# School Achievement and Immigration in Catalonia, 2011-2016: A Demo-spatial Analysis 

Andreu Domingo*<br>Universitat Autònoma de Barcelona

Jordi Bayona
Universitat de Barcelona

## Original source:

Revista Catalana de Pedagogia, (15): 89-116 (2019)
(http://revistes.iec.cat/index.php/RCP/index)
Translated from Catalan by Mary Black


#### Abstract

In this paper, we present a study of schoolchildren of immigrant origin from the "generations" perspective, with the initial aim of visualising and re-evaluating the different situations associated with immigration and a secondary aim of analysing school achievement in relation to the determinants of the migratory process. The results indicate that major changes are occurring in the composition of the student body by origin, with second generations becoming increasingly prominent. At the same time, much of school failure is explained by recent arrival in Catalonia or by immigrationrelated discontinued presence in the country, in some cases at rates that are considerably higher than the figures for the students defined as autochthonous. This approach, which offers a better understanding of the composition of the student body in classrooms, has not previously been possible owing to a lack of statistical data, and it is a good example of the analytical possibilities of crossing data from administrative records and population statistics. These operations are indispensable for any project which seeks to design more effective school integration policies, thereby contributing towards social cohesion in the middle and long term.


Key words: immigration, school, migratory status, school failure, demographics.

[^0]
## 1. Introduction: Contributions to social innovation from the demographic perspective

Generating specific new statistics which adapt to the transformation of sociodemographic phenomena, and especially using administrative records and crossing this data with other existing population statistics, are utterly essential in order to generate informed policies. ${ }^{1}$

This is also true with regard to schools and the education and pedagogical action policies they require. This issue is particularly relevant at a time when a recent and particularly intense migratory wave in Catalonia - with more than 2,078,604 immigrants from abroad from 2000 to 2017 - has converged with an economic crisis that has had strong effects on both migratory currents, leading students to leave school and accelerating family regrouping flows of school-aged minors, and on schools themselves, primarily with budget cut-backs and limitations on staff. Last but not least, we are currently at a critical juncture in the organisation of population statistics with the National Statistical Institute's announcement of the definitive elimination of census operations. That is, we are in the midst of an exceptional demographic and economic juncture, coupled with a rethinking of the statistical records which underlie the visibility of populations and their dynamics, including the integration of the immigrant population and their descendants at school.

Being able to roll out more effective school inclusion policies that help contribute to social cohesion in the middle and long term depends on having a clear picture of this phenomenon. However, the data available from the Department of Education have traditionally been released by students' date of birth or nationality. This classification, which at the beginning of the migration boom caused no problems, has become insufficient with the increase in the number of children who are the descendants of immigrants born in Catalonia or the rest of Spain and have Spanish nationality. This statistical procedure has had two immediate repercussions. The first is the gradual loss of coverage associated with students' migratory flows, which are increasing in absolute terms and account for an ever-larger percentage of students in classrooms. Yet not only is this coverage partial, it is also biased since, as is common knowledge, access to Spanish citizenship varies from one nationality to the other, with the priority going to Latin American migrants, who are only required to have two years of continuous legal residency - as are Filipinos, Andorrans and Sephardic Jews - over other nationalities, as well as their children born in Spain, who have to have lived here ten years (Álvarez Rodríguez, 2006 and 2012). Secondly, it should be noted that methodological nationalism, the outcome of this availability of data, ended up guiding the reading of school achievement towards interpretations that highlighted students' expectations or living conditions depending on their origin or the nationality of their parents above other variables, thus excluding the disturbance that the very phenomenon of migration can cause in school achievement from the scope of study. The same held true in relation to territorial analysis, where the concentration (the existence of high proportions of a given population group) or segregation (the distance in distribution compared to another group) of certain

[^1]nationalities or origins in both neighbourhoods and schools was systematically underestimated, while those of other groups might be overestimated.

However, as demographers, one of our main hypotheses is that the low school achievement of children from some of the nationalities with the strongest representation in Catalonia may stem from their very migratory processes, which affect the child's schooling. Linking the data from the Department of Education with the ongoing local population census has made it possible for us to analyse the disturbances that migrations may have caused in the insertion and permanence of the foreign-born student body at school because of either late arrival or discontinuity. This is what we generically called the "migratory trajectory".

Once the trajectories have been established, we classify these minors by generational status, such that on the one hand, for the first time the school population can be described using this taxonomy (and not merely by place of birth or nationality), while on the other it enables us to compare the school achievement of those who were born in Spain as the children of immigrants with those we call "autochthonous", that is, those born in Spain to natives of Spain. The distinction according to their relationship with their and their parents' place of birth and their migratory trajectory also help us finetune our description of the relationship between school achievement and the concentration and segregation of the groups to which the children belong, particularly whether this different distribution in the territory translates into processes of identity encapsulation or social exclusion.

Within this context, this article has three main objectives. The first is to show a new perspective on the school population associated with international immigration in the $21^{\text {st }}$ century, beyond students' place of birth or nationality, which bears in mind their migratory trajectory and status. The second is to reproduce this taxonomy based on migratory trajectory in the territorial distribution, especially in the spatial concentration at both municipal and school level. The third objective seeks to relate the demographic characteristics of the student body and their spatial distribution with school achievement, measured as graduation from compulsory secondary school (henceforth CSS). Finally, the conclusions contain reflections on the results for the field of education.

## 2. The student body from the perspective of migratory trajectory

To relate the students with their migratory trajectory, we decided to use a "generations" classification, which is primarily used in studies on school achievement in the United States. Specifically, we have adapted the classification proposed by Ruben Rumbaut (2014) to the Catalan educational system. In this classification, the variables taken into account are place of birth, the year the student arrived and the place of birth of each parent. Despite occasional criticisms of this kind of classification, which argued that it perpetuated the classification of children born in the country (many of whom had the nationality of the host country) as "immigrants", thus contributing to their stigmatisation, this operational classification sheds light on the disadvantages that the very phenomenon of migration can entail and the inequalities that would otherwise remain hidden.

### 2.1. Sources: Administrative records and population statistics

The data sources on the students examined in this study were provided by the Department of Education of the Generalitat de Catalunya through the Statistical Institute of Catalonia (Idescat). We examined the microdata on the students enrolled in non-university education in Catalonia for academic year 2015-16. With this microdata, we found the main variables on the students and the schools where they are studying:

1) In addition to age and sex, the student is defined by their nationality (Spanish or foreign, and in the latter case the main nationalities and continental aggregations), as well as by their country of birth (born in Spain or abroad, and in the latter case the country where they were born).
2) The students are classified by type of study and year at school, the ownership of the school (public or private) and its location (city or inframunicipal).
3) Note is taken if the students have any special educational needs (including late arrival and disadvantageous social situations).
4) In addition to school achievement, two further variables are examined; first, whether or not the student has repeated any school year (yes, no or partially), and secondly, the variable analysed here: whether or not the student graduated from CSS, that is, whether they earned the diploma certifying that they have attained the basic competences of compulsory education in Spain. Following international criteria, we have used failure to graduate from CSS as synonymous with school failure. Despite the fact that this variable is only available for public schools, they are the home to $75 \%$ of the immigrant student body in the last year of CSS.

These data are joined by several variables coming from the examination of the Ongoing Population Census ${ }^{2}$ :
5) The nationality and place of birth of the parents (if the student lives with them) was ascertained in order to identify the volume of second generations and their relationship with school concentration; this is particularly associated with certain groups, such as the children of Latin Americans born in Catalonia with Spanish nationality, who disappear from view, unlike students from other origins.
6) For each student, the date they entered the census system of Catalonia was ascertained, with their first entry, which we identify as their arrival in Catalonia, although we do not know whether they have been schooled in Spain, and their last entry, which tells us of possible discontinuities in their residence in the country, a factor which is particularly relevant in some origins and nationalities, especially at

[^2]a time of economic crisis such as the one experienced during the years studied.
2.2. Classification of the student body by migratory trajectory: Generational groups

In this way, our classification consists in five generational groups:

1) Generation 1 or First Generation: students born abroad who reached Catalonia at the age of seven or older, and therefore have not studied in its educational system from the start of their education;
2) Generation 1.75: students born abroad but who reached Catalonia before the age of seven, and therefore have studied in the compulsory educational system from the start of their education;
3) Second Generation: students born in Spain, both of whose parents (or one, if they only live with one parent) were born abroad;
4) Generation 2.5: students born in Spain, one of whose two parents was born abroad; and
5) Generation 3 or Autochthonous: students born in Spain whose parents were also born here. If there is information on only one parent, and this parent was born in Spain, the child will also be considered Spanish.

## 3. Contributions from the migratory generations approach

The perspective we are taking in our analysis of the minors in relation to immigration is essential to understanding the volume and composition of this group within the entire student body, as well as to ascertaining their territorial distribution and concentration in classrooms. Considering the students enrolled in general, non-university education in Catalonia in academic year 2015-16, out of a total of 1,224,755 students ( $48.1 \%$ girls), the figures fluctuate between $9.75 \%$ of students born outside Spain and $11.9 \%$ with foreign nationality; despite the similarity of these two categories, they conceal very different age profiles, encompassing foreign minors born in Catalonia during their early years of schooling and other immigrants with Spanish nationality in their last years of CSS (Figure 1, left). However, if we consider the broader generations perspective, we find that $25.0 \%$ of these same students are either directly or indirectly associated with the phenomenon of immigration, through either their own or their parents' migratory process (Figure 1, right).

Among the student body, the Second Generation is gradually becoming more prominent among the youngest children, accounting for more than one-fifth of students in early-childhood education and becoming increasingly prominent in the different years of primary school. In contrast, in CSS the composition by generations is much more marked by recent migratory phenomena, with the students who have made a migratory movement (First Generation and Generation 1.75) being the most heavily represented. Conversely, there were few descendants of immigrants in academic year 2015-16, although this situation shifts in the ensuing years due to the growth of the Second

Generation. We should also consider the future evolution in migratory flows, where the economic recovery may come with a new upswing in the number of immigrant students. What is more, in Catalonia, the unequal distribution of these origins according to school ownership means that the percentages shown here are considerably higher in public schools.

Figure 1. Proportion of students in Catalonia according to their and their parents' origin, academic year 2015-16

By nationality and place of birth


By generations


Source: Authors, using data from the Department of Education and Idescat

One of the main factors to bear in mind in relation to students' migratory process is the year they arrived in Catalonia ${ }^{3}$. Half of the immigrant students came before 2007, after which the numbers start to decease, dovetailing with the first effects of the economic crisis on migratory flows. More recently, since 2013, we have been witnessing a clear upswing in arrivals, with $6.4 \%$ of immigrant children entering within the last academic year. According to place of birth (Figure 2), we can see that the decline in arrivals associated with the crisis is more intense among Africans, while the upswing in figures is particularly among students from the Americas.

Another variable examined, which is associated with the migration plans of immigrant families, is the relationship between their first year of arrival in Catalonia and

[^3]the last time they entered the country. We have access to this information by crossing the administrative records on the student body with the data from the Population Statistics Records, with which we can identify the last year of entry into the ongoing census system. However, we do not know the length of this discontinuity; we know that there has been a hiatus in their continuity in the Catalan educational system, but not its length, the time when they left, or whether it might happen again. The results presented here only refer to secondary school students, and they reveal that one out of every eight students associated with the migratory process has experienced this upheaval, a proportion which rises to $18.8 \%$ of those from Generation 1.75, although the Second Generation also shows a high rate of $15.1 \%$. Among the last to arrive, the First Generation, the percentage of discontinuity drops to $12 \%$, since they have had a shorter timeframe during which this situation could arise, while for Generation 2.5 this possibility is even lower, $4.6 \%$, very similar to the discontinuities experienced by the autochthonous students. By place of birth, among those born abroad, the discontinuity is quite notable among Pakistanis ( $28.8 \%$ ) and Ecuadorans (23.1\%), while it is less common among Moroccans (14.1\%) and Romanians ( $9.7 \%$ ). This practice, which we could relate directly to the migratory process - either the desire for the minor to be familiar with the customs of their home country or a temporary return due to a poor economic situation resulting from the economic crisis is repeated among the Second Generation. Considering the father's origin ${ }^{4}$, if he is Chinese (37.6\%), Dominican (23.4\%) or Filipino (22.8\%), there are higher levels of discontinuity, even though in absolute terms the group with the most discontinuities is Moroccans (9.9\%).

Figure 2. Immigrant students in Catalonia according to year of first arrival in Catalonia and zone of origin, academic year 2015-16


Source: Authors, using data from the Department of Education and Idescat.
${ }^{4}$ The figures are quite similar from the perspective of the mother. The use of one of the parents as a reference is to avoid the complexity of couples from different origins.

## 4. The territorial analysis

The considerable territorial dispersion of foreign-born students representing virtually all schools and years, plus the concentration in absolute number in some of the most populous municipalities in the country, many of which are located in the Barcelona Metropolitan Region, shape the main geographic patterns in Catalonia on a county and municipal scale.

These patterns reproduce the territorial distribution of the immigrant population in Catalonia, although in some regions their presence is more noticeable because of the low number of students overall. One example of this is the counties in the Pyrenees region. Figure 3 illustrates this distribution according to generations and stage at school, either primary or secondary, at the county level. The most visible results include the fact that Second Generation children are the most prominent in primary school, especially in counties like Segarra, where they are $25.8 \%$ of the total, and the Alt and Baix Empordà, where they account for more than $20 \%$.

Figure 3. Students associated with immigration, primary and secondary school, by county, Catalonia, academic year 2015-2016


Source: Authors, using data from the Department of Education and Idescat

Generation 2.5 is also more prominent in primary school, where it has the most significant portion of students in the Pyrenean and coastal counties. On the other hand, the First Generation is not very prominent in primary, although its representation
increases in secondary school, primarily in the Pyrenees of Lleida and in the Barcelonès county, which acts as a gateway to Catalonia. This last pattern is reproduced in Generation 1.75, but less intensely, and in particularly in the county of Segarra, which is the home to the town with the highest percentage of immigrants, Guissona.

Table 1. Towns with the highest percentages of students associated with the migratory process over total number of students, academic year 2015-2016 (early childhood, primary and secondary)*

| Town | Students | \% | Town | Students | \% |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Salt | 3,095 | 69.9 | Vic | 2,966 | 43.6 |
| Aitona | 137 | 60.4 | Torroella de Montgrí | 834 | 43.4 |
| La Jonquera | 326 | 56.4 | Creixell | 111 | 43.0 |
| Guissona | 692 | 56.2 | Manlleu | 1,265 | 42.6 |
| Castelló d'Empúries | 832 | 56.1 | La Seu d'Urgell | 815 | 41.5 |
| Cadaqués | 176 | 53.3 | L'Escala | 485 | 41.3 |
| Sant Pere Pescador | 126 | 52.7 | Salou | 1,580 | 41.2 |
| Lloret de Mar | 2,092 | 48.6 | Ulldecona | 331 | 40.5 |
| Roses | 1,391 | 46.5 | Castell-Platja d'Aro | 444 | 40.3 |
| Figueres | 3,479 | 46.0 | La Bisbal d'Empordà | 707 | 40.3 |
| Palafrugell | 1,565 | 44.7 | Canovelles | 813 | 40.2 |
| L'Hospitalet de Llobregat | 12,275 | 43.7 | Alcarràs | 533 | 40.1 |

*Only towns where more than 100 students are associated with the migratory process were included.
Source: Authors, using data from the Department of Education and Idescat.

In some specific towns, these percentages are high above the average (Table 1) and can account for more than half the student body, as in the town of Salt, where it verges on $70 \%$, with more than 3,000 students. They primarily include a strings of towns located on the Girona coastline from Cadaqués to Lloret de Mar (Cadaqués, Castelló d'Empúries, Sant Pere Pescador, Roses, Palafrugell, Torroella de Montgrí, l'Escala, Castell-Platja d'Aro and Lloret de Mar), all with more than $40 \%$. These coastal towns are joined by some in the inland regions from the same counties, such as La Jonquera, Figueres and La Bisbal d'Empordà. The remaining municipalities are geographically dispersed and encompass everything from metropolitan towns like L'Hospitalet de Llobregat and Canovelles to others closer to Lleida like Aitona and Alcarràs, along with towns that border Andorra (La Seu d'Urgell) or are located in Terres de l'Ebre (Ulldecona) and in the Tarragona region (Salou and Creixell), inland towns like Vic and Manlleu, and the town of Guissona in the county of Segarra, which shows a high degree of territorial dispersion of children with immigrant origins.

In Figure 4, these overall percentages for some of the cities with the largest immigrant student bodies are broken down by year in school and educational stage. In
some of these towns, the First Generation still has quite a considerable impact in the classrooms, such as in L'Hospitalet de Llobregat, Salt and Santa Coloma de Gramenet, where they account for close to or slightly over $20 \%$ of the students in the last year of CSS. However, the most striking fact is how in most cases the Second Generation represents a considerable percentage of students in the early stages of education. Salt in relation to Girona, and L'Hospitalet de Llobregat and Santa Coloma de Gramenet in relation to Barcelona, show us the metropolitan nature of the settlement of international immigrants and the need for supramunicipal school policies.

Figure 4. Composition of the student body by academic year, educational stage and migratory status, in percentages over the total number of students, academic year 2015-2016. Main towns






Source: Authors, using data from the Department of Education and Idescat

## 5. Inadequate achievement in CSS

Graduating from compulsory secondary school is tantamount to attaining the minimum compulsory education in the country. This does not mean that the student cannot continue their education, since there are vocational training programmes they can access without a secondary school diploma; nor does it mean that they cannot earn their secondary school diploma at a later date. However, failure to graduate from secondary school is internationally equated with the idea of "school failure" (Department of Education, 2013). Furthermore, it is a diploma which can be crucial in the future job placement of many of these youths, and therefore it conditions their future possibilities, further exacerbating any initial disadvantages they may have. However, we are not aware of the competences associated with these levels attained, since the objective of our study was to ascertain the determining factors of insufficient school achievement among minors directly or indirectly related with international immigration in Catalonia.

Generally speaking, students with immigrant origins show lower school achievement than autochthonous students (OECD, 2016), in Catalonia as well (Bonal et al. 2015; Domingo \& Bayona, 2016). Schnepf (2007) justifies these lower competences with two main groups of reasons: 1) because of the dearth of cultural capital of the families of students associated with immigration compared to the autochthonous students; and 2) because of the unequal geographical distribution of immigrants, meaning that they are associated with higher levels of school segregation and concentration. In addition to these factors, among those born outside the country, age of arrival is crucial (Böhlmark, 2008), and it becomes even more important in students from places where the language of the host country is not spoken (Corak, 2011).

In our case, graduating from CSS is information we only have available for those students enrolled in public schools, a total of 42,797 students who were in their fourth year of CSS. However, because we do not have the results of $3.2 \%$ of these cases, we only have the results of 41,442 of these students. On the other hand, for all academic years we have information on whether the student is repeating the year or not. Up to 2,395 students enrolled in the fourth and last year of CSS (5.8\%) were repeating the year, a situation which is more common among foreigners than autochthonous students ( $10.5 \%$ versus 4.5\%).

Table 2. Proportion of students who do not complete compulsory secondary school, by their migratory status, academic year 2015-2016

|  | Males | Females | Total | Difference males/females |
| :--- | ---: | ---: | ---: | ---: |
| Autochthonous | 13.3 | 7.4 | 10.3 | 5.9 |
| Generation 2.5 | 12.6 | 7.7 | 10.1 | 5.0 |
| Second Generation | 21.3 | 13.7 | 17.4 | 7.6 |
| Generation 1.75 | 21.7 | 12.2 | 16.7 | 9.5 |
| First Generation | 34.8 | 23.5 | 29.3 | 11.3 |
| Total students | $\mathbf{1 7 . 5}$ | $\mathbf{1 0 . 5}$ | $\mathbf{1 4 . 0}$ | $\mathbf{7 . 1}$ |

Source: Authors, using data from the Department of Education and Idescat.

The student body analysed shows a generational composition which should be borne in mind when interpreting the overall results. Thus, among these repeating students, the First Generation is quite common ( 4,749 students, or $11.5 \%$ ), but so is Generation 1.75 (3,561 or 8.6\%); together, these two groups account for two out of every ten students. In contrast, the Second Generation is barely represented ( 2,118 or $5.1 \%$ ), and Generation 2.5 even less so ( 1,478 or $3.6 \%$ ). This distribution by migratory status is quite particular and will vary intensely in the forthcoming academic years, as gleaned from the data in Figure 1.

The upheaval entailed by migration is decisive in school achievement in Catalonia (Bayona \& Domingo, 2018). The figures are the highest among the First Generation, $29.3 \%$ of whom do not graduate. Among them, those that entered Catalonia in 2015 and therefore are identified as arriving in the last year show an excessive proportion of $59 \%$ of school failure, which even surpasses $80 \%$ among those coming from African and Asian countries. In contrast, if the child arrives before the start of compulsory education, those we have labelled Generation 1.75, the differences are fuzzier compared to the children of immigrants, the Second Generation. We could say that arriving as a small child has the same effect as having been born here to immigrant parents. Despite the decline in percentages, there is still a $17.4 \%$ failure rate in the Second Generation, far higher than the $10.3 \%$ among autochthonous students. This is associated with the socioeconomic characteristics of the households in which they live, which have lower parental purchasing power and often educational levels or knowledge of the language which are much lower than in other households. In contrast, Generation 2.5 students show equal values as autochthonous students, even though the diversity according to the parents' origin is still noteworthy. However, the importance of the mother's educational level in the children's achievement is significant: the levels are higher if the mother is autochthonous or European than if she is African or Asian, from which we can deduce a significant difference in educational level. However, the origin of the father does not seem to have such a pronounced effect on the children's achievement.

The discontinuity mentioned above is negatively correlated with school achievement, since the children that have experienced ruptures in their presence in the Catalan school system - presumably because they emigrated from Catalonia - generally show the worst results. The exception is those who have just arrived, caused by a purely statistical effect, since it is impossible to find students among them whose year of first entry is very recent. The effect of discontinuity on the children of Generation 2.5 and Second Generation is worth underscoring, and it affects the marks of boys more intensely than girls.

Table 3. Proportions of school failure among students with discontinuities at school, academic year 2015-16

|  | Males | Females | Total | Difference males/females |
| :--- | ---: | ---: | ---: | ---: |
| Autochthonous | 19.9 | 14.6 | 17.4 | 5.3 |
| Generation 2.5 | 32.3 | 15.2 | 23.4 | 17.1 |
| Generation 1.75 | 26.0 | 16.5 | 20.9 | 9.4 |
| Second Generation | 28.4 | 15.6 | 22.0 | 12.8 |
| First Generation | 32.2 | 23.9 | 28.2 | 8.2 |
| Total students | $\mathbf{2 5 . 0}$ | $\mathbf{1 7 . 0}$ | $\mathbf{2 1 . 0}$ | $\mathbf{7 . 9}$ |

Source: Authors, using data from the Department of Education and Idescat.

One last factor that was considered in this study is the relationship between the school achievement and the concentration of immigrant children and adolescents at the school. Concentration tends to be viewed with concern, since it is directly associated with school failure. The social composition of the families at the schools with the highest proportions of immigrants is one of the main reasons behind these results (Garrido \& Cebolla, 2010); this is in direct relationship with their residential spaces and with the higher concentration or segregation of the population with immigrant origins in Catalonia as a whole (Galeano et al., 2014), and at schools in particular (Síndic de Greuges, 2008; Benito \& Gonzàlez, 2007; López-Falcón \& Bayona, 2012). Nonetheless, the effects of concentration have only been identified with significant levels of concentration are reached (Cebolla \& Garrido, 2011; Calero \& Escardíbul, 2016), and they affect both immigrants and the autochthonous student body.

School segregation and concentration is motivated by factors such as the parents' initial selection of the school (Síndic de Greuges, 2016); the gradual diversification of school educational plans intensifies this practice among the families with the most information and social capital. At the same time, the stigmatisation associated with concentration activates flight mechanisms by some families, which is known as "white flight" (Sánchez Hugalde, 2009), while others with fewer resources remain.

In our study, concentration was defined as the percentage of students associated with the migratory process (the sum of the different migratory statuses), which provides us with a different picture than what we get from nationality or country of birth, systematically increasing the levels of concentration. Figure 4 shows the percentages of school failure at schools in Catalonia according to the percentages of concentration at those same schools.

Figure 5. Relation between the levels of concentration of students associated with the migratory process and school failure, by migratory status, academic year 2015-16


Source: Authors, using data from the Department of Education and Idescat.

Generally speaking, a direct relationship was found between concentration and school failure; the higher the concentration, the higher the failure rate for both boys and girls. However, this is due to a composition effect (the higher the concentration, the higher the number of students with worse marks), and it is essential to check what happens for each of the migratory statuses examined. By doing so, we find that for the autochthonous students, concentration is associated with failure and that the effects increase with
concentration higher than $50 \%$. For Generation 2.5 , a similar effect was found, even though in this case we found a small number of cases and the volatility of the results is higher. Among Generation 1.75, the effect is also positive, although the intensity is low. If we discard the students in schools with a concentration under 10\% (even though there are very few of schools like this), concentration leads to a $5 \%$ increase in school failure, from values under $15 \%$ to higher than $20 \%$ in the highest concentrations. A similar picture can be gleaned from the graph on the Second Generation. However, for the First Generation, concentration does not increase failure levels, since they remain steady regardless of concentration. In this last case, only in schools where immigrants have a very low presence can positive results be found. Therefore, the effect of concentration is low-intensity and especially significant among the autochthonous student body, most likely those with the fewest resources.

Table 4. Proportions of school failure by municipality of the school and migratory status, academic year 2015-16*

|  | Autochthonous | First Generation | Generation 1.75 | Second Generation |
| :---: | :---: | :---: | :---: | :---: |
| Badalona | 13,1 | 31,4 | 15,3 | 20,5 |
| Barcelona | 8,7 | 27,2 | 14,2 | 13,2 |
| Figueres | 7,7 | 29,6 | 16,7 | 20,9 |
| Girona | 10,0 | 28,6 | 15,9 | 7,1 |
| Hospitalet de Llobregat, 1 | 14,6 | 29,2 | 15,1 | 21,1 |
| Lleida | 11,1 | 29,4 | 12,0 | 8,5 |
| Mataró | 12,7 | 37,5 | 11,4 | 20,0 |
| Reus | 11,9 | 31,1 | 14,9 | 12,8 |
| Rubí | 10,0 | 30,4 | 16,7 | 16,7 |
| Sabadell | 10,9 | 31,6 | 29,2 | 16,7 |
| Salt | 38,9 | 26,1 | 37,5 | 52,5 |
| Santa Coloma de Gramenet | 11,4 | 32,7 | 24,3 | 24,1 |
| Tarragona | 9,1 | 15,5 | 14,1 | 11,8 |
| Terrassa | 15,3 | 35,6 | 17,6 | 28,2 |

* Only municipalities with a minimum of 30 students in each of the categories were included. Source: Authors, using data from the Department of Education and Idescat.

Finally, Table 4 shows the municipal perspective on school graduation rates. As can be seen, there is a wide range of situations. The data show that the high failure rates among First Generation students is a consolidated phenomenon around Catalonia, from the
minimums in Tarragona and Salou ( $15.5 \%$ and $21.6 \%$, respectively), where are nonetheless always above the levels for autochthonous students, to the maximum levels of over 40\% in Vilafranca del Penedès, El Vendrell, Martorell, Lloret de Mar and Blanes. Comparatively, Generation 1.75 shows the best performance, even though it still lags far behind the performance of the autochthonous students; however, these figures are close in some municipalities or cities. The behaviour of the Second Generation is disparate, since some municipalities show better results than in the two aforementioned typologies, with values close to those of autochthonous students (as in Barcelona, Girona and Tarragona), while in other cases the differences remain or are even accentuated in relation to Generation 1.75. In these cases, we imagine that the differences can be explained by the composition of the different student groups by origin. Badalona, Figueres and L'Hospitalet de Llobregat may be examples of this. What are particularly exceptional and worrisome are the towns where the school failure rates among the Second Generation are higher than one-third of the students, which is far behind the results of the autochthonous students, accounting for more than $40 \%$ of the generational group. This can be found in Banyoles (contrasting with a scant $5.8 \%$ of autochthonous students), Blanes (with no differences between First and Second Generation), Salt (with a discouraging 52.5\%) and even Terrassa, where the rate is $28.2 \%$. Of course, the absolute numbers in these cases are important enough to attract attention, even if the percentages are lower than in less populous municipalities. The combination of the composition by student origin and the neighbourhood effect should be the interpretative factors with the strongest bearing on the results.

## 6. Conclusions: The road out of hell

The poor achievement of students associated with international immigration, and especially the distance between the achievement of those born in Catalonia and those we have called autochthonous in terms of graduating from compulsory secondary school, should spark a reflection. Despite the teaching community's efforts and the possibility that the achievement levels will improve with the change in the composition of the student body and the increasingly high proportion of Second Generation students in the forthcoming years, the gap between this generation and the autochthonous students persists, in some cases in an unsustainable fashion for both some origins and some territories. If this is true, instead of serving to offset inequalities, as the official discourse seeks to project, and despite the good intentions inspiring it, school will become one of the pathways where the most direct inequalities are reproduced. Stigmatising origins, municipalities or schools is not only unfair, it is also sterile. This is not how a truly serious problem should be addressed: it should be neither downplayed nor neglected.

If we had to classify the causes of this gap, we could find three kinds of reasons: 1) strictly demographic reasons; 2) reasons comprised of structural economic factors; and 3)
what we call "cultural" reasons. Among the first, as we have seen, the most important one is the disturbance that the migratory process itself can cause in individuals' school careers, where the most prominent factors are late arrival - not only because of the difficulties adapting, but also because expectations which are often placed in the job market - and discontinuity - which continues to affect some of the Second Generation students and can be related both to migratory (and educational) strategies and to economic difficulties in the household where the child lives. Finally, we also find the phenomenon of drop-out, although we were unable to examine it because of a lack of data, which is associated with other socioeconomic variables beyond migration itself. Among the factors we call socioeconomic, we should first point out the endemic lack of resources at schools, which is aggravated by the austerity policies which were implemented during the early years of the economic crisis. Secondly, school achievement is translating the disadvantaged situation in the households and neighbourhoods where the children live: although this can happen in privileged socioeconomic environments, in the majority of cases, concentration and segregation of the school population is associated with vulnerability. Finally, we want to stress that given the profile of immigrants, who are overwhelmingly here to provide untrained labour, the educational level of many of the immigrants' parents is very low, and this circumstance - especially among the women, who still bear the brunt of the reproductive tasks, including raising children - affects the supportive role that parents can play in their children's education.

Thirdly, we can highlight three reasons we have classified as "cultural". Even though these causes were not dealt with in this study, their effects on the results cannot be ignored. First, we should bear in mind the social capital for some students stemming from their initial knowledge of the Spanish language, which is notable among Latin Americans; this goes an extraordinary way towards facilitating their schooling compared to students of other origins, in terms of not only their own school integration but also their parents' potential participation in the educational community and their children's education itself. Yet secondly, we should also consider symbolic capital, that is, the hierarchisation of the children according to the prejudices and stereotypes which are widespread among the autochthonous population, including the teaching community. The expectations of children based on these stereotypes, though apparently not lower in the case of foreign parents and the descendants of immigrants to Spain than in the case of autochthonous students (Aparicio \& Portes, 2014; Portes et al., 2016), tend to have effects on their achievement, for better or for worse, and in turn on the expectations of the parents themselves.

Formidable efforts were clearly made in the field of education during the years of the migratory boom, beginning with the loads that the teachers had to take on, and yet the results are far from what we might expect. Part of this distance stems from the conviction of the exceptionalism of the migratory episode, beyond the improvisation and fragmentation of the students' educational experiences. As noted, we have the ingredients,
but the recipe does not seem to be working (Rué Domingo, 2018). A comprehensive educational policy should encompass not only schools, which obviously need higher investment, but also society as a whole - not solely what is known as the "educational community" - and all the processes involved in pedagogical action, beginning with recording and producing statistics which enable us to empirically analyse students' situation. For example, the typology suggested in this article could lead to micro-policies better geared towards offsetting the sociocultural deficits and discontinuities found.

The reinforcement from welcome support classrooms reflected the reality of a period marked by massive and increasing immigration flows, and today this service should be continued - since the migratory flows have resumed, albeit still at modest levels. However, as we have seen based on the poor results of the Second Generation students, special reinforcement should be planned for these students whose family environment cannot provide additional educational support because of a lack of resources. This means extending, to the extent possible, the pedagogical effort to the household members where the children are cared for, especially their mothers.

If urgent measures are not taken, we will be facing a paradox in a country where the "intercultural" discourse is hegemonic, concerned with putting an end to what has been called "parallel lives" (Cantle, 2005); a country which virtually spearheads a transversal policy reflected in the National Education Pact (2006) - where one of the three basic programmatic elements is social cohesion and equal opportunity - and a Pact for Living Together. National Immigration Pact (2008) - one of whose principles is the promotion of autonomy and equal opportunities to foster real equality, eliminating arbitrary conditions and circumstances; yet a country where the population is divided from the start of the life cycle and the careers of the student body are preordained. There have already been voices warning about the distance between goals and reality from the very start (Medina, 2007), but the distances have taken specific shape in children's achievement levels, as they drag the ballast of their failure as they search for jobs, try to start a family and in general aspire to improve, thus perpetuating and further deepening the inequality, legitimised by ethnocultural and religious prejudices. All of this contributes to constructing what we call a "pigmentocracy", that is, the hierarchisation of the social structure based on these prejudices. The discourse on meritocracy and upward social mobility through individual effort (Littler, 2017), which so many of our politicians cite when speaking about national identity, may be revealed to be an alibi to conceal the creation of inequality in the worst calque of the classic by Pierre Bourdieu and JeanClaude Passeron (2014).

## 7. Acknowledgements

This article is part of the project Demographics, Migrations and New Statistical Frontiers: Big Data, Continuous Population Censuses and Administrative Records
(CSO2017-85670-R), funded by the Ministry of Economy and Competitiveness, and the project Foreign Immigration, Territorial Concentration and the Neighbourhood Effect in Spain, financed with a Leonardo Grant for Researchers and Cultural Creators from the Fundación BBVA directed by Jordi Bayona.

## Bibliograhpy

ÁLVAREZ RODRÍGUEZ, A. (2006). Nacionalidad de los hijos de extranjeros nacidos en España. Madrid, Ministerio de Trabajo y Asuntos Sociales.

ÁLVAREZ RODRÍGUEZ, A. (2012). "Españoles por carta de naturaleza: del privilegio a la reparación de los prejuicios causados", in La notaría, 3, pp. 38-59.

APARICIO, R.; PORTES, A. (2014). Crecer en España. La integración de los hijos de inmigrantes. Barcelona: Obra Social La Caixa. Colección Estudios Sociales, 38.

BAYONA, J.; DOMINGO, A. (2018). "El fracàs escolar dels descendents de la immigració a Catalunya: més que una assignatura pendent", in Perspectives Demogràfiques, 11, pp. 1-4.

BENITO, R.; GONZÀLEZ, I. (2007). Processos de segregació escolar a Catalunya. Fundació Jaume Bofill, Polítiques, 59.

BONAL, X.; CASTEJÓN, A.; ZANCAJO, A.; CASTEL, J.L. (2015). Equitat i resultats educatius a Catalunya. Una mirada a partir de PISA 2012. Barcelona: Fundació Jaume Bofill. Informes breus, 60.

BOURDIEU, P.; PASSERON, J.C. (2014). La Reproducció. Vic: Eumo Editorial.
BÖHLMARK, A. (2008). "Age at immigration and school performance: A siblings analysis using Swedish register data", in Labour Economics, 15, pp. 1366-1387.

CALERO, J.; ESCARDÍBUL, J.O. (2016). "Proceso educativo y resultados del alumnado nativo y de origen inmigrante en España. Un anàlisis basado en PISA-2012", in Estudios de Economía Aplicada, 34-2, pp. 413-438.

CEBOLLA, H.; GARRIDO, L. (2011). "The impact of immigrant concentration in Spanish schools: School, class, and composition effects", in European Sociological Review, 27(5), pp. 606-623.

CANTLE, T. (2005). Community Cohesion: A New Framework for Race and Diversity. London: Palgrave Macmillan.

CORAK, M. (2011). "Age at immigration and the education outcomes of children", in

Discussion Paper Series, Forschungsinstitut zur Zukunft der Arbeit, no. 6072, Institute for the Study of Labor (IZA), Bonn.

DEPARTAMENT D'ENSENYAMENT (Department of Education); GENERALITAT DE CATALUNYA (2013). Ofensiva de país a favor de lèèit escolar. Pla per a la reducció del fracàs escolar a Catalunya, 2012-2018.

DOMINGO, A.; BAYONA, J. (2016). "Panoràmica de la immigració a Catalunya", in PINYOL-JIMÉNEZ, G. (coord.) Informe sobre la integració de les persones immigrades a Catalunya 2015 (pp. 10-45). Secretaria d’Igualtat, Migracions i Ciutadania, Generalitat de Catalunya.

GALEANO, J.; SABATER, A.; DOMINGO, A. (2014). "Formació i evolució dels enclavaments ètnics a Catalunya abans i durant la crisi econòmica", in Documents d'Anàlisi Geogràfica, 60(2), pp. 261-288.

GARRIDO, L.; CEBOLLA-BOADO, H. (2010). "Rendimiento educativo y concentración de inmigrantes en las escuelas españolas: PISA 2006", in Presupuesto y Gasto Público 61/210, 159-176.

GENERALITAT DE CATALUNYA (2006). Pacte nacional per l'Educació. Barcelona: Generalitat de Catalunya.

GENERALITAT DE CATALUNYA (2008). Un pacte per a viure junts i juntes. Pacte nacional per la immigració. Barcelona: Generalitat de Catalunya.

LITTLER, J. (2017). Against Meritocracy. Culture, Power and Myths of Mobility. London and New York: Routledge.

LÓPEZ-FALCÓN, D.; BAYONA, J. (2012). "Segregación escolar y residencial en Barcelona: del boom migratorio al asentamiento", in GARCÍA CASTAÑO, F.J.; OLMOS, A. (ed.). Segregaciones y construcción de la diferencia en la escuela (pp. 21-42). Granada: Editorial Trotta.

MEDINA, D. (2007). "El Pacto por la Educación en Cataluña. La realidad y el deseo", in Revista de Educación, 344, pp. 117-140.

OECD (2016). PISA 2015. Resultados Clave. (https://www.oecd.org/pisa/pisa-2015-results-in-focus-ESP.pdf)

PORTES, A.; APARICIO, R.; HALLER, W. (2016). Spanish Legacies: The Coming of Age of the Second Generation. Oakland, California: University of California Press.

RUMBAUT, R. (2014). "Ages, life stages, and generational cohorts: Decomposing the immigrant first and second generations in the United States", in International Migration Review, 38(2), pp. 1160-1205.

RUÉ DOMINGO, J. (2018). Propuestas para un nuevo Pacto de Educación. Barcelona: Octaedro.

SÁNCHEZ-HUGALDE, A. (2009). "La segregació escolar dels immigrants a Catalunya". Quaderns d'Avaluació, 13, pp. 55-76.

SCHNEPF, S.V. (2007). "Immigrants' educational disadvantage: An examination across ten countries and three surveys", in Journal of Population Economics, 20(3), pp. 527-545.
SÍNDIC DE GREUGES (Ombudsman) (2008). La segregació escolar a Catalunya. Informe extraordinari. Síndic de Greuges de Catalunya.

SÍNDIC DE GREUGES (Ombudsman) (2016). La segregació escolar a Catalunya (I): la gestió del procés d'admissió d'alumnat. July 2016.


[^0]:    *Contact address: Andreu Domingo. Centre for Demographic Studies (CED)/CERCA, Universitat Autònoma de Barcelona. Ca n’Altayó, Edifici E2. 08193 Bellaterra, EU. E-mail: adomingo@ced.uab.es

[^1]:    ${ }^{1}$ This article contains the main results from the research School Achievement, Migration and Territory. Catalonia 2011-2016, conducted by the Centre of Demographic Studies for the Secretary of Equality, Migration and Citizenship of the Generalitat de Catalunya.

[^2]:    ${ }^{2}$ Through a partnership agreement, the Statistical Institute of Catalonia (Idescat) has linked the microdata from the Department of Education on students from academic year 2015-2016 with the Ongoing Population Census. This is the administrative record that tallies the residents of any municipality in Spain and their main demographic characteristics.

[^3]:    3 We have this information for the first year in which their residence in Catalonia is registered on the ongoing census, and therefore it signals when they entered the school system. However, we do not know whether these students came directly from abroad or whether they came from other regions in Spain; in this latter case, the differences in the educational system would be much smaller.

