43 | 0.05 | 1.54 | 0.08 | 0.89 | 0.08 | 1.32 | 0.15 | 0.81 | 0.19 |
| SPAIN | 0.92 | 0.22 | 1.76 | 0.08 | 0.96 | 0.06 | 1.45 | 0.15 | 0.57 | 0.21 |
| Poland | 0.9 | 0.44 | 2.12 | 0.4 | 0.95 | 0.17 | 1.79 | 0.12 | 0.56 | 0.30 |
| Portugal | 1.16 | 0.16 | 2.37 | 0.12 | 1.39 | 0.12 | 2.37 | 0.05 | 0.56 | 0.13 |
| Greece | 1.43 | 0.34 | 3.09 | 0.27 | 1.51 | 0.14 | 2.35 | 0.09 | 0.68 | 0.09 |
| Croatia | 1.45 | 0.13 | 3.17 | 0.28 | 1.34 | 0.04 | 2.39 | 0.03 | 0.51 | 0.17 |
| Slovenia | 1.65 | 0.04 | 3.04 | 0.14 | 1.35 | 0.03 | 2.57 | 0.03 | 0.69 | 0.03 |
| Estonia | 1.25 | 0.23 | 3.0 | 0.09 | 1.68 | 0.08 | 2.53 | 0.33 | 0.89 | 0.13 |
| Netherlands | 1.83 | 0.18 | 2.4 | 0.11 | 1.05 | 0.13 | 2.34 | 0.06 | 0.94 | 0.07 |
| Malta | 2.17 | 0.43 | 4.5 | 0.69 | 2.35 | 0.63 | 2.93 | 0.07 | 1.29 | 0.56 |
| SWEDEN | 2.13 | 0.1 | 2.78 | 0.08 | 1.52 | 0.03 | 2.63 | 0.06 | 1.47 | 0.12 |

In reference to "Contact with English through the communication media", France obtained the lowest average (1.3) followed by Spain (1.4) and Poland (1.8). The rest of the countries get over two points of average on a scale of 0 (never) to 4 (several times a week). This index, composed of nine items, includes four relating to the viewing of programmes and movies in English "with" or "without" subtitles, which, because of their special interest in this study, we have also analysed separately. In all cases, the lowest averages belong to Spain and France which, except in the case of films with
subtitles, do not achieve one point in the scale (from 0 - never to 4 - several times a week). This means that, on average, students in both countries watch movies without subtitles or TV shows "with" or "without" subtitles less than "several times a year", activities which are much more day-to-day for other European students.

In the indices relating to "Contact and use of English in extracurricular contexts", Malta achieves the highest score in both, well above the rest of the countries. This result is to be expected in view of the historical and cultural situation of Malta owing to the legacy of British influence and the process of "anglicisation" by the British authorities until its independence in 1964.

Graph 2.2 shows us the frequency with which the students grouped according to their CEFRL level, watch movies in English 'without' subtitles. As can be seen, 34\% of the total of those who never engage in this activity got an -A1 in listening, 32\% an A1, $12 \%$ an $A 2$, and $10 \%$ and $11 \%$ attained a B1 and B2 respectively. At the other extreme, among those who watch movies 'without' subtitles several times a week $62 \%$ have level B2 and only $5 \%$ have an -A1. The graph shows us how the percentage with the highest level in listening also increases to the extent that we find a greater frequency of movie viewing, going from $11 \%$ to $62 \%$, while those that have the lowest level decreases from 34\% to 5\%.

Graph 2.2. Frequency, expressed in percentages, with which students watch movies without subtitles, based on their CEFRL level


Regarding the "Travel frequency to an English speaking country", again Sweden and Malta are at the top, the only countries from which the average students have traveled at least once with their family in the last three years. The average for the other countries is between 0 (never) and 1 (once in the past three years), which shows that making this type of trip in the family environment of the students isn't habitual.

The correlations obtained between each of these indices and the performance in listening are significant in all cases (significance level of 0.01) and of a moderate value (see Table 2.2 in Appendix). The "Contact with English through the communication media" is the one with the highest (0.53). If we stop again at those specific items making up this index, the viewing of films (item 31.2) and of other programs in English 'without' subtitles (item 31.4) obtain a correlation of 0.44 , the highest of the items that make up this index. The parental knowledge of the English language and the contact and use of English in environmental situations have lower values of $0.36,0.34$ and 0.35 respectively.

It is the frequency of trips with the family to English-speaking countries which offers a lower correlation with performance of listening (0.23) although, as already pointed out, it is significant. Certainly the question posed in the student questionnaire only provides information about the "number" of trips and not about the "duration" or "type of stay", questions which can clearly condition the contact with the language of the country visited. In the case of Spain the correlation is somewhat higher, reaching 0.38 .

Regression analysis was carried out for all the eleven countries in our study with four of the five explanatory variables: "Parental knowledge", "Contact with English through the communication media", "Travel to English-speaking countries" and "Contact with English in extracurricular contexts", to which we have added the socioeconomic and cultural status, given the expected explanatory weight that it can have when considering activities which are mainly carried out in the family context. In order to assess the potential impact we have used a hierarchical type regression analysis in which this has been the first variable in the model, allowing us to know in advance the explanatory capacity it has on the activity of listening.

The "Use of English in extracurricular contexts" has not been included because of its collinearity. ${ }^{8}$ This variable presents a high correlation with the 'use' of English in the environment (0.65), which is something to be expected, furthermore, because, as we have already noted, both questions refer to the

[^13]same situations, in one case asking about the "exposure" itself and in another about the "frequency of use" of English. At the same time it seems reasonable to think that performance in oral comprehension of the language can improve in situations of simple exposure to English, through a rich and contextualized input, without necessarily resorting to a productive use of language on the part of the individual.

Table 2.4 presents the overall results of the hierarchical regression analysis. As can be seen, all five predictors explained $34.5 \%$ of the variance in listening, a percentage of that $12 \%$ depending on the socioeconomic and cultural status of the family, and the remaining $22.3 \%$ on the environmental exposure and use of the language.

Table 2.4. Overall results of the hierarchical regression analysis: variable predictors, $\mathbf{R}, \mathbf{R} \mathbf{2}, \mathbf{F}$, level of associated significance and sample size ${ }^{9}$

| PREDICTOR VARIABLES INTRODUCED IN THE MODEL | R | $\mathbf{R}$ | F ASSOCIATED | SIGNIFICATION | $\begin{gathered} \mathrm{N} \\ \text { CASES } \end{gathered}$ | N WEIGHTED CASES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ESCS | 0.350 | 0.122 | 264129.3 | 0.000 | 10999 | 1841736 |
| ESCS, communication media | 0.575 | 0.331 | 468319.5 | 0.000 | 10999 | 1841736 |
| ESCS, communication media, parental studies | 0.587 | 0.345 | 331574.6 | 0.000 | 10999 | 1841736 |
| ESCS, communication media, parental studies and contact with English | 0.588 | 0.345 | 249440.7 | 0.000 | 10999 | 1841736 |
| ESCS, communication media, parental studies and contact with English and travel | 0.588 | 0.345 | 199588.1 | 0.000 | 10999 | 1841736 |

If we analyze the role of the variables of interest for this study, the one which has greater explanatory weight is the contact with English through the communication media, 21\%, with an associated beta value of 0.43 (see table 2.3 in the Appendix). Furthermore, this index shows a partial correlation of 0.49 , well above those obtained by the other indices.

The parental knowledge of the English language gives 1.4\% more. The remaining variables, ie "Travel with the family to English-speaking countries" and "Contact in extracurricular situations", even when they present a significant Beta, with values of 0.005 and 0.025 , have no explanatory power because, as we see, the

[^14]value of the coefficient of determination is maintained at 0.345 . And to this it must be added that, in addition, the associated partial correlations are minimal, namely 0.008 and 0.032 respectively, which led us to reject both indices in order to obtain a more sensible model.

To come straight to the point, the results show that contact with English through activities such as listening to songs or watching TV and movies in that language is the index relating to "Environmental exposure and use" that best explains the performance in the oral comprehension of the students.

CONCLUSIONS AND PROPOSALS OF EDUCATIONAL POLICY

As we have already seen, the overall performance for all of the eleven countries which have been analysed by us is very modest: only $32 \%$ reaches a level B ( $12.2 \%$ a B1 and $19.6 \%$ a B2) in listening skills. The set of indicators we have linked to contact with the English language in contextual activities outside the classroom setting, in non-formal situations, present significant correlations with performance in "listening", although, evidently, it is the contact with English through the communication media that gets a higher degree of correlation (0.53).

The results obtained in the comparison between countries call into question, quite significantly, the ability of Spanish students to understand English orally: a wide majority, reaching $63.4 \%$ of the students assessed, is between the -A1 and A1 levels, that is to say well below the reference level of the CEFRL which they are supposed to have reached by the end of the studies during the period of their compulsory schooling. A level of competence in this language activity which places us as a group in the penultimate position in the ranking of countries, where France would come bottom and Sweden and Malta at the top.

At the same time, the data reveal that students from countries that lead the ranking of top results in "listening" have a high exposure to English in environmental situations outside the school setting, just as the Spanish and French, with the lowest "listening" results, have very limited contact with this language in the same type of environmental situations. All of this points to a clear confirmation of our initial hypothesis that environmental exposure and use of a foreign language in non-formal contexts, with involvement of individuals
in experiential behaviour activities in situations of language immersion or submersion, yields performance results in listening which are significantly higher than those of other individuals who do not participate in this type of activities in the same way.

With the ability of a country to "generate linguistically welcoming environments, where different languages can be heard and seen" being so relevant to the improvement of language learning, in the sense that the European Commission referred to some time ago (as we have already pointed out), and with the contribution of audiovisual products in the mass communication media being so significant, as our results show, the question is:

> What options do we have within reach of our possibilities, without an unaffordable increase in spending, and without causing inconvenient disruptions within the education system and the curriculum development in the area of foreign languages in their schools, in order to improve performance in the oral comprehension of Spanish students?

First of all, the fact should be taken into consideration that, as obvious as it may seem, is not, however, sufficiently socially accepted: somebody who does not understand, or understands little, either doesn't speak or speaks very little. The widespread belief that languages are learned at school or in specialised centres through good study discipline does not have sufficient empirical evidence. That which is learned through studying and that which is acquired by environmental immersion or submersion are not comparable dimensions. Understanding orally sometimes in the classroom has very little to do with activating our neurocognitive disposition to transform an incomprehensible, heterogeneous, undefined and unstructured input into a meaningful communicative event. In the oral use of a language, one really learns to understand through understanding; even those languages which are very distant from that already acquired, as long as we adopt the role of 'immersed experiencer': the linguistic input, supported by nonverbal contextual elements, activates previous cultural experiences that lead us to comprehensively build and integrate a model for an inclusive communicative situation. However extensive the curriculum development of English as a foreign language, and however high the quality of teaching at the centres and of the teacher training, the empirical evidence is getting closer and closer to the point of convergence of our conclusion: oral comprehension improves greatly with environmental exposure to the language in 'friendly contexts.'

If the data reflect the fact that students from countries that watch and hear audiovisual products on television in original version (with or without subtitles) have better oral comprehension of English, and those who only see and hear these products in the dubbed version have a very low level, there can be little doubt about the influence that the way a country offers audiovisual products has in relation to improving the understanding of the foreign language. If English is the priority foreign language in Spain and if the market mainly offers its bestselling audiovisual products to young people in this same language, there can be little doubt that the option of the original version, with the technological advances brought about by TDT, is an ideal medium to promote immersion environments in English, with more advantages than the other alternatives, which promote oral comprehension and complement the limitations that the development of this skill raise within the education system. In short, the following question should be answered:

> What does the distribution of cinematographic and audiovisual content in original version actually contribute to the improvement of the oral comprehension of a foreign language?

The possibilities of the school system, already fairly saturated with curricular content and with precious little time for extracurricular activities, limit the options that students have to experience the gradual appropriation of foreign languages independently in an effective intercultural context. This situation is also transferable to the adult world. Access to audiovisual content in original version turns out to be, in this sense, an essential complement for promoting the creation of an open space for civic culture where a more socially cohesive citizen profile is able to prosper and which shares a concept of communication that better meets the comprehensive, diversifying and sociocultural aspects which should be part of the metacommunicative conscience of those who aspire to be competent and educated European citizens.

Language is a form of cultural appropriation. And, as research from the neurosciencestells us, the basis of this appropriation is necessarily comprehensive at first, in order to later become expressive. During the early stages of the study of a second or third language, both in the case of children and adults, the right hemisphere tends to be more involved in the processes of verbal communication due to the fact that everyone who starts in the appropriation of a new language tries to compensate for their lack of expressive language competence in that language through the use of pragmatic inferences. This explains why a greater bilateral activation of some structures of the hippocampus can be observed
when subjects with moderate proficiency are exposed to narrations in that language. The narrative structure, in that sense, is that which best meets cognitive activation processes. If we provide that structure with an inclusive audiovisual medium, which enriches the linguistic and cultural context where the meanings are negotiated, we will be recreating the model of a situation where the recipient of the content in original version is asked to 'activate', 'build' and 'integrate', by way of comprehension, a cognitive representation of the event in question. For these three processes of understanding to be effective, the 'immersed experiencer' needs only (as a child, teenager or adult) to have opportunities of access to material of great linguistic and cultural value, as offered by cinematographic and audiovisual content in its original version.

Even so, it is worth taking into account the cultural resistance that we Spanish have in willingly accepting the original version as opposed to dubbing (data contrasted by Eurobarometer 243, mentioned above). Changing our social, cultural and industrial habits in this area represents a social transformation of the first order, which will only be possible by adopting an inavoidably wide-reaching temporal and generational perspective. Hence our proposal to understand, and to make others understand, the close link which exists between good oral comprehension of a foreign language and the environmental exposure to high impact audiovisual media products such as television in original version. This form of raising awareness, taking into account an exogenous cultural resistance, would mean focusing urgently on those sectors which have not yet formed consolidated habits of audiovisual consumption, such as children and teenagers, through three areas of action: school centres, the family and the television medium itself. In this regard, we propose the use of proactive and transverse measures, along with the gradual introduction and modulation of, for example, a school programme of extracurricular activities related to movies or educational documentaries in the original version with subtitles (with guidelines for teaching use) and also that in the home the audio channel of the TDT be received in original version by default, unlike the present situation where movies and foreign series (of which a very high percentage are in English) are broadcast in dubbed mode.

Finally, it's worth clarifying that the school teaching of a foreign language principally activates explicit acquisition mechanisms. This type of learning is particularly effective in teenagers and adults, with well-developed cognitive abilities. But this is not the only type of learning that can happen in relation to a foreign language. The data that we have analysed in our work takes ample
notice as to how the 'incidental learning' (ie, learning that occurs without the individual having an explicit intention to learn), also has a significant influence on the learning of English as a foreign language. It is worth, therefore, giving credence to this 'incidental learning' and promoting it in the three areas of action indicated. That the Spanish students occupy a very low position in English oral comprehension is bad news. If we don't manage to improve extracurricular conditions for the environmental exposure to the language in 'friendly contexts' in the mid-term would be terrible news.

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## Appendix

Table 2.1. Unweighted and weighted sample by country

| COUNTRY | PARTICIPATING SAMPLE |  | WEIGHTED SAMPLE LISTENING |  | Weighted sample SQ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq. | Perc. | Freq. | Perc. | Freq. | Perc. |
| ESTONIA | 1,100 | 9.7 | 13,431 | 0.7 | 9,047 | 0.7 |
| Greece | 1,042 | 9.2 | 88,720 | 4.6 | 58,543 | 4.6 |
| SPAIN | 1,123 | 9.9 | 372,871 | 19.5 | 245,679 | 19.3 |
| FRANCE | 1,001 | 8.8 | 716,138 | 37.5 | 479,680 | 37.7 |
| Croatia | 1,084 | 9.5 | 45,003 | 2.4 | 29,590 | 2.3 |
| MALTA | 783 | 6.9 | 5,314 | 0.3 | 3,591 | 0.3 |
| NETHERLANDS | 946 | 8.3 | 15,396 | 8.0 | 103,034 | 8.1 |
| POLAND | 1,169 | 10.3 | 305,915 | 16.0 | 201,613 | 15.9 |
| PORTUGAL | 1,051 | 9.2 | 93,016 | 4.9 | 62,457 | 4.9 |
| SWEDEN | 1,011 | 8.9 | 99,035 | 5.2 | 66,935 | 5.3 |
| Slovenia | 1,053 | 9.3 | 17,375 | 0.9 | 11,634 | 0.9 |
| TOTAL | 11,363 | 100 | 1,910,216 | 100 | 1,271,802 | 100 |

Table 2.2. Average correlation, level of signification and associated standard error between the explanatory variables and the plausible values in oral comprehension

| Index | R <br> ORAL <br> COMPREHENSION | LEVEL DE SIGNIFICATION | StANDARD ERROR | N | N <br> WEIGHTED |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Travel | 0.233 | 0.000 | 0.042 | 11,168 | 1874475 |
| Parental knowledge | 0.359 | 0.000 | 0.495 | 11,262 | 1892945 |
| Contact with English in an extracurricular context | 0.337 | 0.000 | 0.104 | 11,333 | 1905364 |
| Use of English in an extracurricular context | 0.353 | 0.000 | 0.144 | 11,332 | 1905267 |
| Use of communication media | 0.528 | 0.000 | 0.019 | 11,327 | 1905117 |

Table 2.3. Results of the regression analysis: Coefficients B, associated ES, Coefficients Beta and level of signification

| Variables | NON-STANDARDISED COEFFICIENT |  | TYPIFIED COEFICIENTE | T | LeVEL OF SIGNIFICATION |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | ES | Beta |  |  |
| Constant | -0.927 | 0.64 | -- | -442.7 | 0.000 |
| ESCS | 0.236 | 0.14 |  | 260.3 | 0.000 |
| English through communication media | 0.650 | 0.11 | 0.428 | 600 | 0.000 |
| Parental knowledge of English | 0.206 | 0.70 | 0.136 | 188.4 | 0.000 |
| Contact with English | 0.018 | 0.11 | 0.025 | 33.8 | 0.000 |
| Travel to English-speaking countries | 0.006 | 0.24 | 0.005 | 7.3 | 0.000 |

## Chapter 3

Attribution of the importance to the dimensions of COMPETENCE IN EXAMINATIONS and performance in English as the first foreign language in

Europe

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## Summary

Evaluation is a key element in the process of teaching and learning. If the dimensions of competence that a teacher includes in his/her exams operationally define his/her didactical-methodological choices, then these should have repercussions on the learning outcomes of his/her pupils.

In this study we have defined two models of attitude with respect to teacher evaluation. On the one hand, we talk about the exhaustive model when we refer to teachers who give the highest importance to each and every one of the eight dimensions of competence analyzed in ESCL. On the other, we give the name of oriented model to the option of those teachers who consider some subset of the dimensions named above as more relevant than the others, regardless of the
content of the selected subset.
The hypothesis of this study is that the students of those teachers who follow the exhaustive model obtain higher average results in reading and oral comprehension in English than the students of teachers who follow the oriented model.

The results show that whenever statistically significant differences are observed, these come out in favour of the averages of the students who are in schools with a predominantly exhaustive model.

Especially interesting is the case of Spain. In our country $85 \%$ of students are in schools where the predominant model is oriented, and only $15 \%$ of cases are exhaustive model centres. The differences are statistically significant in favour of the latter model both in reading and in listening comprehension.

In Spain, $15 \%$ of the students who are in schools where the predominant model is of the exhaustive type have a performance of, in terms of the size of the effect, 0.4 standard deviations in reading comprehension and 0.32 standard deviations in listening comprehension higher than that of the remaining $85 \%$ students.

## Key words:

English as a foreign language, Evaluation of performance, Teacher beliefs, Models of evaluation, Large-scale Evaluation

The study of the factors involved in the process of the teaching and learning of a second language, as well as the interaction of these with the performance of the students, is essential in identifying which processes or environments can help to promote the quality of language teaching. As with other performance indicators of the education system, the study of the students' achievement in the acquisition of another language has aroused the interest of many authors to analyse the effect that the variables related to the individual and family characteristics of the students, the teachers, or even the context, have on the performance levels of the students (see De la Rica and González, 2012; Vez, Martínez and Lorenzo, 2012, and Anghel and Güell, 2012, all of them in this
volume). And this is the case of this article, which takes the performance measurements of the European Survey on Language Competences (ESCL) as a reference.

Along with the individual and family characteristics of the students, it is important to point out the role of the teachers' characteristics on student performance. This is the case of their knowledge and teaching experience, their beliefs, their educational and personal goals, their expectations and powers regarding student performance and the effectiveness of their own actions (García Legazpe, 2008, p. 42). These characteristics of the teachers can influence their teaching practice, creating environments which favour the learning of a second language and which, in turn, have an impact on the students' results. Thus, it is the guidelines of teacher behaviour in the classroom which are those that influence learning most directly (García Legazpe, 2008).

The research on foreign language teaching started focusing in the 1960's on the methods and procedures which prove to be effective for learning, clearly having prescriptive push regarding the method that is still reflected today in teaching materials. Little by little the research on teaching English as a second language is beginning to move from the field of applied linguistics towards the field of the cognitive beliefs of the teachers (Woods, 1996; Rodger, 2001; Richards and Rodgers, 2001). This change would mean that in order for the teaching of a second language to be effective, not only is it necessary to define what the teachers need to know, but also to analyse what are their conceptions and beliefs about teaching, learning processes, teaching contexts and their pedagogical practices (Freeman and Johnson, 1998; 2005).

The teachers' cognitive beliefs logically affect what and how they teach. Furthermore they are influenced by their training, by the teaching context and by their teaching experiences (Tsui, 2011). However, there are no studies of how teachers' beliefs influence what they do in their teaching work or how these beliefs have an impact on the results of their students (Kiely, 2001).

The most usual way to study the teacher's way of thinking is to analyse the self-assessments of the objectives which they set out for their classes, the pedagogical principles that they rely on and the educational activities they develop in the classroom. However, where the methodological and didactic options are probably best expressed is in the evaluation they perform. The very thing that the teacher tests is that which they really consider to be important. Therefore, the analysis of teachers' evaluative options provides first hand information about how they conceive the process of teaching and learning. It is
in the assessment content and criteria where the teacher operationally sets out what he/she considers to be more valuable or relevant for his/her students. The evaluation of what he/she considers very important to assess is also a benchmark of what he/she has taught in the classroom and can be considered an indirect indicator of expectations regarding the performance of his/her students.

Assessment is an indirect way of communication between the teachers and the students. The content of the assessment done by the teacher constitutes the most effective guide for directing the individual work of the students. The first information that students try to obtain when they take a new subject is that of how the teacher examines them. Assessment is a medium by which the teacher operatively expresses his or her beliefs about teaching and their methodological and didactic options, beyond their own discourse.

In the European Survey on Language Competence (ESCL), as well as the performance of students in foreign languages, information has been obtained through the Teacher Questionnaire. In this questionnaire the teachers are asked to evaluate eight dimensions of competence and the extent to which they consider it important to include them in their assessments. These eight dimensions are: a) write well in English, b) speak well in English, c) understand spoken English well, d) good knowledge of English grammar, e) read well in English, f) good English pronunciation, g) good knowledge of the English vocabulary and h) to have knowledge about the culture and literature of the English-speaking countries.

As can be seen, these dimensions refer to the different skills that teachers think of demanding from their students. We assume that teachers always tend to think that everything they teach is very important. Certain types of teachers can give more importance to writing, grammar and vocabulary knowledge of English, over and above the other five dimensions. The orientation of this teacher could be described as formal academic English teaching, focusing on grammar, with less emphasis on the communicative elements. Alternatively, we can conceive a profile of teacher that values speaking and understanding, vocabulary and knowledge of culture and literature more than the other dimensions. This would be a clear teaching profile with emphasis on the communicative functions of language. It is also possible to conceive a kind of teacher who values all the items listed in the previous paragraph. This would be the profile of a demanding and exhaustive teacher who demands everything from all of his or her students. Unlike the previous two, this profile simultaneously implies teaching centred both in the formal elements of language as well as in the communication dimension.

The primary objective in any research related to students' performance in learning a foreign language is to identify those factors which allow us to explain the differences in the performance levels shown by the students. One thing that recurrently appears both in the research and in the everyday experience of any citizen who moves around through the different countries of the European Union is the very different level of English language proficiency, considered as a lingua franca, shown by citizens of those other countries. This would not be a relevant issue if not for the large amount of public and private resources and efforts dedicated in them to the promotion of English learning.

As pointed out already, assessment is a key element in the process of teaching and learning. If the dimensions of competence that teachers include in their exams define their didactic and methodological options, these dimensions should have an impact on the learning outcomes of their students.

If the teachers include a broad range of dimensions of competence in their assessment, their students are more likely to successfully pass those tests adapted to that spectrum of competence. Moreover, students of teachers who guide their assessment selectively towards some specific aspects of language, either communicative or formal, will have more difficulty in successfully passing a test of broad competency spectrum.

For the operational purposes of this study, we have defined two models of attitude regarding the evaluation of the teachers. On the one hand, we talk about the exhaustive model when we refer to teachers who give the most importance to each and every one of the eight dimensions of competence analysed. On the other, we call the oriented model the option of those teachers who consider some subset of the dimensions mentioned above as being more relevant than the others, regardless of the content of the selected subset.

Our hypothesis is that students of those teachers who comply with the model here called exhaustive obtain higher average results in reading and listening comprehension in English than the students of those teachers that comply with the oriented model.

The methodology used in this study is conditioned by its own nature, given that it is a secondary analysis of data from the ESCL. The design of the ESCL responds to a complex measurement pattern, so we have made use of the methodology of plausible values (Wu, 2005, 2010) based on the previous work of Rubin (1976, 1987, 1996) on multiple imputation and sampling design adapted to the structure of the population, which, for the calculation of standard errors of some statistics, requires resampling procedures appropriate to the object of study. The full technical details are available on ESCL (2012).

In this paper we have used two different databases: one referring to students and the other referring to teachers. Although ESCL includes performance data relating to both the first and the second foreign language, here we have selected scores obtained by students for whom English is the first foreign language. Consequently, we have worked only with the responses of teachers who teach English as a first foreign language.

Of all the surveyed countries, the ones included in this study are only those in which English can be studied as a first option foreign language. These countries are: Belgium (French-speaking community), Bulgaria, Estonia, Greece, Spain, France, Croatia, the Netherlands, Poland, Portugal, Sweden and Slovenia. Malta has been intentionally excluded from this sample considering that until 1979 it had been under British influence, and that English is an official language along with Maltese.

The sample design of subjects and items involves using appropriate resampling procedures to obtain unbiased estimates of the errors associated with statistical estimates, and plausible values obtained from the a posteriori distributions for each subject, thereby ensuring that the size of the measurement error is not underestimated. In this study we have made use of the replicas generated by the JRR procedure and particularly of the weighting variables for reading and listening comprehension (for more information see ESCL Technical Report, 2012).

Variables
There are four variables involved in this secondary analysis of ESCL data: the independent variable which is related to the valuation of the important elements in the teachers' assessment; the response variables which are the scores
obtained in the reading and listening comprehension tests; and two control variables which are the country to which the student belongs and the sociocultural level of the family, which is a classic factor in studies of effectiveness and that helps to explain a part of the variance between students' results.

Independent Variable: Opinion about the important elements of the assessment of English as a second language

The Teacher Questionnaire was applied to teachers in the same school who voluntarily wanted to fill out the questionnaire. However, due to the ESCL design it is not possible to link the responses of a specific teacher to student results. This means that although the students' responses cannot be linked directly to the teachers that are giving them classes on one particular academic year, the student responses can be linked to overall characteristics of the centre he/ she is enrolled at. The aggregation of the responses of the teachers of a centre becomes a characteristic feature of that. Therefore, in the student's level the individual performance values can be related to the set of responses provided by the teachers of the school they attended during secondary education. This decision on aggregation also has a substantive justification. The ESCL study assesses students aged about 15 years old, these having been in the education system for an average of over twelve years of education, so it would be pointless to link their performance exclusively to the actions of a specific teacher. After having finished Compulsory Secondary Education it makes more sense to link the students' performance to the concerted intervention of the school as a whole. Naturally, some students will have gone through more than one school in their academic life. But, apart from being treated as isolated data, this is not information that is available in the database. Thus, as will be seen later through its design, the independent variable is a variable that characterises the predominant assessment model of the centre which the student attends.

The teacher's answers have been treated as follows:

- First we calculated the average of the eight variables which is included in the questionnaire about the important elements in their assessment to obtain the average score of each teacher.
- In the Teacher's Questionnaire, the eight questions about assessment are valued in a Likert-type scale of four alternatives. The scale values are: "Not Important" (0), "Not very important" (1), "Quite important" (2) "Very important" (3).
- The average variable range of each teacher varies between 0 and 3.
- To obtain the school's profile on which elements the teachers consider important in the assessment of the English language the average score is calculated in an aggregate manner for each centre. In this way an average score on the importance of assessment is obtained for each school.

■ This average is an indirect indicator of the centre's assessment style. In order to obtain two different assessment models, the average answers of the centre were divided into two (dichotomised) based on the average value of that variable. As a result of an exploratory data analysis of the clusters, given the observed distribution of the values, the cut-off point was taken as the value 2.50.

- The centres with an average value equal to or below the cutoff point were assigned to the so-called oriented model. In that case the code zero (0) was assigned to the independent variable.
- The centres with an average value above the cut-off point were assigned to the so-called exhaustive model. In that case the code (1) was assigned to the independent variable.

Dependent Variable: Scores obtained on the English reading and oral comprehension tests

Two response variables are used: reading comprehension and listening comprehension. As in the ESCL each student answered only part of all the questions used, assigning the individual scores was carried out through the imputation of Plausible Values (Wu, 2005, 2010; ESCL, 2012).

In essence, rather than obtaining a precise estimator of the measured skill for each student, an a posteriori distribution is obtained for each one from which five values are later extracted at random, which are called plausible values. This procedure has the advantage of allowing a better estimate of the variance of the measurement error, so that it decreases the probability of type I errors by making inferences about the average and other population values. In return, we do not have a single value for each individual, and in fact, two students with the same set of responses for each item may have different sets of plausible values, with different averages. Therefore all statistical analyses carried out with these variables differ from standard procedures that are common in conventional statistical packages.

The database used has finally linked the values for each centre corresponding to the independent variable constructed, as explained above, with the database of the students. Each student is assigned with the calculated average value for his or her centre in the independent variable.

The sample corresponds to a two-stage stratified design, with schools like PSU's (Primary Sampling Unit), with a probability proportional to the size of the centre and with equal sample size for all schools in the second stage. A weighting variable corresponds to this design in order to adequately calculate point estimates of each variable.

Furthermore, for the error variance estimation, the ESCL project uses a resampling procedure, in this particular case a variant of the Jacknife method known as JRR or JK2. This procedure uses 40 replicates for the first choice foreign language. This involves generating 40 weighting variables which allow us to get a better estimate of the sampling variance of each estimator.

As for each record in the database, five plausible values correspond to each dependent variable, the estimation of measurement and sampling errors reaches a certain complexity level especially considering a multilevel context like the one we have defined. For this reason in this case we have adapted the SPPS macros developed for PISA (2009, p. 203 and 217) by Eveline Gebhardt (Australian Council for Educational Research) ${ }^{1}$.

We have used a hierarchical lineal two level model - students (i) and centres ( $j$ ) for each country. The model has been applied to each of the two dependent variables $\left(y_{i j}\right)$ included in this paper. This model includes the socio-cultural level of the family (ESCS) and the assessment model of the centre ( $M_{-}$Evaluation), according to the equation 1:

$$
y_{i j}=\beta_{0}+\beta_{1} \text { ESCS }_{j}+\beta_{2} M_{-} \text {Evaluación }_{j}+\left(\mu_{1 j} \text { ESCS }_{j}+\mu_{2 j} M_{-} \text {Evaluación }_{j}+\mu_{0 j}+\varepsilon_{j}\right)
$$

The random errors of the students and schools are spread out according to a normal distribution with zero average and constant variables.

[^15]Figure 3.1 shows the responses to the Teacher's Questionnaire in the eight variables related to the valuation of the dimensions of competence in the assessment carried out by the teacher.

A highly asymmetric distribution can be observed, in which almost all of the responses focus on the valuations "Quite important" and "Very important." Regarding this fact there are at least two considerations.

The first one refers to the very real possibility that the answers are influenced by social desirability. It is very difficult for a teacher to consider any of the investigated dimensions as not important, especially in a subject such as language teaching in which departmental work is especially important, and therefore where peer pressure is more present.

The second relates to the posing of the question, because what this distribution shows is the low capacity for discrimination of the questions. There is a very small variance in the teachers' responses, which is the same as saying that these variables are not very informative.

But what is more important is that the way in which the questions are posed does not allow us to obtain a precise image of how the assessment is carried out by the teachers, since the responses obtained can hardly be regarded as a true reflection of that assessment. It is not that all teachers do the same. It is just that all teachers answer in the same way. It is not a problem of uniform activity, but lack of the discriminative power of the measuring instrument.

The interesting thing about this variable is that even though this distribution is so concentrated in only two values which are apparently very similar to each other, it shows differences in the students' achievement levels, as discussed below.

Figure 3.1. Teachers' valuations about the importance of each element on the students' assessment


Indeed, one thing is what the teachers ideologically consider, with respect to the dimensions to assess, as the discourse that they explicitly or implicitly assume, and another thing altogether is what they include operationally as content of their assessment. The time available for assessment is a scarce resource, and so necessarily all teachers have to make the best use of it and intentionally distribute their time in a way that suits their personal preferences - preferences that often even the teachers themselves are not fully aware of and that respond to internalized models throughout the length of their training and professional practice.

It is possible that a teacher may consider that all competences are equally important but in reality he/she assigns double the amount of time, for example, to text translation than to listening tests, or gives less points in a test to those parts relating to vocabulary than to another relating to the correct construction of grammatical sentences. And the way the questions are posed does not allow us to infer what the actual behaviour of the teachers in the assessment is. This is very important because, as suggested above, it is precisely the tests which the students have to answer that are those which in their eyes establish the
true priorities of the teacher concerning foreign language learning. And it is precisely those implicit messages in the assessment to which students react more strongly, thus adapting their behaviour in a way that ensures greater probabilities of academic success.

As a result of these considerations, it is worth noting the possibility that in the future these issues are presented in formats that are homogeneous with the reality on which they intend to collect information. Indeed, when planning their assessment, the teacher has certain limited resources, such as time spent evaluating and relative score assigned to each of the dimensions of competence. The questions should be isomorphic with that reality. For example, each teacher could be asked to circulate a hundred points between the different dimensions in the same way they would rate their exam. Another question might be to ask them to distribute a fixed time of the assessment between the dimensions analysed. Another alternative would be that teachers order all competitions based on several criteria, for example from higher to lower importance on the score, the time they would assign to them, the homework they would ask for each day or week, etc. All these forms of assessment have the common feature which is to ask the teacher to distribute a fixed resource between dimensions of competence. This would better differentiate the various styles evaluators of teachers. Naturally we still would still face the problem of the correspondence between what the teachers say and the reality in the classroom, something that always happens when you take individuals as a source of information about objective realities. But we would be eliminating the homogenizing effect that comes with the questions with unrestricted response format, as is the case of this questionnaire.

In Figure 3.2 we can see the distribution of the two models built by countries. In all the countries studied we observe that $70 \%$ of schools in the sample are assigned to the oriented model while the remaining $30 \%$ is allocated to the exhaustive model. This trend continues along the description of the set of centres selected by country, except the case of Sweden, Croatia and Bulgaria, which as discussed below is of some importance.

Figure 3.2. Distribution by countries of both evaluation models


Table 3.1 shows the results of the main coefficients of the multilevel model defined in equation 1 for the dependent variables of Reading and Listening comprehension based on the evaluation model of the centre (orientedexhaustive) and the socio-cultural level of the family.

The results' presentation will be focused on the fixed coefficients of the model, which will allow us to quantify the magnitude of the influence of each of the two included predictors and their statistical significant. We particularly focus on the evaluation model. Keep in mind that the cut-off point represents the average performance of a student (i) in the centre (j) of a certain country where the socio-cultural life of their family is in the average and the evaluation model of the centre in which they study which is the one called oriented. As in any regression model, the coefficient of the predictor shows the increase in performance with respect to the cut-off point when the socio-cultural level of the family increases by one point, on the one hand, and on the other, when the assessment model of the centre becomes exhaustive.

As every work that study the influence of socio-cultural families in academic
performance show, overall, the magnitude of this coefficient is bigger than the coefficient of the evaluation model in the two dependent variables and in every countries, except as in a couple of significant exceptions which are Bulgaria and Spain.

The study of the behaviour of the predictor Evaluation Model by countries has a significant influence on the Reading comprehension (Table 3.1) competence in favour of the exhaustive model in Bulgaria, Spain, Portugal and Slovenia ( $p<$ 0.05 ), It is also noteworthy that the magnitude of this coefficient is higher than that shown by the socio-cultural level of the family in Bulgaria ( 0.344 for socioeconomic level versus 0.691 ) and Spain ( 0.349 for socio-economic level versus 0.373 ). This is a strong indication that in these two countries the evaluation model called exhaustive is especially suitable for the development of reading comprehension. In the rest of the countries, where the evaluation model has no significant effect, the magnitude of the coefficient approaches zero.

Table 3.1. Multilevel Model for Reading and Listening Comprehension with ESCS and Evaluation Model as covariates by country

| COUNTRY |  | Listening C. |  | Reading C. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coef. | E.TípıCO | Coef. | E.Típıco |
| Belgium (French C.) | Average performance ( $\beta_{0}$ ) | 0.330 | (0.027) | 0.372 | (0.035) |
|  | $\operatorname{ESCS}\left(\beta_{1}\right)$ | 0.165 | (0.034) | 0.299 | (0.064) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.000 | (0.047) | 0.073 | (0.049) |
|  | Variance between schools | 0.152 | (0.013) | 0.187 | $(0.038$ |
|  | Variance within schools | 0.017 | (0.024) | 0.787 | (1.127) |
| Bulgaria | Average performance ( $\beta_{0}$ ) | 0.238 | (0.036) | -0.030 | (0.046) |
|  | $\operatorname{ESCS}\left(\beta_{1}\right)$ | 0.348 | (0.034) | 0.344 | (0.056) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.734* | (0.060) | 0.691* | (0.057) |
|  | Variance between schools | 0.485 | (0.051) | 0.664 | (0.088) |
|  | Variance within schools | 0.018 | (0.025) | 1.082 | (1.552) |
| Estonia | Average performance ( $\beta_{0}$ ) | 1.418 | (0.032) | 1.298 | (0.044) |
|  | $\operatorname{ESCS}\left(\beta_{1}\right)$ | 0.368 | (0.069) | 0.388 | (0.258) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.003 | (0.049) | 0.015 | (0.095) |
|  | Variance between schools | 0.502 | (0.047) | 0.539 | (0.205) |
|  | Variance within schools | 0.096 | (0.127) | 1.334 | (1.904) |
| Greece | Average performance ( $\beta_{0}$ ) | 0.766 | (0.039) | 0.680 | (0.051) |
|  | $\operatorname{ESCS}\left(\beta_{1}\right)$ | 0.312 | (0.037) | 0.383 | (0.045) |
|  | Evaluation model ( $\beta_{2}$ ) | -0.032 | (0.063) | 0.013 | (0.090) |
|  | Variance between schools | 0.228 | (0.037) | 0.073 | (0.029) |
|  | Variance within schools | 0.013 | (0.018) | 1.576 | (2.259) |


| SPAIN | Average performance ( $\beta_{0}$ ) $\operatorname{ESCS}\left(\beta_{1}\right)$ | $\begin{aligned} & 0.162 \\ & 0.267 \end{aligned}$ | $\begin{aligned} & (0.016) \\ & (0.026) \end{aligned}$ | $\begin{aligned} & 0.390 \\ & 0.349 \end{aligned}$ | $\begin{aligned} & (0.048) \\ & (0.038) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Evaluation model ( $\beta_{2}$ ) | 0.257* | (0.052) | 0.373* | (0.103) |
|  | Variance between schools | 0.291 | (0.038) | 0.252 | (0.047) |
|  | Variance within schools | 0.002 | (0.003) | 1.001 | (1.441) |
| France | Average performance ( $\beta_{0}$ ) | -0.042 | (0.053) | -0.155 | (0.079) |
|  | ESCS ( $\beta_{1}$ ) | 0.281 | (0.033) | 0.359 | (0.025) |
|  | Evaluation model ( $\beta_{2}$ ) | -0.029 | (0.061) | 0.036 | (0.101) |
|  | Variance between schools | 0.215 | (0.027) | 0.083 | (0.030) |
|  | Variance within schools | 0.001 | (0.001) | 0.838 | (1.206) |
| Croatia | Average performance ( $\beta_{0}$ ) | 1.155 | (0.024) | 0.609 | (0.033) |
|  | ESCS ( $\beta_{1}$ ) | 0.365 | (0.031) | 0.507 | (0.041) |
|  | Evaluation model ( $\beta_{2}$ ) | -0.165* | (0.033) | 0.019 | (0.056) |
|  | Variance between schools | 0.171 | (0.010) | 0.168 | (0.043) |
|  | Variance within schools | 0.024 | (0.033) | 1.260 | (1.807) |
| The Netherlands | Average performance ( $\beta_{0}$ ) | 1.855 | (0.069) | 1.198 | (0.065) |
|  | ESCS ( $\beta_{1}$ ) | 0.153 | (0.063) | 0.222 | (0.066) |
|  | Evaluation model ( $\beta_{2}$ ) | -0.041 | (0.126) | 0.034 | (0.153) |
|  | Variance between schools | 0.414 | (0.093) | 0.445 | (0.037) |
|  | Variance within schools | 0.007 | (0.009) | 0.836 | (1.199) |
| Poland | Average performance ( $\beta_{0}$ ) | 0.483 | (0.106) | 0.355 | (0.142) |
|  | ESCS ( $\beta_{1}$ ) | 0.348 | (0.054) | 0.578 | (0.082) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.158* | (0.054) | 0.092 | (0.099) |
|  | Variance between schools | 0.208 | (0.137) | 0.192 | (0.106) |
|  | Variance within schools | 0.003 | (0.004) | 0.945 | (1.357) |
| Portugal | Average performance ( $\beta_{0}$ ) |  | (0.018) |  |  |
|  | $\operatorname{ESCS}\left(\beta_{1}\right)$ | 0.380 | (0.021) | 0.363 | (0.024) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.166* | (0.056) | 0.155* | (0.068) |
|  | Variance between schools | 0.109 | (0.015) | 0.164 | (0.034) |
|  | Variance within schools | 0.012 | (0.017) | 1.149 | (1.650) |
| Sweden | Average performance ( $\beta_{0}$ ) | 2.110 | (0.034) | 1.858 | (0.040) |
|  | ESCS ( $\beta_{1}$ ) | 0.347 | (0.018) | 0.451 | (0.027) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.141* | (0.054) | 0.035 | (0.043) |
|  | Variance between schools | 0.101 | (0.014) | 0.161 | (0.062) |
|  | Variance within schools | 0.010 | (0.014) | 1.389 | (1.992) |
| Slovenia | Average performance ( $\beta_{0}$ ) | 1.452 | (0.029) | 0.886 | (0.055) |
|  | $\operatorname{ESCS}\left(\beta_{1}\right)$ | 0.388 | (0.036) | 0.434 | (0.025) |
|  | Evaluation model ( $\beta_{2}$ ) | 0.102* | (0.038) | 0.229* | (0.075) |
|  | Variance between schools | 0.122 | (0.010) | 0.127 | (0.041) |
|  | Variance within schools | 0.060 | (0.081) | 1.339 | (1.912) |

[^16]The study of the predictor Evaluation Model by countries has a significant influence in the Listening comprehension competence (Table 3.1) in favour of the exhaustive model in Bulgaria, Spain, Poland, Portugal, Sweden and Slovenia. There is also a significant influence in favour of the oriented model in Croatia. As in reading comprehension, the coefficient in Bulgaria ( 0.348 for socioeconomic level versus 0.734 ) and Spain ( 0.267 for socioeconomic level versus 0.257 ) has a similar or even greater weight than the socio-cultural family level. One can therefore say that in Bulgaria and Spain is particularly significant the exhaustive model in Listening comprehension. In this case, only in five of all the studied countries of evaluation model had no significant effect, with magnitude of the coefficient tending to zero.

It is important to highlight the fact that every time we observe statistically significant differences they are in favour of the students' average of schools with predominantly exhaustive model, except in the case of Listening comprehension in Croatia.

The case of Spain is particularly interesting. Spanish students are not known for their performance, as Spain occupies the second last position among all countries participating in the English as first foreign language tests. In our country $85 \%$ of students are in schools where the predominant model is the oriented, and only $15 \%$ of the cases centres with exhaustive model. But the influence of the exhaustive evaluation model is significant both in Reading Listening comprehension, having much influence on the performance and the socio-cultural family level.

An analysis of mean difference with the Spanish data based on the evaluation model has also been conducted. It has proven the existence of statistically significant differences in favour of the exhaustive model both in reading ( $\mathrm{t}=3.01$, $d f=1001$ ) and Listening ( $\mathrm{t}=3.25, \mathrm{df}=1026$ ) comprehension. These analyses also allow us to report the magnitude of the effect because it talks about the impact of the chosen treatment, quantified effectiveness between different levels of the independent variable. Statistically, a standardized difference in the means "is the standardized difference in the means of the treatment groups". From this point of view, it complements the information provided by the contrasts of average differences, as well as to confirm the existence of these, also reports the standardized magnitude of the differences of one group over another.

The size of the effect on reading comprehension is 0.4 standard deviations in favour of the exhaustive model. This means that $65 \%$ of students enrolled in schools with oriented model are below the average of students in schools with
predominantly exhaustive model. Similarly, the size of the effect on listening comprehension is 0.32 standard deviations in favour of comprehensive model, showing that 63\% of students enrolled in schools with oriented model are below the average of the students enrolled in schools with exhaustive model.

A very suggestive result is that in the variable evaluation model influences performance in English as a first foreign language, because it is a variable that is manipulated by the teacher and the school. When results are significant, the exhaustive evaluation model has a positive influence (except in the case of listening comprehension in Croatia). This means that the average performance of students who are in centres with predominantly exhaustive model is superior to that of students who are in centres with predominantly oriented model.

Although the results are not statistically conclusive, they point in the direction that there is a systematic relationship between the predominant form of assessment of the centre and the average score obtained by the students in the dimensions of listening and reading comprehension, even after controlling a variable with proven influence on performance like the socio-cultural level of the family. These differences lean to the exhaustive model side. It is important to point out that, although it seems reasonable that there is a relationship between the teacher's way/form of evaluation and the student achievement, in this study the performance is not measured by the teachers themselves, but obtained in an independent and objective assessment, which highlights the importance of the result.

The limitations of the study when it comes to the used measuring instruments, especially those related to the information provided by the teachers themselves, may partly explain the fact that the observed differences, although almost always pointing in the same direction, not always become statistically significant.

One could legitimately wonder about the true meaning of the independent variable that has been built here. The fact that it reflects a major difference between teachers and between schools seems certain, especially after checking that these differences are partly reflected in the performance of students in tests that are independent of the teachers' perceptions.

Now, is it possible that teachers assign to all or nearly all the dimensions of competence the utmost importance without distinction, that they have a more demanding attitude in general towards students and this is reflected in their performance? If so, it is clear that the logical consequence of this would be the promotion of an attitude of greater academic rigor among teachers. It is also possible that the independent variable is associated with other causal elements that currently are not evident. To clarify this point it would be necessary to carry out some changes in the used measuring instruments and in the actual design and evaluations as those now before us.

And not escaped to our consideration the enormous importance of an independent variable that ultimately may be modifiable, but like everything in relation to the attitudes of teachers, not without great effort by the entire system, administrators, managers and even teachers themselves.

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# Chapter 4 

THE DETERMINANTS OF FRENCH LANGUAGE

LEARNING IN SPAIN ${ }^{1}$

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In this chapter we examine the learning of French as a foreign language by the Spanish students using the data obtained from the European Survey on Language Competences (ESLC). In Spain, the Basic Law of Education sets out that it is compulsory for students to study a foreign language and they can optionally study a second one. Typically, the first foreign language is English (and it begins in Primary education) and the second one is French (and it starts in Secondary education). ${ }^{2}$

This study has two main objectives. The first one is to examine the results that the students who study in Spain obtain in the French knowledge test and compare them with the results obtained by students who study in other countries (see

[^17]Hanushek and Woessmann (2011) for a discussion of the advantages and disadvantages of making international comparisons of academic tests). In ESLC there are two other countries, as well as Spain, where the second most commonly taught language is French. These are Greece and Portugal (see Chapter 3, Volume I of this report). It is also interesting to compare the results that Spanish students obtain in French with those they obtain in English. ${ }^{3}$ The second objective is to understand the potential determinants of the results of the French test.

As will be documented in section 3, the first remarkable fact that we observe in the ESLC data is that students in Spain obtain by far higher results than those of other countries that also study French as a second foreign language. Finally, these results are also far higher than those obtained by students in Spain on English knowledge tests. In this sense, according to ESLC data, students in Spain would have a very high level of French knowledge. Evidently, as discussed in detail in section 2, we have to take into account that the education systems of the different countries may differ, and the fact that for the vast majority of the students tested in Spain, French is a subject that they have chosen and that therefore there will be a positive selection effect of the sample. To some extent this sample selection will be translated into higher socioeconomic levels that we will be able to take into account.

Still, it is very important to understand which the keys to the success of French learning in Spain in order to consolidate them are.

The plan of the rest of the chapter is as follows: in section 2 we describe the ESLC data used in our analysis, highlighting the peculiar nature of the French sample and the possible effects of sample selection. In section 3 we analyze the results of the French test of students in Spain. In section 4 we identify the possible determinants of those results, first on a descriptive statistical level and secondly on a econometrical level. Finally, in section 5 we offer the conclusions and a reflection for possible recommendations for educational policy.

Data and selection of the sample

The data used in this study come from the test and questionnaires (of student, teacher and head) of the ESLC for the sample of students of Spain examined in the French test. As we have mentioned in the introduction, in Spain, in general,

[^18]French language is not a compulsory subject. Typically, it is an optional subject in Secondary education. This means that, compared to English, it is a subject that students choose and also a subject that they start studying later.

This is a very important aspect when analysing the results of the French test for several reasons. First, most students studying French in Spain have chosen to take it. This is important since the mere fact of choosing a subject can positively affect the academic performance: students who have chosen a subject are more motivated than students who are obliged to take it. Secondly, we must also bear in mind that for most students French is the second foreign language (typically English being the first). One might think it is easier to learn a second foreign language than learning the first foreign language because, though they are different languages, there are general common aspects of learning any foreign language that have already been overcome when starting with the second one. Thirdly, we must take into account the optional subjects on offer at the centre in addition to French. In the first years of ESO (Compulsory Secondary Education) reinforcement classes of basic skills (Maths and written or oral communication) are offered, in general, together with French. While in the fourth year of ESO (year in which students have done the ESLC performance test), the offer of optional subjects is much broader, the fact of having done French in the early years largely determining its continuation in the fourth year of ESO. Therefore one might think that the student who chooses French is a student who does not need reinforcement classes and who, on average, would tend to be a better student.

All these aspects result in a positive selection of the sample of students in the French test. That is to say, those factors in themselves contribute very directly to the results of the test being high. Furthermore, by analysing the data we find that students who have taken the French test have a much higher average socioeconomic level than the students who have taken the English test (see index of socioeconomic and cultural status of the parents in Table 4.3). And comparing the distribution of this index for both groups of students we can see that there is less dispersion for the students who take the French tests than for those who take the English test (see Table 4.A1 in the appendix). That is to say, neither the students from families with the lowest socio-economic levels nor those from families with the highest levels choose to do French. In the next section we will take these differences in the samples into account when comparing results.

We will also compare Spain with the other countries that were examined in French as a second foreign language. According to Eurostat, the percentage of
students studying French at ISCED level 2 in the three countries is: $36.9 \%$ in Spain (2010, latest available data), 52.8\% in Portugal (2010, latest available data) and $54.2 \%$ in Greece (2008, latest available data).

On the one hand, the comparison between these countries is less problematic because in all of them French is studied as a second foreign language and it is a language students have chosen. But on the other hand, we are faced with the comparison of different educational systems. Specifically, in the case of Portugal both the first and the second foreign language are compulsory subjects in Primary and Secondary Education, respectively. But the particular language which is studied (English, French, German) is chosen by the student in both cases. In practice English is the most widely studied as a first foreign language and French as a second foreign language but the reasons are not identical to the case of Spain. In Greece, the situation is similar to Portugal: the students who study English in Primary Education, and later in secondary education, can later choose the second foreign language they study (French, German, Spanish, Italian). In summary, these differences in the education systems make the comparison of Greece and Portugal with Spain less direct than would be ideal, though surely still largely valid.

In any case, we will be able to control some of these aspects which affect the selection of the sample in our econometric analysis, but perhaps not completely. In this sense, our results must be interpreted with caution, taking into account these selection effects.

The first objective of this study is to examine the level of French knowledge of the students who study in Spain and who completed the ESLC performance test. Each student was examined in two of the three following language skills: oral comprehension (listening), reading comprehension (reading) and/or written expression (writing) and the selection of the two skills for each student was made randomly. ${ }^{4}$ Next, we analyse the scores of students in each of the examined skills and compare them, firstly, with those of Greece and Portugal, and, secondly, with those of students from Spain who have done the English test.

[^19]As mentioned before, there are two other countries in the ESLC besides Spain where the second most widely taught language is French: Greece and Portugal. Furthermore, as in Spain, in these countries the first most widely taught foreign language is English. In all three countries French is a subject chosen by the students (although, unlike in Spain, in Greece and Portugal the learning of a second foreign language, whichever that is, is compulsory). These facts make the comparison between these countries largely valid, although not wholly ideal. Figures 4.1, 4.2 and 4.3 compare the scores distribution of French of the students in Spain, Greece and Portugal in the three language skills, respectively.

Figure 4.1. Distribution of scores in French - Listening comprehension
(Spain, Greece, Portugal)


[^20]Figure 4.2. Distribution of scores in French - Reading comprehension
(Spain, Greece, Portugal)


Source: compiled from ESLC 2011.

Figure 4.3. Distribution of scores in French - Written expression (Spain, Greece, Portugal)


[^21]In the three graphs the same fact is expressed: the level of French knowledge of the students in Spain is very high and, especially in reading comprehension and writing tests, is way above Greece and Portugal. Likewise, as the figures in Table 4.1 show, the differences in the average scores in French language between Spain and Portugal and between Spain and Greece are statistically significant in all three examined skills. As we have previously mentioned in section 2, we must bear in mind that these results could be explained by the fact that education systems are very different in these countries and, in particular, with regard to foreign language learning. Furthermore, these results could also be partly explained by sample selection effects. While correcting for the different education systems is not so obvious from the available data, we will later be able to correct sample selection effects, to some extent, when we compare French and English tests in Spain.

Table 4.1. Difference in mean scores between Spain and Portugal and between Spain and Greece

|  | Spain-Portugal Difference | Spain-Greece Difference |
| :---: | :---: | :---: |
| Listening comprehension |  |  |
| Diff. | $0.16^{* * *}$ | $0.35^{* * *}$ |
| Stand. Error | 0.03 | 0.03 |
| Reading comprehension | $0.16^{* * *}$ | 0.04 |
| Diff. | $0.35^{* * *}$ |  |
| Stand. Error | $0.44^{* * *}$ | 0,04 |
| Writing | 0.10 | $3.53^{* * *}$ |
| Diff. |  | 0.19 |

Source: compiled from ESLC 2011.
Given that the educational systems can be very different between countries, we next compare the French and English levels from the EECL among the students from Spain. In this case, the problem of the sample selection is more obvious given that French is an optional subject while English is compulsory. Figures 4.4, 4.5 and 4.6 make this comparison for the three language competences, respectively.

Figure 4.4. Distribution of the scores in French and English for Spain - Listening comprehension


Source: compiled from ESLC 2011.

Figure 4.5. Distribution of the scores in French and English for Spain - Reading comprehension


[^22]Figure 4.6. Distribution of the scores in French and English for Spain Written expression


Source: compiled from ESLC 2011.

Table 4.2. Distribution of the score averages in French and English for Spain

|  | French -ENGLISH DIFFERENCE |
| :---: | :---: |
| Listening comprehension |  |
| Diff. | $0.41^{* * *}$ |
| Stand. Error | 0.04 |
| Reading comprehension |  |
| Diff. | $0.74^{* * *}$ |
| Stand. Error | 0.04 |
| Writing |  |
| Diff. | $0.89^{* * *}$ |
| Stand. Error | 0.11 |

Source: compiled from ESLC 2011.

In the three graphs it can be seen that the French level of students in Spain is well above the level of English in all three skills. Again, the differences are greater in reading comprehension and writing than in listening comprehension.

In addition, Table 4.2 shows that the differences between the average scores in French and English are statistically significant in all three skills. However, in this case, as we have discussed in section 2, we have to take into account the differences in sample selection of the students who have taken the French test and those who have taken the English test.

One problem of the ESLC is that we cannot identify who has chosen French as an optional subject unless they have done the French test. ${ }^{5}$ This information would be crucial in order to implement a Heckman correction of the sample selection. Still, with the available data we can perform the following exercise to get an idea of the magnitude of the selection problem. In the data we can see that the French and English samples differ mainly with respect to the socioeconomic level of the parents, measured by the ESLC through an index of socioeconomic and cultural status, the ESCS (see Table 4.3 of descriptive statistics and Appendix Table 4.A1), and that the differences are above all at the tail-end of the distribution. So, if we focus on the observations between the 50th percentile and the 75th percentile of the ESCS distribution for the French sample we observe that socio-economic levels of both samples are very similar (see Table 4.A1 of the Appendix). Therefore, we next analyse the results of the French and English tests in these subsamples. Comparing Table 4.2 and Table 4.A2 of the Appendix, we can see that the differences the French and English tests results have been reduced but are still significant. In other words, although the sample selection is an important factor to explain the success in French tests in Spain, in view of this simple exercise it does not seem that the sample selection explains all the differences between the French and English results.

In this first section we have documented, based on the ESLC, that the French level of students in Spain is very high in the three assessed skills (listening, reading and writing). Furthermore, the French level of students in Spain is well above the French level of students in Greece and Portugal just as when we compared each of these levels of French with the corresponding levels of English of the students in Spain. In other words, we can say that, according to data from ESLC, in Spain the students excel in their French knowledge. Although, we obviously have to consider that on one hand, there are effects of sample selection (as we have shown in a simple way given the data limitations), especially when we compare with students who have taken the English test in Spain and that, on the other hand, the comparison between countries can also be problematic given

[^23]that the education systems are not the same.
In the next section we analyse the second objective of this study: the potential determinants of the results in French tests and the possible keys to success, controlling, as far as the data allow, for the effects of the sample selection.

Potential determinants of French tests results

When analysing the results of language learning, it is helpful to think in terms of a production function of four inputs: students, parents, teachers and schools (e.g.: see Hanushek, 1979). Each of these inputs may possibly contribute to the student's academic performance results. Firstly, the student's characteristics, as well as the motivation and interest of that same student when learning French, affect their performance. Secondly, we also know that an environment which is strongly determined by the parents' characteristics also affects the academic results (see Björklund and Salvanes (2011) for a review of the recent empirical literature on the effects of family background on education). Thirdly, the input of the teachers is also a key factor for the students' performance. In the ESLC data available for this study, we do not have the link between teachers and students. Therefore, all characteristics relating to the teacher will be average characteristics of the interviewed teacher of any given centre (for example, the proportion of teachers in a centre who spoke French at home when they were little). Finally, there are characteristics of the centre beyond those of the teachers which can also affect the academic results of the students. This can include observable characteristics of the centre such as its working methods (for example, the size of the classes) as well as other less observable factors (for example, additional effects of classmates, or the so-called peer effects in the literature - see Sacerdote - 2001, for a review of the recent literature).

For our analysis we will use both the ESLC questionnaire of students as well as that of teachers and also of the head of the centre. In particular, these are the variables that we have considered relevant, a priori, for each of the inputs.

- Students ${ }^{6}$
- Gender
- Age
- Duration of French learning (Number of years)
- French: optional or compulsory subject
- Time spent on French homework: A lot or a little
- Time spent on Maths homework: A lot or a little
- Parents
- Index of socio-economic and cultural status
- Level of French: good or bad
- Teachers
- Proportion of teachers in the centre who spoke French at home when they were little
- Centres
- Number of French classes per week ${ }^{7}$
- Size of the French class: more or less than 25 students
- Public or private centre
- Offer of other subjects in French: yes or no

Next we proceed with the analysis of these potential determinant factors of academic results. This consists of a descriptive statistical analysis, an econometric analysis for the sample of French and finally, an econometric analysis comparing French with English.

[^24]In this section, we conducted an analysis, on a descriptive level, of the factors that could be potential determinants of the academic results in French. Table 4.3 shows descriptive statistics for these variables (average, standard deviation, minimum and maximum values) both for the students in Spain who have taken the French test (first block) as well as for those who have taken the English test (second block) in order to have a framework of reference. Moreover, when comparing the sample of French with the sample of English, we can show some of the selection problems mentioned above.

Table 4.3 also includes descriptive statistics of the results of the ESLC test in each skill tested, which are provided through Plausible Values. Plausible Values are an instrument to study the relationship between ability and contextual information. Formally, Plausible Values are values drawn from the subsequent distribution of the ability of each student, where the prior distribution is adjusted (in a hierarchical Bayesian way) for each individual, based on questionnaire information, using a latent regression model (see European Commission SurveyLang Technical Report, Chapter 12, for more details on the calculation methodology for Plausible Values).

If we start with the student variables, we can see that the percentage of girls who choose to study French is higher than that of boys, $60 \%$ compared to $40 \%$. This does not occur in English, which is a compulsory subject. Since all of the students in Spain were tested while they were in fourth year of ESO, the variation of age in both of the tested languages is very small. ${ }^{8}$ The students tested in French language in Greece and Portugal are one year younger.

As for the number of years (academic years) that students have been studying the foreign language, in the case of English, since it is a compulsory subject and it is studied from Infant Education level, the average is about 9 years. In the case of the French, which is an optional subject, which most students begin to study in the first year of ESO, the average is much smaller, 4.5 years.

The low percentage of students who say French is a compulsory subject (17\%) with respect to English stands out. As we have previously discussed, this is one of the most important features that distinguishes the sample of students who have done the French test from the English sample. The fact of being able to choose French as opposed to the compulsory nature of English may influence motivation, interest and effort level of the students. It is worth noting, that for

[^25]those students who study French as a compulsory subject, the ESLC test results are still above those who have been tested for English. ${ }^{9}$

When analysing the variable that approximates the time dedicated to foreign languages homework we can also see important differences between French and English. Thus, 40\% of students examined in the French test said they devote a lot of time to French homework, compared with $53 \%$ of students examined in the English test who answer in the same way. Obviously, we must bear in mind that the centres dedicate less time in their timetables to French, which is optional, than to English: according to the ESLC, 2.79 hours of French against 3.35 hours of English.

The student questionnaire data do not allow us to identify how much time students devote to French/English homework relative to the time they devote to homework for other subjects, such as Mathematics which is a very important compulsory subject and which usually requires more work and effort from the students. However, we have included a variable which shows, as in the case of French/English homework, whether students spend a lot or a little time on Maths homework. Again, there are differences between the two samples: $63 \%$ of students in the sample of French say they spend a lot of time on Maths homework compared with $53 \%$ of students in the sample of English who answer the same.

[^26]Table 4.3. Descriptive Statistics of the variables

|  | French |  |  |  |  | ENGLISH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | No. obs. | Average | Stand. Dev. | Min. | Max. | No. obs. | Average | Stand. Dev. | Min. | Max. |
| Plausible value - Listening comprehension | 1142 | 0.56 | 0.73 | -1.66 | 4.92 | 1130 | 0.15 | 1.06 | -3.18 | 5.24 |
| Plausible value - Reading comprehension | 1167 | 1.03 | 0.90 | -1.50 | 4.06 | 1161 | 0.28 | 1.22 | -2.65 | 5.58 |
| Plausible value - Writing | 1142 | -0.66 | 2.39 | -11.80 | 6.34 | 1106 | -1.55 | 2.83 | -11.92 | 7.68 |
| Student |  |  |  |  |  |  |  |  |  |  |
| Girl | 1734 | 0.58 | 0.49 | 0 | 1 | 1716 | 0.51 | 0.50 | 0 | 1 |
| Boy | 1734 | 0.42 | 0.49 | 0 | 1 | 1716 | 0.49 | 0.50 | 0 | 1 |
| Age | 1710 | 15.35 | 0.68 | 11 | 22 | 1692 | 15.60 | 0.79 | 11 | 19 |
| Duration ( n o of years) | 1735 | 4.44 | 1.56 | 1 | 11 | 1711 | 9.23 | 2.32 | 1 | 11 |
| French/English - compulsory | 1718 | 0.17 | 0.38 | 0 | 1 | 1710 | 0.77 | 0.42 | 0 | 1 |
| Time dedicated to French homework/English- A lot | 1722 | 0.40 | 0.49 | 0 | 1 | 1705 | 0.53 | 0.50 | 0 | 1 |
| Time dedicated to French homework/English- Little | 1722 | 0.60 | 0.49 | 0 | 1 | 1705 | 0.47 | 0.50 | 0 | 1 |
| Time dedicated to Maths homework- A lot | 1729 | 0.63 | 0.48 | 0 | 1 | 1710 | 0.53 | 0.50 | 0 | 1 |
| Time dedicated to Maths homework- Little | 1729 | 0.37 | 0.48 | 0 | 1 | 1710 | 0.47 | 0.50 | 0 | 1 |
| Parents |  |  |  |  |  |  |  |  |  |  |
| Index of socio-economic and cultural status | 1730 | 0.23 | 1.11 | -3.58 | 2.89 | 1714 | -0.15 | 1.12 | -3.90 | 3.15 |
| French/English level - Good | 1722 | 0.33 | 0.47 | 0 | 1 | 1695 | 0.31 | 0.46 | 0 | 1 |
| French/English level - Bad | 1722 | 0.67 | 0.47 | 0 | 1 | 1695 | 0.69 | 0.46 | 0 | 1 |
| Centres |  |  |  |  |  |  |  |  |  |  |
| №. French/English hours per week | 1711 | 2.79 | 0.67 | 0.83 | 10 | 1697 | 3.35 | 0.84 | 0.92 | 10 |
| Size of French class - less than 25 students | 66 | 0.79 | 0.41 | 0 | 1 | 57 | 0.56 | 0.50 | 0 | 1 |
| Size of French class - more than 25 students | 66 | 0.21 | 0.41 | 0 | 1 | 57 | 0.44 | 0.50 | 0 | 1 |
| Public Centre | 68 | 0.63 | 0.49 | 0 | 1 | 59 | 0.66 | 0.48 | 0 | 1 |
| Private Centre | 68 | 0.37 | 0.49 | 0 | 1 | 59 | 0.34 | 0.48 | 0 | 1 |
| Other subjects in French/ English | 68 | 0.19 | 0.40 | 0 | 1 | 58 | 0.14 | 0.35 | 0 | 1 |
| TEACHERS |  |  |  |  |  |  |  |  |  |  |
| Proportion of teachers who spoke French/English at home when they were little | 79 | 20.22 | 31.85 | 0 | 100 | 71 | 9.10 | 21.12 | 0 | 100 |

Source: compiled from ESLC 2011

As for the variables of the parents, as already pointed out in section 3, it should be emphasised that the socio-economic and cultural status of the students who have taken the French test is much higher than that of the students who have done the English test. This indicates a major problem in the sample selection of French with respect to the English sample, probably unintentional. As we already know, the students' academic performance is positively related to the socioeconomic level of the parents (see Anghel and Cabrales, 2010, for the case of Spain). Therefore, the good results of students in French language in Spain could be explained, in part, by the proper family context of most of them. However, according to the simple exercise carried out in section 3, it does not appear that the selection of the sample in terms of socioeconomic status explains all of the difference between the results of French and English.

Another variable that might be correlated with the results in the language tests is the level of French/English knowledge of the parents. However, no differences were observed between the French level of the parents of students tested in French and the English level of the parents of students tested in English.

If we analyse the variables at the level of the centre, the data shows that the size of the French class (number of students in a class) is smaller than that of the English class. 79\% of the centres of the French sample have French classes of under 25 students compared to $56 \%$ of the centres in the English sample. This may be related, in part, to the fact that teaching English, a compulsory subject, involves more students and therefore it requires more resources (classrooms, teachers, etc.) from the school. However, in the next section, in the econometric analysis, we will see whether class size has any impact on students' performance on French tests. Finally, in 19\% of the centres of the French sample other subjects are taught in French, apart from the foreign language subjects, against $14 \%$ of the centres of the English sample where other subjects are taught in English.

As for the teachers, we have chosen from the teacher questionnaire the question that indicates whether the teachers spoke French/English at home when they were little (before 5 years of age). ${ }^{10}$ What stands out is the high percentage of French teachers who spoke French at home when they were little (20\%) compared to the low percentage of English teachers who spoke English at home when they were little (9\%).

To summarize, the descriptive analysis of the variables that we have identified as potential determinants of the student learning of French language reveals

[^27]significant differences between the French sample and the English sample. Some of them could be a sign of self-selection of students studying French and the centres that teach French. French is an optional subject to a much greater extent than is the case of English. This translates into fewer hours of classes of French than of English per week, and therefore less homework and less time spent by students on French homework. The socio-economic level of the parents of students in the French sample is much higher than that of the parents of students in the English sample. The size of French classes in schools is, on average, smaller than that of English classes and there is a significant proportion of centres in the sample where other subjects are taught in French, except foreign languages. Finally, among the teachers of French there is a high percentage of them who spoke French at home when they were little.

The estimations of next section will control for all these observable factors and, therefore they will take into account, partly, the problem of self-selection of students and schools.

Econometric Analysis

In this section we perform an econometric analysis of the potential determinants of academic results in French that we have already analysed in the previous section. To do this we will perform a series of linear regressions by Ordinary Least Squares (OLS). Since in the ESLC database there are students from the same school, all regressions will correct the standard errors clustering them by centre (clustered standard errors).

Our analysis considers three distinct specifications for each of the language skills (see Tables 4.4, 4.5 and 4.6, respectively). For each specification, we perform an unweighted regression and another one weighted according to the values provided by the ESLC database for each test (see European Commission SurveyLang Technical Report, Chapter 9). The first specification considers the variables of students and parents as inputs of the academic results (columns 1 and 2 of the tables with results). In the following specifications (columns 3-6) we add the inputs of teachers and schools.

As previously pointed out, in order to investigate the impacts of the teacher it would be necessary to be able to link each teacher with his/her students. Since this information is not available, all features related to the teacher will be the average characteristics of the teachers interviewed in any given centre.

This is a major weakness of the ESLC data when trying to distinguish between the effects of the teacher and those of the centre. Moreover, given that the number of centres interviewed in each country in the ESLC is only about 70, this severely limits the analysis that can be carried out on teachers and schools. To overcome this limitation, our focus in this study is, on the one hand, to estimate a second specification that adds the input of the centre and the average input of the teacher at the level of the centre to the first one (columns 3 and 4 of the tables with results). In other words, in this second specification we have the input of the student and parents and the input of the school and the teacher (on average). On the other hand, in a third specification (columns 5 and 6 of the tables with results) we set out a complementary analysis in which we include, besides the input of the student and the parents, the input from the centre through a fixed effect of that centre (i.e., the value added of the centre).

In summary, given the nature of the ESLC data it is not possible to distinguish between the four inputs (students, parents, teachers, educational centres) that we had initially set out. But we can differentiate between the input of the student, the input of the parents and a combination of the input of the teachers and the centre.

Tables 4.4 to 4.6 show the results of our regressions for the three language skills, respectively.

Table 4.4. Results of the regressions for the French test in Listening Comprehension
$\left.\begin{array}{lcc|c|c|ccc}\hline \text { OLS } & \text { OLS } \\ \text { WEIGHTED }\end{array}\right)$

[^28]Table 4.5. Results of the regressions for the French test in Reading Comprehension

|  | OLS | OLS WEIGHTED | OLS | OLS WEIGHTED | OLS WITH FIXED EFFECTS OF THE CENTRE | MCO WEIGHTED WITH FIXED EFFECTS OF THE CENTRE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Student |  |  |  |  |  |  |
| Girl | $\begin{gathered} 0.093 \\ (0.058) \end{gathered}$ | $\begin{gathered} 0.147^{* *} \\ (0.060) \end{gathered}$ | $\begin{gathered} 0.085 \\ (0.054) \end{gathered}$ | $\begin{aligned} & 0.114^{*} \\ & (0.058) \end{aligned}$ | $\begin{gathered} 0.062 \\ (0.044) \end{gathered}$ | $\begin{gathered} 0.097^{* *} \\ (0.046) \end{gathered}$ |
| Age | $\begin{gathered} -0.099^{* *} \\ (0.041) \end{gathered}$ | $\begin{aligned} & -0.089^{*} \\ & (0.043) \end{aligned}$ | $\begin{aligned} & -0.083^{*} \\ & (0.043) \end{aligned}$ | $\begin{aligned} & -0.068 \\ & (0.044) \end{aligned}$ | $\begin{aligned} & -0.065^{*} \\ & (0.036) \end{aligned}$ | $\begin{aligned} & -0.071^{*} \\ & (0.038) \end{aligned}$ |
| Duration ( n ㅇ. Years) | $\begin{gathered} 0.101^{* * *} \\ (0.020) \end{gathered}$ | $\begin{gathered} 0.103^{* * *} \\ (0.022) \end{gathered}$ | $\begin{gathered} 0.090^{* * *} \\ (0.021) \end{gathered}$ | $\begin{gathered} 0.082^{* * *} \\ (0.025) \end{gathered}$ | $\begin{gathered} 0.090^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.098^{* * *} \\ (0.028) \end{gathered}$ |
| French - compulsory | $\begin{gathered} -0.286^{* * *} \\ (0.097) \end{gathered}$ | $\begin{gathered} -0.0322^{* * *} \\ (0.109) \end{gathered}$ | $\begin{gathered} -0.305^{* * *} \\ (0.128) \end{gathered}$ | $\begin{gathered} -0.329^{* * *} \\ (0.134) \end{gathered}$ | $\begin{gathered} -0.257^{* * *} \\ (0.073) \end{gathered}$ | $\begin{gathered} -0.299^{* * *} \\ (0.072) \end{gathered}$ |
| Time devoted to French homework - A lot | $\begin{gathered} 0.094 \\ (0.070) \end{gathered}$ | $\begin{gathered} 0.138^{* *} \\ (0.068) \end{gathered}$ | $\begin{aligned} & 0.126^{*} \\ & (0.071) \end{aligned}$ | $\begin{gathered} 0.179^{* *} \\ (0.073) \end{gathered}$ | $\begin{gathered} 0.014 \\ (0.044) \end{gathered}$ | $\begin{gathered} 0.003 \\ (0.046) \end{gathered}$ |
| Time devoted to Maths homework - A lot | $\begin{aligned} & -0.008 \\ & (0.071) \end{aligned}$ | $\begin{aligned} & -0.034 \\ & (0.069) \end{aligned}$ | $\begin{aligned} & -0.019 \\ & (0.084) \end{aligned}$ | $\begin{aligned} & -0.028 \\ & (0.072) \end{aligned}$ | $\begin{gathered} 0.072 \\ (0.048) \end{gathered}$ | $\begin{aligned} & 0.071^{*} \\ & (0.042) \end{aligned}$ |
| Parents |  |  |  |  |  |  |
| Index of the socio-economic status | $\begin{gathered} 0.172^{* * *} \\ (0.038) \end{gathered}$ | $\begin{gathered} 0.168^{* * *} \\ (0.042) \end{gathered}$ | $\begin{gathered} 0.172^{* * *} \\ (0.037) \end{gathered}$ | $\begin{gathered} 0.159^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} 0.081^{* * *} \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.062^{* * *} \\ (0.027) \end{gathered}$ |
| French level - Good | $\begin{gathered} 0.088 \\ (0.063) \end{gathered}$ | $\begin{aligned} & 0.124^{*} \\ & (0.069) \end{aligned}$ | $\begin{gathered} 0.098 \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.103 \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.048 \\ (0.050) \end{gathered}$ | $\begin{gathered} 0.042 \\ (0.056) \end{gathered}$ |
| Centres |  |  |  |  |  |  |
| №. Hours of French per week |  |  | $\begin{gathered} 0.171^{* *} \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.202^{* *} \\ (0.086) \end{gathered}$ |  |  |
| Size of the French class - less than 25 students |  |  | $\begin{aligned} & -0.024 \\ & (0.134) \end{aligned}$ | $\begin{gathered} 0.106 \\ (0.119) \end{gathered}$ |  |  |
| Public Centre |  |  | $\begin{aligned} & -0.169 \\ & (0.141) \end{aligned}$ | $\begin{aligned} & -0.175 \\ & (0.146) \end{aligned}$ |  |  |
| Other Subjects in French |  |  | $\begin{gathered} 0.359^{* *} \\ (0.166) \end{gathered}$ | $\begin{gathered} 0.128 \\ (0.151) \end{gathered}$ |  |  |
| TEACHERS |  |  |  |  |  |  |
| Proportion of teachers who spoke French at home as children |  |  | $\begin{aligned} & 0.003 \\ & (0.002) \end{aligned}$ | $\begin{gathered} 0.003 \\ (0.002) \end{gathered}$ |  |  |
| Constant | $\begin{gathered} 1.995^{* * *} \\ (0.690) \\ \hline \end{gathered}$ | $\begin{gathered} 1.827^{* * *} \\ (0.679) \\ \hline \end{gathered}$ | $\begin{aligned} & 1.273^{*} \\ & (0.725) \end{aligned}$ | $\begin{gathered} 0.926 \\ (0.688) \end{gathered}$ | $\begin{gathered} 1.555^{* *} \\ (0.597) \end{gathered}$ | $\begin{gathered} 1.639^{* * *} \\ (0.610) \\ \hline \end{gathered}$ |
| R-squared | 0.128 | 0.138 | 0.205 | 0.215 | 0.062 | 0.067 |
| №. observation (students) | 1,113 | 1,113 | 905 | 905 | 1,113 | 1,113 |
| №. Centres |  |  |  |  | 82 | 82 |
| Notes: |  |  |  |  |  |  |
| 2. Reference categories for dummy variables: Boy, Time devoted to French homework -Little, Time dedicated to Maths homework - Little, French level of parents - Bad, Private centre. |  |  |  |  |  |  |
| 3. The estimations in columns (3) and (4) | control for | e size of the | munity wh | the centre is | cated. |  |

Source: compiled from ESLC 2011.

Table 4.6. Results of the regressions for the French test in Written Expression

|  | OLS | OLS WEIGHTED | OLS | OLS WEIGHTED | OLS WITH FIXED EFFECTS OF THE CENTRE | OLS WEIGHtED WITH FIXED EFFECTS OF THE CENTRE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Student |  |  |  |  |  |  |
| Girl | $\begin{gathered} 0.418^{* *} \\ (0.165) \end{gathered}$ | $\begin{gathered} 0.509^{* * *} \\ (0.190) \end{gathered}$ | $\begin{gathered} 0.491^{* * *} \\ (0.183) \end{gathered}$ | $\begin{gathered} 0.548^{* *} \\ (0.229) \end{gathered}$ | $\begin{gathered} 0.544^{* * *} \\ (0.114) \end{gathered}$ | $\begin{gathered} 0.578^{* * *} \\ (0.124) \end{gathered}$ |
| Age | $\begin{gathered} -0.229^{* *} \\ (0.098) \end{gathered}$ | $\begin{gathered} -0.253^{* *} \\ (0.112) \end{gathered}$ | $\begin{gathered} -0.243^{* *} \\ (0.106) \end{gathered}$ | $\begin{gathered} -0.256^{* *} \\ (0.120) \end{gathered}$ | $\begin{gathered} -0.206^{* *} \\ (0.094) \end{gathered}$ | $\begin{gathered} -0.218^{* *} \\ (0.109) \end{gathered}$ |
| Duration ( n º. Years) | 0.253*** | 0.221*** | 0.265*** |  |  |  |
|  | (0.054) | (0.073) | (0.056) | (0.069) | (0.041) | (0.041) |
| French - compulsory | $\begin{aligned} & -0.561 \\ & (0.353) \end{aligned}$ | $\begin{aligned} & -0.486 \\ & (0.396) \end{aligned}$ | $\begin{aligned} & -0.545 \\ & (0.414) \end{aligned}$ | $\begin{aligned} & -0.443 \\ & (0.421) \end{aligned}$ | $\begin{gathered} -0.677^{* * *} \\ (0.198) \end{gathered}$ | $\begin{gathered} -0.735^{* * *} \\ (0.193) \end{gathered}$ |
| Time devoted to French homework - A lot | $\begin{gathered} 0.564^{* * *} \\ (0.165) \end{gathered}$ | $\begin{gathered} 0.787^{* * *} \\ (0.191) \end{gathered}$ | $\begin{gathered} 0.567^{* * *} \\ (0.158) \end{gathered}$ | $\begin{gathered} 0.738^{* * *} \\ (0.177) \end{gathered}$ | $\begin{gathered} 0.394^{* * *} \\ (0.116) \end{gathered}$ | $\begin{gathered} 0.469 * * * \\ (0.144) \end{gathered}$ |
| Time devoted to Maths homework - A lot | $\begin{aligned} & -0.205 \\ & (0.168) \end{aligned}$ | $\begin{aligned} & -0.317 \\ & (0.218) \end{aligned}$ | $\begin{aligned} & -0.226 \\ & (0.179) \end{aligned}$ | $\begin{aligned} & -0.273 \\ & (0.218) \end{aligned}$ | $\begin{aligned} & -0.013 \\ & (0.106) \end{aligned}$ | $\begin{aligned} & -0.007 \\ & (0.116) \end{aligned}$ |
| Parents |  |  |  |  |  |  |
| Index of the socio-economic status | $\begin{gathered} 0.556^{* * *} \\ (0.090) \end{gathered}$ | $\begin{gathered} 0.531^{* * *} \\ (0.096) \end{gathered}$ | $\begin{gathered} 0.542^{* * *} \\ (0.102) \end{gathered}$ | $\begin{gathered} 0.519^{* * *} \\ (0.114) \end{gathered}$ | $\begin{gathered} 0.308^{* * *} \\ (0.068) \end{gathered}$ | $\begin{gathered} 0.304^{* * *} \\ (0.074) \end{gathered}$ |
| French level - Good | $\begin{gathered} 0.332^{* *} \\ (0.149) \end{gathered}$ | $\begin{gathered} 0.377^{* *} \\ (0.168) \end{gathered}$ | $\begin{aligned} & 0.321^{*} \\ & (0.161) \end{aligned}$ | $\begin{aligned} & 0.316^{*} \\ & (0.188) \end{aligned}$ | $\begin{gathered} 0.193 \\ (0.120) \end{gathered}$ | $\begin{gathered} 0.128 \\ (0.143) \end{gathered}$ |
| Centres |  |  |  |  |  |  |
| №. Hours of French per week |  |  | $\begin{gathered} 0.616^{* * *} \\ (0.202) \end{gathered}$ | $\begin{gathered} 0.781^{* * *} \\ (0.294) \end{gathered}$ |  |  |
| Size of the French class - less than 25 students |  |  | $\begin{aligned} & -0.216 \\ & (0.382) \end{aligned}$ | $\begin{aligned} & -0.191 \\ & (0.384) \end{aligned}$ |  |  |
| Public centre |  |  | $\begin{gathered} 0.238 \\ (0.412) \end{gathered}$ | $\begin{gathered} 0.211 \\ (0.487) \end{gathered}$ |  |  |
| Other subjects in French |  |  | $\begin{gathered} 0.389 \\ (0.471) \end{gathered}$ | $\begin{aligned} & -0.250 \\ & (0.563) \end{aligned}$ |  |  |
| TEACHERS |  |  |  |  |  |  |
| Proportion of teacher who spoke French at home as chindren |  |  | $\begin{aligned} & -0.001 \\ & (0.006) \end{aligned}$ | $\begin{aligned} & -0.002 \\ & (0.006) \end{aligned}$ |  |  |
| Constant | $\begin{gathered} 1.275 \\ (1.542) \end{gathered}$ | $\begin{gathered} 1.632 \\ (1.810) \end{gathered}$ | $\begin{aligned} & -0.041 \\ & (1.718) \end{aligned}$ | $\begin{aligned} & -0.080 \\ & (2.070) \end{aligned}$ | $\begin{gathered} 1.658 \\ (1.491) \end{gathered}$ | $\begin{gathered} 1.870 \\ (1.731) \end{gathered}$ |
| R-squared | 0.154 | 0.153 | 0.214 | 0.211 | 0.091 | 0.094 |
| №. observations (students) | 1,094 | 1,094 | 878 | 878 | 1,094 | 1,094 |
| №. centres |  |  |  |  | 82 | 82 |

## Notes:

1. Stardard errors clustered by centre, in parenthesis: * significant to $10 \%$; ${ }^{* *}$ significant to $5 \%$; *** significant to $1 \%$.
2. Reference categories for dummy variables: Boy, Time devoted to French homework -Little, Time dedicated to Maths homework Little, French level of parents - Bad, Private centre.
3. The estimations in columns (3) and (4) also control for the size of the community where the centre is located.

Source: compiled from ESLC 2011.

In all specifications and for each of the skills, the different explanatory variables have the expected sign. We now analyse the impact of the different characteristics of students, parents, schools and teachers on the ESLC French test results, for the different skills.

Starting with the students' characteristics, we see that being a girl is associated with better results in the French test. This phenomenon has been widely documented above for academic results in general (see González de San Román and De la Rica, 2012. The "girl effect" is very significant in the case of writing but less so in the case of reading comprehension and not at all significant for oral comprehension. In terms of age, we find a negative effect which probably reflects the presence of repeaters in the same year. Again the effect is larger and very significant in the case of writing but less so for reading comprehension and not so for listening. The number of years that the student has been learning French positively and significantly affects the test results for the three skills. When French is a compulsory rather than an optional subject it negatively affects the academic results. This effect is especially significant in the case of reading comprehension and writing but not so in the case of listening comprehension. The time dedicated to French homework (controlling for the time devoted to Maths homework) has a significant positive effect on writing but the effects are less significant in the other skills.

As for the variables of the parents, the socio-economic and cultural status positively and significantly affects the academic results in each of the three skills. The level of French of the parents also has a significant positive effect especially in the case of listening comprehension.

It is worth pointing out that in the specifications with fixed effects of the centre in columns (5) and (6), the impact of the variables of students and parents generally decreases in magnitude, even though their significance does not change. This indicates that the factors related to the centre or, in other words, the added effect of the centre, have a significant impact.

In the specifications of columns (3) and (4) we explicitly add the variables of the centre to identify those factors that mostly affect the results of the students in the French test. We observe that the number of teaching hours of French positively affects student results in the test and this effect is significant especially for reading comprehension and written expression. The bigger the size of the class, the worse the academic results in the case of oral comprehension but not
in the other two skills. ${ }^{11}$ In the literature, the effects of class size are mixed (see, for example, Angrist and Lavy (1999), Bandiera et al. (2010), Hanushek (1999 and 2003), Finn and Achilles (1990), Krueger (1999), Krueger and Whitmore (2001)). However, no emphasis has been done in the literature on the type of competence. Our results suggest that the size of the class matters but not for all skills. It seems very intuitive that it would be important for listening comprehension, a skill closely related to the practice of the language through conversation, but not for the other skills.

As to whether the centres are public or private, it does not seem to have any effect on the students' performance. The fact that other subjects are taught in French in the centre has a positive effect but its significance disappears when we use the weightings.

Finally, in terms of the teacher variable which is average at the level of the centre, the estimations show that the fact that the teachers spoke French at home when they were children has a positive effect but it is only significant in the case of listening comprehension.

Summarising the results of the estimations, we could say that the factors whose effect is homogeneous across all three language skills are the socio-economic level of the parents and the number of years that students have been learning French. Another student variable that positively affects the result is having chosen French, although it does not seem to have any effect in listening comprehension.

The impact of the factors related to centres and teachers is much more heterogeneous among the three skills. In reading comprehension and writing what matters is the number of hours of French per week. In listening comprehension what matters is the size of the French class and whether the teachers spoke French at home when they were children.

## Econometric analysis -French versus English

To finish this chapter, we have carried out the same econometric analysis as before but this time using the French and the English samples. In this case we have added a dichotomous variable that takes the value 1 for those who have

[^29]taken the French test and value 0 for those who have taken the English test. This variable captures (after controlling for all the characteristics of students, parents, teachers/education centre) whether students of French get significantly better results than students of English in the ESLC tests. Table 4.A3 in the Appendix ${ }^{12}$ shows these results and we can see that, in general, this variable is positive and significant, indicating that actually the students of French do better than students of English.

CONCLUSIONS AND RECOMMENDATIONS FOR EDUCATION POLICY

In this chapter we have analysed the results in French tests of students from Spain using the data of the ESLC. The first remarkable fact is that the students from Spain do particularly well in French tests compared to the results in Greece and Portugal and also compared to the results of English tests of students from Spain. In this sense we would say that it is important to maintain the way French is taught in Spain.

As we have thoroughly discussed during this chapter, such comparisons are difficult and not without their problems. Therefore, these results must be read with caution. On the one hand, when we compare countries we are comparing education systems that are very different. In particular, for foreign languages, while in Spain French is an optional subject (along with reinforcement classes for basic skills), in Greece and Portugal to study a second foreign language is compulsory (the particular language is the student's choice). On the other hand, the fact that in Spain French language (unlike English) is an optional subject means that there is self-selection in the population of students studying French instead of another optional subject. Specifically, we found that the socioeconomic status of parents whose children have been tested for French is higher than that of those who have taken the test in English.

The nature of the data has not allowed us to correct for this bias, but by carrying out a simple exercise based on the socio-economic level, we observed that the differences between French and English results do not disappear completely when we focus on the same socio-economic quartile. In the rest of our analysis,

[^30]the problems of selection have been taken into account as long as the available data allowed.

With regard to the key factors identified as determinants of the results of French tests, we can highlight (controlling for other determinants) firstly, the socioeconomic index and the level of French of the parents. Secondly, the amount of French (measured by the number of hours of French per week, or by the number of years students have studied French) the student is exposed to positively affects their knowledge. In third place, the class size affects some skills (such as listening comprehension) though it does not affect the others (such as writing). Finally, in fourth place, the fact that teachers spoke French at home when they were children positively affects students' listening comprehension, but does not seem to affect the other language skills, once it has been controlled for the other inputs. While these results are not very surprising, it is worth emphasising their importance and that it would be desirable to keep them at least equal in order to maintain the good results in French.

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## Appendix

Table 4.A1. Percentiles of the Index of socio-economic and cultural status (ESCS) in French and English

|  | FRENCH | ENGLISH |
| :---: | :---: | :---: |
| PERCENTILE 25 | -0.63 | -1.00 |
| PERCENTILE 50 | 0.34 | -0.24 |
| PERCENTILE 75 | 1.14 | 0.75 |
| PERCENTILE 100 OBS. | 2.89 | 3.15 |
| No. OB | 1,730 | 1,714 |

ESCS average for the group of students with ESCS between the 50 th percentile and the 75 th percentile of the French sample ESCS=[0,34-1,14]

| FrENCH | ENGLISH |  |
| :---: | :---: | :---: |
| Average ESCS | 0.73 | 0.74 |
| STAND. DEv. ESCS | 0.23 | 0.23 |
| №. Obs. | 434 | 343 |

Source: compiled from ESLC 2011

Table 4.A2. Average scores of the group of students with ESCS between the 50th and the 75th percentiles of the sample of French

|  | French |  |  | English |  |  | ENGLISH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | №. obs. | Average | Stan. Dev. | №. obs. | Average | Stan. Dev. | Diff. | Stan. <br> Error |
| LISTENING COMPREHENSION | 293 | 0.63 | 0.75 | 222 | 0.44 | 1.09 | 0.20*** | 0.08 |
| READING COMPREHENSION | 279 | 1.15 | 0.90 | 218 | 0.64 | 1.29 | 0.51*** | 0.10 |
| Writing | 288 | -0.31 | 2.37 | 239 | -0.74 | 2.57 | 0.43** | 0.22 |

[^31]Table 4.A3. Regression results for the joint sample of French and English


Source: compiled from ESLC 2011.

# Chapter 5 

Conclusions

The data from the European Study of Competence in Languages allow secondary analyses to be carried out in order to explain the results obtained in this study by Spain and, in turn, to identify factors for improving the performance of our students. Below are some of the findings observed by different research groups.

In the first chapter of this volume, Sara de la Rica and Ainara González, both professors at the University of the Basque Country, examine the determining factors of the results achieved by pupils in English by Spanish students. With this aim they compare, firstly, the characteristics of the education systems in Spain and Sweden, which is the the country with the best results in the first foreign language. In this way they can confirm that one of the major differences between these two countries is the level of English of the parents, which is high in the case of Sweden and relatively low for Spain. In our country, the Spanish students of parents who know English do better than those whose parents do not know this language. But this is not the only variable affecting language knowledge - there are other factors that also have a significant influence. Spanish students who have been studying English for longer have a better grasp of this language, meaning that the work of the teachers in our country has a true reflection on the knowledge of their students. However, there are aspects of the teaching that can be improved. Students who take extracurricular classes considerably increase their results in the three analysed skills: listening comprehension, reading comprehension and written expression. It may be concluded, therefore, that if we can achieve greater student motivation then the knowledge of English increases, and so too, the performance of Spanish students. This greater motivation should not mean an increase in the amount of English homework of the students, because this does not have a positive effect
on language knowledge. In short, the exposure time of students to the English language, either in class or in the family environment, positively affects their results in the command of English.

The second article, written by José Manuel Vez, Esther Martínez and Alfonso Lorenzo, Professors at the University of Santiago de Compostela, focuses on another type of exposure to English, that which is produced through the communication media in such activities as listening to and watching material in the original version. This listening to and viewing of audiovisual products in original version on television significantly improves the results achieved by the students in listening comprehension. This contact with English through the communication media explains $21 \%$ of the performance in the listening comprehension of the students, a greater influence than exposure to English through other means, such as the relations with people who know English or travel to English-speaking countries. The little use made in Spain of audiovisual products in English is, therefore, one of the causes of the relatively poor results in the listening comprehension of this language. The authors of this chapter point out that the countries with less dissemination of products in original version, France and Spain, are those with the worst achievements. The use of movies in English without dubbing explains why Portugal gets better results than those of Spain in listening comprehension, while in reading comprehension and writing it is in a worse position. To conclude, the option of the original version is an ideal medium to promote "friendly immersion environments" in English which improve listening comprehension to enhance and which complement the constraints that the development of this skill brings up within the education system.

The third chapter focuses on the teachers, who have a very significant effect on the knowledge that students achieve. The study of professors from various universities (UNED, International University of La Rioja and Complutense de Madrid) Eva Expósito, Esther López, Enrique Navarro and José Luis Gaviria, concentrates on studying how teachers' beliefs about the importance of the elements of assessment influence what they do in their teaching work and how these beliefs ultimately affect the results of their students. The authors define two assessment models of the centres. The so-called exhaustive assessment model is that which requires that their students master all competence dimensions in English (writing, speaking, listening, reading, pronunciation...) while the oriented model characterises those centres which examine their students to a greater extent in some of these dimensions and attach less importance to others. The
study concludes that the pupils from centres which attach the utmost importance to all dimensions of competence (exhaustive) get better results in English than those that consider some to be more important than others (oriented). It is possible that the exhaustive centres may have a more demanding attitude in general towards students, which is ultimately reflected in their performance. If so, the authors recommend the promotion of a culture of greater academic rigour in the Spanish educational system.

Volume II, produced by the research groups ends, with an article for optimism regarding the future of language learning in Spanish education centres. Brindusa Anghel of FEDEA and Maia Güell from the University of Edinburgh and FEDEA analyse the factors that influence the good results obtained by the Spanish students in French. These authors show that some of this good performance is down to the fact that students studying French have chosen this course, so are not a representative sample of all Spanish students in the 4th year of ESO (Compulsory Secondary Education). In fact, the socio-economic index of students studying French in our country is significantly higher than of those studying English. But even discounting the origin of the students, the results achieved in French by Spain are significantly better than those of English. Among other factors contributing to the performance in the French language is the percentage of teachers of this subject that spoke French at home as children. It is possible that the students of French make good use of the classes of this language, perhaps because having chosen this subject themselves they are more motivated. The class size affects results in listening comprehension but has no effect on written expression and reading comprehension. In short, the authors conclude that it would be important to maintain the way French is currently taught in our country.

This report, together with the international study, analyses only some of the many variables that influence student performance and can be taken as a starting point for further analysis and research that shed light on how to improve results in language competence for Spanish students.

The Spanish edition of the "European survey on Language Competences, ESLC" has been organized in two volumes. The first volume, written by the National Institute of Educational Evaluation, presents the main data from the international study and focuses on the Spanish data, comparing them to the data from the other participating countries and regions. In this second volume the National Institute of Educational Evaluation has coordinated the work done by four groups of researchers, specialized and interested in education, with the aim of using the conclusions drawn from these rigorous and detailed analyses to take decisions in the field of education. Professors from different Spanish Universities have had the chance to work with the database from the ESLC, and to focus on specific aspects which are highly relevant for linguistic competency in order to draw valuable conclusions by using robust statistical models.


[^0]:    ${ }^{1}$ In Spain this refers to the last year of Compulsory Secondary Education (ESO) which corresponds to ISCED level 2 of the OECD Classification of Educational Programmes
    ${ }^{2}$ See De la Rica, S. and A. González de San Román (2012) for a detailed description of the differences in the PISA results between the countries participating in the assessment program for 2009

[^1]:    ${ }^{3}$ To calculate the average we consider every native student from each of the 13 participating institutions assessing English as a first foreign language - around 18,800 students.
    ${ }^{4}$ The reading comprehension test encompasses two aspects which were assessed independently. In the analysis of this chapter we use the combined result of both - available in the data.
    ${ }^{5}$ The plausible values are drawn from the posterior distribution of ability of each student, where the previous information is adjusted based on questionnaire data for each individual using a regression. More details in the European Commission SurveyLang Technical Report.

[^2]:    Source: Prepared by ESLC 2011.

[^3]:    ${ }^{6}$ We present the average, which in most cases is a frequency corresponding to qualitative variables that take value 0 or 1 , and the standard deviation of each variable, as well as the number of available observations in each case.

[^4]:    ${ }^{7}$ Estimates are made for Spain, and not for Sweden, as the focus of our analysis is the determinants of performance for the Spanish case and not the differences in the returns of each of the variables between the two countries.

[^5]:    ${ }^{8}$ Nationality is not included among the demographic characteristics of the student as it only considered students born in Spain

    - about 90\%-. The estimation results do not change qualitatively for the sample that includes foreigners. Available upon request.

[^6]:    ${ }^{9}$ The results are robust to the inclusion of the centre fixed effects and the adjustment of estimates, measured by the R-squared, increases significantly when they are included.
    ${ }^{10}$ See De la Rica, S. and A. González de San Román (2012) for a detailed description of gender differences in the PISA results for a broad sample of 63 countries.
    ${ }^{11}$ This index summarizes diverse information about the social and family context of the students, such as the educational level of the father and mother or their occupations.
    ${ }^{12}$ See the report of José Manuel Vez et al. in this volume for a more detailed analysis of the effects of environmental exposure and use of a foreign language in non-formal contexts. It also finds a greater effect of the context in listening.

[^7]:    ${ }^{13}$ The coefficients used are those from the specification [2] in Table 1.3.

[^8]:    ${ }^{14}$ When interpreting the effects associated with the number of hours, we should take into account the low variability of that variable for those students of the same country, as is the case, being generally very similar between centres.

[^9]:    * José Manuel Vez is Chair Professor of Foreign Language Teaching. Esther Martínez Piñeiro is Professor of the Department of Research Methods and Diagnosis in Education. Alfonso Lorenzo Rodríguez is Associate Professor of the Department of Languages and IT Systems.

[^10]:    The study involved 12,000 students from eight European countries (Denmark, Finland, France, Germany, Netherlands, Norway, Spain and Sweden) who were in the final year of compulsory secondary education, and with an average age of 16 years.
    ${ }^{2}$ See also, in this report, the study of the Sara de la Rica and Ainara González entitled: Deciding Factors of Academic Performance in English Proficiency in Spain. Keys to improvement.
    ${ }^{3}$ Research conducted by the French group Media Consulting Group under the direction of Hayssam Safar (Centre for Media Studies and Research, University of Mons in Belgium) in 33 participating European countries.

[^11]:    ${ }^{4}$ This study used samples in the 32 OECD member countries and those European countries that do not have English as their official language. View: Rupérez, Bris, and Banal-Estañol (2010).
    ${ }^{5}$ Sara de la Rica and Ainara González reach a similar conclusion in their aforementioned study when comparing performance results in English between Spain and Sweden.
    ${ }^{6}$ Referring to the construction of language-friendly environments in which different languages can be heard and seen, where speakers of all languages feel welcome and where contexts and situations that foster language learning are encouraged (European Commission, 2003: 12; European Commission , 2008: 18).

[^12]:    ${ }^{7}$ This is how it was stated at the time by the European Commission with regard to the time factor in the implementation of the Indicator, as described in its paper "The European Indicator of Language Competence" (COM (2005) 596 final).

[^13]:    ${ }^{8}$ The test of the Factor of Inflation of Variance (FIV) confirms the collinearity of this index, giving a value of 2.1 which is higher than those found in the case of the remaining explanatory variables.

[^14]:    ${ }^{9}$ Countries included in our study: France, Spain, Poland, Portugal, Greece, Croatia, Slovenia, Estonia, the Netherlands, Malta and Sweden.

[^15]:    ${ }^{1}$ Available at http://www.oecd.org/dataoecd/52/24/42628268.zip

[^16]:    * Significant coefficient associated to the evaluation model with $\mathrm{p}<0.05$.

[^17]:    ${ }^{1}$ We thank Antonio Cabrales and Sara de la Rica for their comments and suggestions for this chapter.
    ${ }^{2}$ In some autonomic regions of Spain Castilian-French bilingual programmes exist. In addition there are the so-called Content and Language Integrated Learning centres (see European Commission SurveyLang Technical Report, point 222) that offer most of the instruction in a foreign language. In the ESLC data, we do not know which centres would be under this category. But we observe that $19 \%$ of the directors of the centres examined in French who responded to this question in their schools answered that in their centres they offer instruction in French in other subjects, no only in French language. (See Table 4.3).

[^18]:    ${ }^{3}$ For an analysis of the English ESLC tests see the chapter written by De la Rica and González de San Román (2012).

[^19]:    ${ }^{4}$ The scale of writing test is different than that of listening and reading tests. However, the comparisons we make in this chapter are not affected by this since we compare the different skills either between countries or within Spain for English and French tests.

[^20]:    Source: compiled from ESLC 2011.

[^21]:    Source: compiled from ESLC 2011.

[^22]:    Source: compiled from ESLC 2011.

[^23]:    ${ }^{5}$ More specifically, in the sample of students who have taken the test in English we do not know who has chosen to do French as an optional language. It would be enough to ask in the student questionnaire what optional subjects were chosen by the student in each course of the ESO.

[^24]:    ${ }^{6}$ We have not included the country of birth among the student characteristics, because $95 \%$ of the sample is composed of students born in Spain. We have also estimated the regressions from the following section only for the sample of natives and the results do not change qualitatively. For space reasons, we have not included these estimations in the chapter, but we can provide them for any interested reader on request.
    ${ }^{7}$ This variable has been computed at the student level since this information already existed in the student questionnaire.

[^25]:    ${ }^{8}$ ESO in Spain corresponds to the ISCED 2 level of the classification of the OCDE education programmes.

[^26]:    ${ }^{9}$ These results are available upon request.

[^27]:    ${ }^{10}$ The question about the languages that the teacher spoke when she was a child, including French, is an approximation of the fact that French may be one of the mother tongues of the teacher.

[^28]:    Source: compiled from ESLC 2011

[^29]:    ${ }^{11}$ We have also analysed another specification, differentiating between three groups of class size: less than 16 students, between 16 and 25 students and more than 25 students. We found that classes with less than 16 students have better results, both oral and written comprehension. These results are available upon request.

[^30]:    ${ }^{12}$ In the estimations with fixed effects of the centre, the dichotomous variable that we add here disappears, since it is a constant variable within the same centre. We have not included these estimations in Table 4.A3 of the Appendix. The effect of class size (from 16 to 25 students and over 25 ) is significant only in listening comprehension.

[^31]:    Source: compiled from ESLC 2011

