

# UvA-DARE (Digital Academic Repository)

# **School segregation**

Karsten, S.

DOI

10.1787/9789264086395-en

Publication date 2010

**Document Version**Final published version

Published in

Equal Opportunities? The labour market integration of the children of immigrants

## Link to publication

### Citation for published version (APA):

Karsten, S. (2010). School segregation. In *Equal Opportunities? The labour market integration of the children of immigrants* (pp. 193-209). OECD. https://doi.org/10.1787/9789264086395-en

#### General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

## Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

## Chapter 7.

## SCHOOL SEGREGATION

bv

Sjoerd Karsten, University of Amsterdam

#### **Summary**

Many OECD countries have recently experienced a rapid increase in immigration, and concomitant changes in the ethnic-social mix in their neighbourhoods and schools. The position of these immigrants in education is generally a major cause for concern because of their low performance levels, poor participation in higher education and high dropout. Considering that education is crucial for obtaining employment and income, the improvement of the educational position of immigrant students is an important policy goal. There is strong evidence that shows that non-school factors, such as family background, parenting practices, country of origin and language explain much of the systematic low achievement of certain immigrant groups. One school factor stands out as an important explanatory variable as well, and that is the impact of the ethnic and socio-economic composition of the students' school. There is much evidence that school and classroom composition effects school achievement and educational attainment through differences in learning opportunities (e.g. differences in teaching practices and teacher quality) and influences of peers. National and international data (in particular the Programme for International Student Assessment – PISA) show that immigrant students are not evenly spread over neighbourhoods and schools, and they often cluster with other low income groups, resulting in school segregation. For example, PISA data of the United States and European countries show that immigrants are highly clustered in a small number of schools. In many OECD countries half or more of immigrant students need to be moved to achieve equal representation in all schools.

Educational segregation is mainly the outcome of a process or residential segregation, processes of supply and demand on the local school market (parental choice, school profiling and admission rules), and general selection processes in education (e.g. early selection and tracking). Up to now, there have been not many, fully successful, policy programmes to create a more "balanced" system of schools in most OECD countries. In general three approaches can be distinguished. First, strategically using mandatory assignments of students by local or regional authorities through adjusting school attendance boundaries (e.g. integrating more affluent neighbourhoods or suburbs into one district); strategic planning of new schools; strategic use of special programmes or targeted recruitment of students and families (e.g. magnet schools); and, finally, student transfers (e.g. voluntary student transfer programmes, regulating transfers). Each of these policy measures presupposes that the public authorities have considerable discretion over the schools in their area. Second, the "controlled choice" approach. In a system employing this approach, either full mandatory assignment to "neighbourhood schools" or full "free choice" is abolished, and students are assigned to schools on the basis of a carefully-designed process. Parental control plays a major role here. This system depends on the juridical and administrative abilities to take account of the criteria in assigning students to schools. Third, the school improvement approach. Because the growing body of research that suggests a school's effectiveness is determined largely by the quality of its teachers, great emphasis in this approach must be placed on attracting excellent teachers to the schools where migrant or minority student clusters are numerous.

The controlled choice strategy seems to be most promising compared to both compulsory assignment and free or uncontrolled choice. First, controlled choice offers an important advantage over a compulsory assignment system: in many countries choice adds a right rather than taking one away. Those who can afford to buy a house in a "good neighbourhood" already had choice. So, choice is also expanded to less affluent families. Second, control can avoid the prisoner's dilemma issue of uncontrolled choice – public authorities can provide the necessary information to the parents, design fair procedures and try to find the right "balance". An important element is that authorities develop a fair system of admission rules of students, and strictly limit the number of schools that can "cream off" the better students. However, any strategy of better balancing the intake of students has to be complemented with policies of improving neighbourhoods and schools.

#### Introduction

The inequality of immigrants in acquiring human capital is an important factor in the explanation of the diversity in their labour market opportunities and chances of integrating successfully in their host countries. There is a large amount of literature that shows that immigrants' educational dispersion in many countries is considerably higher than that of the native population. For most OECD countries, this higher educational dispersion derives from very low-achieving immigrants (Schnepf, 2008). Consequently, an explanation is needed concerning the factors that may play a significant role in the school careers of immigrant students and the low achievement of certain groups of immigrants.

There is strong evidence that shows that *non-school* factors, such as the family background (socio-economic status – SES – and the mother's level of education), the country of origin, language and parenting practices, explain much of the systematic low achievement of certain immigrant groups. One *school* factor that explains differential achievement, and which is generally seen as a very important variable (more important than the teacher-student ratio, salary differences, and public versus private schools), is school or classroom composition (the student mix). The student composition of schools and classrooms can influence opportunities to learn in different ways (for example, through teacher-student and student-student interactions), and this can eventually translate into differences in achievement. It is therefore important to study the differences in student composition between and within schools, both nationally and across nations. This chapter examines the issues related to these differences in student composition in OECD countries: effects, causes and policies.

## 1. School segregation

The difference in distribution of immigrants and natives in schools (producing different school or classroom compositions) is often referred to as school segregation. In the academic literature segregation is a measure of the unevenness in the distribution of individual characteristics between organisational units (e.g. schools or jobs). In educational research the term is conceptually related to the impact of peer's characteristics and attitudes on the educational outcome at the school level. Unequal distribution of a particular population (e.g. socio-economic, ethnic, racial or immigrant group) is a necessary but not sufficient condition for defining the phenomenon of segregation. The notion of segregation implies negative consequences for individuals clustered in particular schools. For example, the students of Japanese schools in some major European cities are of course very similar to each other in terms of social characteristics, but it would be hard to think of these schools as problematic for immigrants. However, an immigrant student in a highly segregated school with a high percentage of low performing immigrants or natives is very much likely pulled to the average immigrants' achievement, while the same student can probably benefit much from a high percentage of well achieving peers in another school.

School segregation can be measured in various ways. Measures of unevenness, isolation, concentration, clustering, and centralisation have been applied in the past (Massey and Denton, 1988). The arguments in the academic debate about how best to measure segregation combine normative disagreements about what segregation actually is with more technical arguments about the desirable properties of a segregation index. As the differences between the various indices are equally valid and can actually be informative, we will not choose between them here and will mention only the most frequently used indices.

The first method of calculating the level of segregation is to measure the unevenness of the distribution between schools. The most familiar indicator for an uneven or imbalanced distribution is the dissimilarity index (DI). This indicator concerns the proportion of a certain group of students who would have to be reassigned to other schools in order to achieve the same proportion in each school as for the whole area (Duncan and Duncan, 1975). Such an area may form a geographic or administrative unit (e.g. school district, city or country). The theoretical limits of the index are zero (no reassignment necessary) and one (the entire population of a specific group must be reassigned). The advantage of the index is that this measure is unaffected by the actual numbers of a certain group of students in society, and is therefore "composition invariant". This segregation indicator, however, has one major limitation. While this index measures the scope of segregation, it says nothing about where the segregation occurs. So, the dissimilarity index can be the same for two or more areas, but can be blind to interesting differences in these areas (see also Hutchens, 2001). For example, in some areas students to be reassigned must come from a few schools, while in other areas (with the same level of segregation) these students must come from many or all schools. This may be important information for policy makers.

The second dimension of segregation concerns the extent of interaction between two groups. We are mainly interested in this dimension if we expect certain effects from this interaction (such as friendship relations or inter-ethnic tolerance). In this case, we can use the index of exposure, which was first proposed by Coleman et al. (1975) to measure the extent of inter-ethnic contact. This index refers to the variation in the ethnic or social composition of schools. This index can be expressed both as a percentage (Rossell, 1988) and as a curve (see Coleman *et al.*, 1975). This index is used mainly to show the differences between school districts or neighbourhoods with respect to the extent of interaction between specific groups of students. A second, closely related measure of inter-ethnic contact is based rather on its absence, or what is sometimes termed *ethnic isolation*. One commonly used measure of isolation is the percentage of certain minority students who are in school with enrolments between 90% and 100% minority students. Measures of this sort can be defined for different groupings (*e.g.* ethnic, racial, social background or immigrant status) and different percentages. It would be best if this type of percentage were also an empirically based reference point for specific results (the "tipping point"): such as fewer development opportunities for certain groups of students, fewer possibilities for integration, or an extra burden on teachers. However, at present, there is no empirically based theory that enables us to establish an absolute criterion.

#### 2. Cross-national differences

The issue of ethnic and social segregation in schools has attracted interest in many countries, but very few studies have been conducted to investigate ethnic or social segregation in a cross-country perspective that allows comparison of the levels of segregation. Literature, examining school segregation of immigrants, focuses generally on national data which are hardly comparable between countries. For this comparison we have to bear in mind that immigrant groups are not evenly spread over the countries so that the national level index doesn't always say much. That is why many single-country studies mainly report on the situation in the urban areas and the big cities.

Examples of those single-country studies are:

- About the largest school districts in the United States (Clotfelder, 2004; the publications of Civil Rights Project of Harvard University such as Frankenberg et al. 2003); the United States are into a dual processes of racial transformation and re-segregation. The next generation will be much less "white" because of the aging and small family sizes of "white" families and the demography is deeply affected by the immigration from Latin American and Asia. In particular the segregation of Latinos (the largest immigrant group) is now far more severe than when it was first measured nearly four decades ago. At the same time federal data show that the country is in a process of re-segregation and in some of the nation's previously desegregated communities they have moved back to segregated neighbourhood schools.
- About different aspects of segregation in England (Gorard *et al.*, 2003; Jenkins *et al.*, 2006; Noden, 2000; West *et al.*, 2004), in particular in relation with the reforms of 1980s. In England social segregation has been rising consistently, albeit slowly on average, but this national average masks considerably differences in segregation between Local Education Authorities.
- About major cities in France (Felouzis *et al.*, 2005; Maurin, 2004; Oberti, 2007). In France school segregation is, by its planning and assignment system (*la carte scolaire*), strongly concomitant with urban segregation. That is why Maurin uses the term "ghettoisation" to describe this situation.
- About Berlin (Noreish, 2007) and some states in Germany (Kristen, 2005). The case of Berlin shows that there is a high correlation between the movement of German children between catchment areas and the percentage of children who do not speak German in the home attending these schools.

- About Madrid (Berniell, 2009). The case of Madrid shows that as the share of immigrants in the population increases, the proportion of native parents who choose to send their children to private schools increases.
- About the situation in more egalitarian countries such as Denmark (Rangvid, 2007), the Netherlands (Karsten et al., 2006), Norway (Fekjaer and Birkelund, 2007), and Sweden (Szulkin and Jonsson, 2007) where ethnic segregation is on the rise. Sweden is an interesting case because it still combines comparatively high immigration rates and ethnic segregation with relatively equal opportunities for children.

An interesting study is also done by Ladd et al. (2009) which compares the levels of segregation in the largest school districts in the United States with the four major Dutch cities. They conclude that the segregation of disadvantaged immigrant students in the Dutch cities exceeds that of black students in most American cities. So, we can hardly deny that ethnic and racial inequality, long one of the central characteristics of American urban education, is increasingly becoming an important feature of the European educational landscape.

Studies with a cross-country perspective are scarce. In her study about differences in educational achievement between immigrants and natives in ten countries with a high population of immigrant students Schnepf (2006) computes the dissimilarity index for those countries using data from the OECD's Programme for International Student Assessment (PISA). Although she stresses (for technical reasons)<sup>1</sup> the need of some scepticism regarding the appropriateness of the PISA data for the calculation of the segregation index, she presents the segregation index DI together with the number of schools in the PISA sample, the average schools' immigration composition and the percentage of immigrants in the 50<sup>th</sup> and 90<sup>th</sup> percentile (ordered by the share of immigrants in schools) by country for PISA reading. The ten countries are ordered by the magnitude of the dissimilarity index (see Table 7.1).

Table 7.1. Average school immigrant composition in percentage and dissimilarity index, school level in PISA reading

	Number of schools	Mean percentage of immigrants in school	Percentage of immigrants in 50th percentile (P50) of school distribution	Percentage of immigrants in the 90th percentile (P90) of school distribution	DI
United States	148	9.1	0	40	0.647
United Kingdom	362	9	4	20	0.616
Canada	1 117	13	3.4	42.4	0.602
Netherlands	100	13.2	4	40	0.546
New Zealand	153	14.5	8.3	40.9	0.501
Sweden	154	13.3	6.1	29.6	0.497
Germany	215	16.2	11.1	43.3	0.493
France	117	11.1	6.3	33.3	0.490
Australia	231	23	14.3	66.7	0.479
Switzerland	282	18.7	14.3	44.4	0.400

Source: Taken from Schnepf (2006).

<sup>1.</sup> The PISA is a sample survey, which means that any measure of segregation estimated using its data is subject to sampling variation.

The table shows that the immigrants are highly clustered in a small number of schools. When we look at the dissimilarity index (DI) we see that school segregation is highest in the United States (almost 65% of the immigrant students in the United States would need to be moved to achieve equal representation in all schools). From the European countries the United Kingdom and the Netherlands also rank high, while in Switzerland (with the lowest index) still as many as 40% of immigrant students need to be moved for equal representation. In her further analyses Schnepf also finds that in Canada, France, Germany, New Zealand, Switzerland, the United Kingdom and the United States students in schools with an over-representation of immigrants (compared to the national share of 15-year-old immigrants) fared worse than students in other schools even if student' and schools' socioeconomic background were hold constant. Obviously, high clustering of immigrants in some schools is neither favourable for the educational achievement of immigrants nor natives attending these schools. Controlling for school segregation decreased immigrants' educational disadvantage in France, the Netherlands, Sweden and Switzerland where socioeconomic background differences between the two groups of children could not explain the whole immigrants' educational disadvantage (see more in Section 4).

Entorf and Lauk (2008), also using PISA, provide the dissimilarity index for six additional OECD countries: Czech Republic (0.82), Denmark (0.63), Hungary (0.61), Norway (0.58), Austria (0.58), and Russia (0.51). All countries have a segregation index above 0.5 indicating that the integration of migrant students in the educational system appears to be rather limited.

In a recent study Jenkins *et al.* (2008) focussed on the differences in socio-economic background in an internationally comparative perspective. Since immigrant status in many (European) countries highly correlates with socio-economic status, their data are of interest too. They compared the social segregation across 27 OECD countries with crossnational survey data (PISA 2000 and 2003). Their results show that levels of segregation in secondary schools do vary appreciably between countries. Factors of particular importance in explaining the degree of social segregation are: where parents of different social backgrounds live; how parents choose schools for their children (parental choice), and how schools choose their students (school choice based on ability and other admission rules). See Figure 7.1 and Jenkins *et al.* (2008) for the differences in the dissimilarity index (with 95% confidence intervals).

#### Their main findings are:

- High-segregation countries include Austria, Belgium, Germany, and Hungary.
   Hungary stands out as having the highest level of segregation, regardless of the choice of index or social position.
- Low-segregation countries include the Nordic countries of Denmark, Finland, Norway and Sweden. Scotland is also part of this group.
- The United States occupies a position in the country rankings that is similar to that of England towards the middle of the distribution.
- Higher levels of segregation are found in countries with a higher prevalence of school choice (*i.e.*, schools selecting their students themselves). The same is not true for parental choice.

<sup>2.</sup> Note that their index does not include migrant background in its definition.

Several countries with separate school tracks for academic and vocational schooling - Austria, Belgium, Germany and Hungary - have relatively high social segregation. Over half of this is due to an uneven social background between the separate school tracks, rather than an uneven spread within each of the school tracks

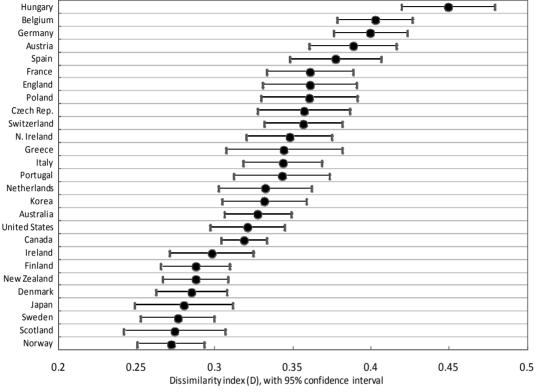


Figure 7.1. Social segregation in schools, 27 countries, dissimilarity index (D)

Note: High (low) family background defined by whether the parental occupation index value is above (below) the national median. The horizontal lines show 95% confidence intervals. Data for Japan refer to 2003 only.

Source: Data provided by Jenkins, Micklewright and Schnepf (2008) based on calculations from PISA data 2006.

## 3. Effects of school segregation

When assessing the effects of school segregation, a distinction can be made between primary and secondary effects. The primary effects concern the direct results at student level, for example on the student's cognitive performance, their non-cognitive skills (such as self-esteem, future aspirations) and inter-ethnic/interracial relations. Secondary effects concern the outcome over the longer term; for example, employment perspectives (social capital, ability to work in diverse workplaces), as well as the consequences for the school organisation (school climate and school attractiveness) and for the teacher labour market.

Most of the academic literature concerns the effects on the *performance* of students. If this effect occurs, this may be due to the characteristics of the students (mainly due to the average and the distribution of their abilities), the social and cultural resources that they have access to, the atmosphere that this gives rise to at school and in class, and the resulting teaching method. In general, it is assumed that the students' differences in socioeconomic background are reflected in this. For immigrant students, it is also assumed that, when they are in the majority, the learning pace may slow down due to the extra attention they will require due to cultural differences with the school and the teachers. And they also lack the benefit of having their native tongue being used as the teaching language. According to this last hypothesis, students who are not native speakers and who attend predominantly minority schools will have insufficient contact with the native language, and consequently their language skills will continue to lag behind.

However, it has often been difficult to convincingly isolate the different factors and mechanisms in empirical studies, because students from similar backgrounds typically tend to associate with one another, which means that a student's peer group is almost always self-selected. This self-selection occurs primarily in countries with parental choice and/or an extensive system of private education. But there are also schools that consciously divide up their students into certain level groups based on their performance, or which place immigrant children with language problems together in classes with teachers specialising in second language acquisition. This type of "self" selection makes it difficult to establish the cause and the actual scope of the effects on student performance. Recent years have seen a considerable amount of research that has attempted to use natural and quasi-experimental settings to identify the real effects of classroom composition.

Despite these better-designed studies, there is still no overall consensus on the subject: reported results vary from strong effects to no effect at all. The peer effects literature is vast, and has been extensively summarised and discussed, even in the form of reviews or meta-analyses (e.g. Hattie, 2002; Thrupp et al., 2002). Recently, Van Ewijk and Sleegers (2007 and 2009) conducted two meta-analyses: one analysis of all studies on the effect of socio-economic status, and a second analysis of studies on the influence of ethnicity.<sup>3</sup> Their findings were:

- The average weighted effect size over all the reviewed studies was 0.32. This means that an increase of the average socio-economic status of a student's peer group with one student-level standard deviation leads to an increase of 0.32 SD in the student's test score. The exact amount depended on the operationalisation of the average SES variable and the model specification chosen. These results suggest that the SES of a student's classmates has a substantial effect on the individual student's test scores.
- In the existing literature, the effect of the ethnic minority share on test scores is generally not very large, but there are some important variations. For example, the effect of the share of African Americans seems considerably stronger than the effect related to the share of immigrants. In addition, the ethnic minority share seems to have a stronger effect on the students from that same ethnic minority group than on students belonging to the ethnic majority or on other minority groups. The average effect size is much smaller than that of socio-economic status (SES), but one has to understand that, in most countries, the ethnic minority or migrant status highly correlate with the SES. Moreover, if these effects of ethnicity apply throughout a child's entire school career, they can add up considerably.

<sup>3.</sup> They provide a list of around 30 recent studies, which is why below there will be no longer references to specific studies.

<sup>4.</sup> Their meta-analysis does not give strong indications for the biasing role of omitted variables and the selection issue in the estimation of the peer effect.

In short, the socio-economic composition and – to a lesser extent – the ethnic composition, but certainly a combination of the two, have an effect on student performance. This is a major factor, particularly for children from disadvantaged environments, who are almost entirely dependent on the school for the acquisition of their human capital. An important piece of information related to policy making is that several studies have shown that the relationship is not linear, but has a tipping point effect (e.g. some studies suggest that the segregation effect is only significant in classrooms with 30% to 70% disadvantaged students, but this may due to the extra resources schools with high concentration of disadvantaged student receive in some countries).

Meta-analyses are a good starting point, but have the major draw-back that they only provide an average effect, and leave out the interesting findings of the individual studies. Although this is not the place to review those particular results, we can conclude that many questions stay unanswered. For example, we still don't know how peer effects work. Does the presence of students with poor outcomes spoil the outcomes of many other students? Or is the reverse the case, do the good performing students inspire all others to raise their achievement? Are there countries where the impact of segregation is more pronounced? Has it increased or decreased over time? These questions stress the importance of an international research agenda on this topic.

Other primary effects have been studied much less often, and the quality of the studies in this area is generally somewhat lower. There are only very few studies which, based on a quasi-experimental design, have established that inter-ethnic contact can lead to inter-ethnic friendships or a reduction in prejudice. A summary of 26 studies in this area (Lindo, 2008) demonstrated that more contact between students from different social strata and ethnic groups has a positive effect if a number of important conditions are met: equal status between the groups (especially the same performance level), active co-operation with social goals within the school, and support arising from regulations and customs. These are conditions that are generally difficult to meet. Descriptive evidence also indicates that simply redistributing students by race or ethnicity may not simply increase cross-racial or ethnic interaction if students are choosing to self-segregate. It is also clear from various studies that extracurricular conditions are also important, such as the general social and political climate, contact at neighbourhood level and the number of heterogeneous marriages.

Research into the secondary effects has taken place mainly in the United States, due to the years of experience with school segregation (since the landmark Supreme Court decision in 1954). From several perspectives, these studies are not transferrable to other OECD countries. For example, several older studies offer indications of differences in occupational aspirations between Blacks from desegregated and segregated schools and differences in social networks (social capital) as a result of attending segregated schools. Research has also been conducted into the effects of enforced desegregation (such as by bussing) on the school climate (increased conflicts and sometimes even violence). In addition, one study (Rivkin, 2000) examined whether desegregation programmes have raised lifetime earnings for Blacks, either through the expansion of interracial contact or improvements in school quality. He concludes that involuntary desegregation programmes have contributed little to the educational careers of African Americans. Therefore, he raises the point of whether schools differ in quality due to the functioning of the teacher labour market. There are strong indications that this is indeed the case. Many United States studies demonstrate how poor and minority students are put at a disadvantage by poor teacher quality. Interesting in this respect are numerous studies that have documented the tendency of the most qualified teachers to gravitate toward schools that serve relatively well-off students, even though the salaries are often no higher in such schools. There is also a large body of evidence that suggests that the power of higher salaries to attract teachers is limited, particularly when the pay differential consists of a one-time signing bonus rather than a permanent salary increase (for example, Clotfelder *et al.*, 2008).

### 4. Causes of social and ethnic segregation

In general, social and ethnic segregation can be caused by three factors. First of all, there is the effect of demographic trends and *residential segregation*. Where parents of different social and ethnic or racial backgrounds live is of particular importance. Since the 1970s, in most industrialised countries, the number of immigrants has been increasing in metropolitan areas and in certain districts within those areas. At the same time, the number of native residents has been falling in many western countries. Schools in these districts are experiencing the consequences of these changes: the proportion of immigrant students is increasing, and the proportion of native students is decreasing. Second, the *parental choice* for schools – which is motivated by social and ethnic factors – can play a role in the sectors or schools where students concentrate (within the state sector or between the private and state sector). Third, how schools choose their students, given that some admission rules (such as concerning ability or religion) are associated with social and ethnic background. In addition, some countries allow the *formation of new schools* based on religions such as Islam and Hinduism. Most students in such schools have an immigrant background.

The spatial dynamics of migrant or ethnic groups is not only a key to understanding the structure of society and the place occupied by specific groups in this society, but it also gives us some insight into the relationship between residential and educational segregation. Direct government intervention (such as affirmative action or zoning) has always been fairly minimal in housing in many western countries. There is a strong tradition of civil freedoms in the areas of residence. That is why ideas about dispersal have never been followed up by concrete policies. In many countries, the ethnic minority population is unevenly distributed throughout the country. Non-western immigrants are considerably overrepresented in the major cities, and distribution is also uneven within the cities themselves. Where housing is highly segregated, neighbourhood schools are generally segregated too. Existing school segregation may also reinforce housing segregation. In this vein, some majority households may move away to areas of a city with a small or nonexistent minority population, because they prefer majority-dominated schools.

However, the connection between residential segregation and educational segregation does not explain the whole picture. Parental choice is also an important factor. There is evidence (for example, Karsten *et al.*, 2003) that this choice can be influenced by differential preferences of different ethnic and social groups. A study by Schneider and Buckley (2001) in Washington, D.C. revealed that parents have a strong behavioural bias toward the demographic characteristics (that is, the country of origin of the parents) of the student population during their choice process, which is in marked contrast to verbal reports of the importance of race. They also found that the composition of the student population played a greater role among well-educated parents than among less well-educated parents. The availability of private education also seems to play an important role. For example, Betts and Fairlie (2003) tested the hypothesis that native parents react to increasing inflows of immigrants in the United States by sending their children to private schools. They find for primary schools no significant relation between

immigration and private school attendance of natives, but they do find a significant link for secondary schools. The authors estimate that for every four immigrants who arrive in public high schools one native student switches to private education.

There are important cross-national variations in parental choice that can have an impact on segregation. The most common forms of formal choice are presented in Table 7.2.

Table 7.2. Most common forms of parental choice

Extent of parental choice	Description	Examples	
No choice	The students are divided among schools according to criteria set by public authorities. These criteria may be: place of residence, available transport, performance level, special needs, etc.	Austria France Switzerland (Cantons)	
	The parents' choice depends on the affordability of housing, waivers, choice for private school or evasion	Germany (several Länder)	
Choice between public schools	Parents can choose another school than that assigned to them by the public authorities	Land Nordrhein-Westfalen (since 2009)	
	The extent of the parental choice is determined by the size of the district, or other well-defined geographical boundaries	Zurich canton (since 2001)  Charter schools in the United States (since 1991)	
Choice between all schools (public and private)	The choice is extended to include private schools	Denmark (since 1849)	
	The choice for a private school may be attached to certain restrictions	Finland (since 1996)	
	(such as endorsement of religious principles)	Netherlands (since 1917)	
	The same as in the public system, the choice is attached to certain geographical boundaries	Sweden (since 1992)	
		Voucher programmes in certain parts of the United States	

Source: Derived from Muller (2009).

The parents' choice of schools, taking into account where they live and parental avoidance strategies, not only depend on these formal regulations, but also on spatial and/or financial barriers, and, of course the attitudes of parents toward different groups.

In a recent study Alegre and Ferrer (2009) tried to examine how and to what extent certain characteristics of educational systems influence school social segregation across countries using PISA data. Their analysis considers data for 32 OECD educational systems. Certain characteristics of school regimes are specially assessed: the level of institutional differentiation existing in the educational career; the presence of private schools in compulsory education; the level of school autonomy as regards the process of student admission; and the models and criteria defining public regulation of school access processes. Results of their analyses suggest that the margin given to schools to intervene in student admissions is more important in explaining social segregation than the margin given to families to select between different schools (parental choice). This is in line with earlier studies (West *et al.*, 2004) and is an important conclusion for policy makers.

## 5. Conclusions: policies concerning desegregation

Educational segregation is the outcome of a process of housing segregation, processes of supply and demand on the local market (parental choice and school profiling) and general selection processes in education. To date, few policies have been pursued to influence this situation in most OECD countries.

Only a few countries, with the United States being the most famous example, have tried to counteract segregation by means of *direct intervention*. "Non-white" children from the poorest neighbourhoods were "bussed" to predominantly "white" schools in more prosperous districts. This policy, often imposed by the courts, was justified by the argument that segregated schools were "inherently unequal" (see Clotfelder, 2004 for the historical background). The government was able to pursue this policy of forced reassignment because it was in control of nearly all the schools and there was no right to a free choice of school (except for affluent students in private schools). In the United States, forced bussing resulted in an accelerated exodus from the big cities to the suburbs (with the side effect of rising house prices), but also a "flight" to private schools.

Less direct ways of doing this are through policy measures with "controlled choice" (Kahlenberg, 2001). In this case, parents must report to a central enrolment point and indicate several school preferences. The public authorities then try to honour these preferences as much as possible, taking into account a desirable distribution. A number of places in the United States already have some experience with this method. This approach has several variations: such as voluntary agreements between schools on quotas and acceptance policies, centralised information for parents and the use of parental advisors who try to influence the parents' choice. Another variation is the introduction of magnet schools, which are public schools that try to attract certain groups of parents so that a certain degree of parental choice results in a diverse school population. The results regarding the effectiveness of such policies have been mixed.

Furthermore, voluntary parent initiatives are present in several countries with broad parental choice, such as the Netherlands. These initiatives consist of actions undertaken by parents who collectively sign up for highly segregated schools in order to create a better balance. Parents interact with the school authorities about the curriculum, individual attention for their children, placement in groups and after-school child care. Most of these initiatives are too recent to determine the effectiveness of such actions. In addition, there are student exchange projects undertaken by schools with very different compositions. These projects, which include collective sports, after-school child care and excursions, attempt to create some form of inter-ethnic contact. However, this may have little effect on student performance.

Finally, measures exist that allow the unequal distribution of students to be accepted as a fact, while extra subsidies (for example, weighted funding) are used to help make the

schools with high concentrations of disadvantaged students as effective as possible. These measures fall within the category of the "classic" positive discrimination programmes. Other studies have already explained (Karsten, 2006) that these programmes have only had limited success in recent decades.

In summary, three methods or approaches to desegregate can be distinguished:

- Strategically using mandatory assignments of students by local or regional authorities to what are often called "neighbourhood" or "community" schools (as is traditionally done by many public school systems in the United States or through la carte scolaire in France). In communities where one finds segregated housing patterns, assigning students based solely on their geographic proximity to schools can result in significant school segregation. One way to counteract this is by improving the housing situation and to strive for "mixed" neighbourhoods (e.g. by zoning; housing vouchers programmes). Other ways are: adjusting school attendance boundaries (e.g. integrating more affluent neighbourhoods or suburbs into one district); strategic planning of new schools; strategic use of special programmes or targeted recruitment of students and families (e.g. magnet schools); and, finally, student transfers (e.g. voluntary student transfer programmes, regulating transfers). Each of these policy measures presupposes that the public authorities have considerable discretion over the schools in their area and that the public system has a (quasi) monopoly or some influence on the private system – through regulating powers or voluntary contracts, for example.
- The "controlled choice" approach. In a system employing this approach, either full mandatory assignment to "neighbourhood schools" or full "free choice" is abolished, and students are assigned to schools on the basis of a carefullydesigned process. Parental control plays a major role here. This system depends on the juridical and administrative abilities to take account of the criteria in assigning students to schools.<sup>5</sup> Individual family or student characteristics that may be considered in order to create a better balance include socio-economic status, parental income, geographic area, parental educational backgrounds and household characteristics. Because of the fact that in many countries desegregation plans based on immigrant status, race or ethnicity have been (successfully) challenged in courts and in the public debate, many authorities have been seeking "non-discriminatory" methods to maintain some racial or ethnic diversity in their schools. This could include, for example, socio-economic integration. This method of "controlled choice" also presupposes the same conditions as in the mandatory assignment approach.
- The school improvement method. Given the fact that demographic trends point towards declining numbers of "native" or "white" students in inner-city districts, which imposes a severe constraint on policy makers' ability to raise inter-ethnic or socio-economic exposure, some argue that a policy for improving schools attended by minority or migrant students is more realistic. Because the growing body of research that suggests a school's effectiveness is determined largely by the quality of its teachers, great emphasis in this approach must be placed on

In many countries "race", "ethnicity" or migrant status cannot be used because of constitutional 5. reasons of non-discrimination. For example, in France there is no official "ethnicity" category, due to the French conception of the citizen and citizenship, which does not recognise ethnicity.

attracting excellent teachers to the schools where migrant or minority student clusters are numerous. It is also argued that providing a high-quality education and a diverse education are not mutually exclusive. However, there is no question that some urban areas are severely segregated and so meaningful desegregation or integration is simply not possible without reversing some demographic trends.

The controlled choice strategy seems to be most promising compared to both compulsory assignment and free or uncontrolled choice (see also Kahlenberg, 2001). First, controlled choice offers an important advantage over a compulsory assignment system: in many countries choice adds a right rather than taking one away. Those who can afford to buy a house in a "good neighbourhood" already had choice. So, choice is also expanded to less affluent families. Second, control can avoid the prisoner's dilemma issue of uncontrolled choice – public authorities can provide the necessary information to the parents, design fair procedures and try to find the right "balance". An important element is that authorities develop a fair system of admission rules of students, and strictly limit the number of schools that can "cream off" the better students. However, any strategy of better balancing the intake of students has to be complemented with policies of improving neighbourhoods and schools.

# References

- Alegre, M.A. and G. Ferrer (2009), "School Regimes and Education Equity: Some Insights Based on PISA 2006", British Educational Research Journal, Vol. 35, pp. 1-29.
- Berniell, L. (2009), "School Sorting: The Effects of Immigration", Unpublished paper Universidad Carlos III de Madrid.
- Betts, J. and R. Fairlie (2003), "Does Immigration Induce 'Native Flight' from Public Schools into Private Schools?", Journal of Public Economics, Vol. 87, No. 5, pp. 987-1012.
- Clotfelder, C.T. (2004), After Brown. The Rise and Retreat of School Desegregation, Princeton University Press, Princeton/Oxford.
- Clotfelder, C.T., E. Glennie, H. Ladd and J. Vigdor (2008), "Would Higher Salaries Keep Teachers in High-poverty Schools? Evidence from a Policy Intervention in North Carolina", Journal of Public Economics, Vol. 92, pp. 1352-1370.
- Coleman, J.S., S.D. Kelley and J.A. Moore (1975), "Trends in School Integration, 1968-73", Paper No. 722-03-01, Urban Institute.
- Duncan, I.D. and B. Duncan (1975), "Residential Distribution and Occupational Stratification", in C. Peach et al. (eds.), Urban Racial Segregation, Longman, London.
- Entorf, H. and M. Lauk (2008), "Peer Effects, Social Multipliers and Migrants at School: An International Comparison", Journal of Ethnic and Migration Studies, Vol. 34, pp. 633-654.
- Fekjaer, S.N. and G.E. Birkelund (2007), "Does the Ethnic Composition of Upper Secondary Schools Influence Educational Achievement and Attainment? A Multilevel Analysis of the Norwegian Case", European Sociological Review, Vol. 23, No. 3, pp. 309-323.
- Felouzis, G., J. Perroton and F. Liot (2005), L'apartheid scolaire. Enquête sur la ségrégation ethnique dans les collèges, Seuil, Paris.
- Frankenberg, E., C. Lee and G. Orfield (2003), A Multiracial Society with Segregated Schools: Are we Losing the Dream?, The Civil Rights Project, Harvard University, Cambridge, MA.
- Gorard, S., C. Taylor and J. Fitz (2003), Schools, Markets and Choice Policies, Routledge Falmer, London.
- Hattie, J.A.C. (2002), "Classroom Composition and Peer Effects", International Journal of Educational Research, Vol. 37, pp. 449-481.
- Hutchens, R. (2001), "Numerical Measures of Segregation. Desirable Properties and their Implications", Mathematical Social Sciences, Vol. 42, pp. 13-29.

- Jenkins, S.P., J. Micklewright and S.V. Schnepf (2008), "Social Segregation in Secondary Schools: How Does England Compare with Other Countries?", *Oxford Review of Education*, Vol. 34, pp. 21-37.
- Kahlenberg, R.D. (2001), *All Together Now*, Brookings Institution Press, Washington, D.C.
- Karsten, S. (2006), "Policy for Disadvantaged Children under Scrutiny: The Dutch Policy Compared with Policies in England, France and the USA", *Comparative Education*, Vol. 42, No. 2, pp. 261-282.
- Karsten, S., G. Ledoux, J. Roeleveld, C. Felix and D. Elshof (2003), "School Choice and Ethnic Segregation", *Educational Policy*, Vol. 17, pp. 452-477.
- Karsten, S., C. Felix, G. Ledoux, G.W. Meijnen, J. Roeleveld and E. Schooten (2006), "Choosing Segregation or Integration? The Extent and Effects of Ethnic Segregation in Dutch Cities", *Education and Urban Society*, Vol. 38, No. 2, pp. 228-247.
- Kristen, C. (2005), *School Choice and Ethnic School Segregation*, Waxmann, New York/Munchen/Berlin.
- Ladd, H., E.B. Fiske and N. Ruijs (2009), "Parental Choice in the Netherlands: Growing Concerns about Segregation", Unpublished paper.
- Lindo, F. (2008), *Interetnische contacten tussen scholieren in het voortgezet onderwijs*, IMES, Amsterdam.
- Massey, D.S. and N.A. Denton (1988), "The Dimensions of Residential Segregation", *Social Forces*, Vol. 67, pp. 281-315.
- Maurin, E. (2004), *Le ghetto français : Enquête sur le séparatisme social*, La République des Idées/Seuil, Paris.
- Muller, K. (2009), "Libre choix des écoles Libre choix de quoi et par qui ?", Texte préparé pour le colloque international "Penser les marchés scolaires" du 12 au 14 mars 2009 à Genève.
- Noden, P. (2000), "Rediscovering the Impact of Marketisation: Dimensions of Social Segregation in England's Secondary Schools, 1994-99", *British Journal of Sociology of Education*, Vol. 21, pp. 371-390.
- Noreisch, K. (2007), "School Catchment Area Evasion: The Case of Berlin, Germany", *Journal of Education Policy*, Vol. 22, No. 1, pp. 1307-1328.
- Oberti, M. (2007), L'école dans la ville : Ségrégation, mixité, carte scolaire, Presses de Sciences Po, Paris.
- Rangvid, B. (2007), "Living and Learning Separately? Ethnic Segregation of School Children in Copenhagen", *Urban Studies*, Vol. 44, No. 7.
- Reardon, S.F. and G. Firebaugh (2002), "Measures of Multigroup Segregation", *Sociological Methods*, Vol. 32, pp. 33-67.
- Rivkin, S. G. (2000), School desegregation, academic attainment, and earnings. *Journal of Human Resources*, 35, pp. 333-346.
- Rossell, C.H. (1988), "How Effective Are Voluntary Plans with Magnet Schools", *Educational Evaluation and Policy Analysis*, Vol. 10, No. 4, pp. 325-342.

- Schneider, M. and J. Buckley (2001), What Do Parents Want From Schools? Evidence from the Internet, Occasional Paper No. 21 from the National Center for the Study of Privatisation in Education. Available at www.ncspe.org.
- Schnepf, S.V. (2006), "How Different Are Immigrants? A Cross-Country and Cross-Survey Analysis of Educational Achievement", in C. Parsons and T.M. Smeeding (eds), *Immigration and the Transformation of Europe*.
- Schnepf, S.V. (2008), "Inequality of Learning amongst Immigrant Children in Industrialized Countries", Southampton Statistical Sciences Research Institute. Applications & Policy Working Paper No. A08/01.
- Szulkin, R. and J.O. Jonsson (2007), "Ethnic Segregation and Educational Outcomes in Swedish Comprehensive Schools", Working Paper No. 2007:2, Stockholm University Linneaus Center for Integration Studies (SULCIS), Stockholm.
- Thrupp, M., H. Lauder and T. Robinson (2002), "School Composition and Peer Effects", *International Journal of educational Research*, Vol. 37, pp. 483-504.
- Van Ewijk, R.J.G. and P. Sleegers (2007), "The Effect of Peer Socioeconomic Status on Student Achievement: A Meta-analysis", Unpublished paper, University of Amsterdam.
- Van Ewijk, R.J.G. and P. Sleegers (2009), "Peer Ethnicity and Achievement: A Metaanalysis into the Compositional Effect", Unpublished paper, University of Amsterdam.
- West, A., A. Hind and H. Pennell (2004), "School Admissions and 'Selection' in Comprehensive Schools: Policy and Practice", Oxford Review of Education, Vol. 30, pp. 347-369.