

Please cite this paper as:

Musset, P. (2012), "School Choice and Equity: Current Policies in OECD Countries and a Literature Review", *OECD Education Working Papers*, No. 66, OECD Publishing.  
<http://dx.doi.org/10.1787/5k9fq23507vc-en>



OECD Education Working Papers  
No. 66

## School Choice and Equity

**CURRENT POLICIES IN OECD COUNTRIES AND  
A LITERATURE REVIEW**

Pauline Musset

## DIRECTORATE FOR EDUCATION

Cancels & replaces the same document of 24 January 2012

**SCHOOL CHOICE AND EQUITY: CURRENT POLICIES IN OECD COUNTRIES AND A LITERATURE REVIEW****Directorate for Education Working Paper N°66****by Pauline Musset**

*This paper was prepared as part of the OECD thematic review *Overcoming School Failure: Policies that Work*, [www.oecd.org/edu/equity](http://www.oecd.org/edu/equity). The project provides evidence on the policies that are effective to reduce school failure by improving low attainment and reducing dropout, and proactively supports countries in promoting reform. The project builds on the conceptual framework developed in the OECD's *No More Failures: Ten Steps to Equity in Education* (2007). Austria, Canada (Manitoba, Ontario, Québec and Yukon), Czech Republic, France, Greece, Ireland, Netherlands, Spain and Sweden took part in this project.*

*This working paper is part of a series of working papers for the thematic review *Overcoming School Failure: Policies that Work* covering the topics of policies to reduce dropout and in-school practice to reduce school failure. This series fed into the final comparative report *Equity and Quality in Education: Supporting Disadvantaged Schools and Students* (OECD, 2012), which gives evidence on the policy levers that can help overcome school failure and reduce inequities in OECD education systems. It focuses on the reasons why investing in overcoming school failure -early and up to upper secondary- pays off, on alternatives to specific system level policies that are currently hindering equity, and on the actions to be taken at school level, in particular in low performing disadvantaged schools.*

Pauline Musset, + 33 (0) 145 24 75 54, [pauline.musset@oecd.org](mailto:pauline.musset@oecd.org)

**JT03315145**

Document complet disponible sur OLIS dans son format d'origine  
Complete document available on OLIS in its original format

**TABLE OF CONTENTS**

INTRODUCTION THE SCHOOL CHOICE DEBATE.....4

1. WHAT IS SCHOOL CHOICE?.....6

    The rationale for school choice: the introduction of market mechanisms in schooling.....6

    Conclusion .....7

2. DIFFERENT APPROACHES TO SCHOOL CHOICE.....8

    Assessing the availability of choice.....8

    Gauging school choice arrangements .....10

    Conclusion .....24

3. SCHOOL CHOICE AND ITS IMPACT ON EQUITY .....25

    The impact of school choice on student performance: “grand claim, modest evidence” .....25

    School choice poses risks that can exacerbate inequities .....31

4. DESIGNING SCHOOL CHOICE SCHEMES COMPATIBLE WITH EQUITY .....37

    Basic features of choice policies to support equity.....37

    Combining school choice and equity through well-thought design.....40

5. CONCLUSION .....43

6. BIBLIOGRAPHY .....44

**Tables**

Table 2.1. The structures of choice in OECD countries (2009).....11

Table 2.2. School choice in primary and lower secondary public schools in OECD countries, 2009 .....13

Table 2.3. Selection criteria for public schools across OECD countries (2009).....15

Table 2.4. Diversity within public schooling (2009) .....19

Table 2.5. Financial mechanisms to promote school choice at the lower secondary level (2009) .....21

Table 3.1. Overview of the existing research on the impact of an increased parental choice on segregation by ability, by SES and by ethnicity .....36

Table 4.1. Information to parents about school choice structures for lower secondary.....39

**Figures**

Figure 2.1. Availability of school choice, as reported by principals (2009) .....	8
Figure 2.2. Student enrolment by type of schools (2009) .....	10
Figure 2.3. Selectiveness of schools' admission criteria, as reported by principals (2009).....	16
Figure 3.1. Performance differences between public and private schools measured on the PISA 2009 reading scale .....	28

**Boxes**

Box 2.1. Definitions of type of schools, by ownership.....	9
Box 2.2. School choice arrangements in selected OECD countries .....	17
Box 2.3. Selected examples of specialized schools .....	18
Box 2.4. Spotlight on Sweden's voucher system.....	22
Box 4.1. Examples of controlled choice schemes.....	41

## **INTRODUCTION THE SCHOOL CHOICE DEBATE**

1. In the last 25 years, more than two-thirds of OECD countries have increased school choice opportunities for parents, and it is perhaps one of the most ardently discussed issues in the current education policy debate. School choice advocates often argue that the introduction of market mechanisms in education allows equal access to high quality schooling for all: expanding school choice opportunities would allow all students – including disadvantaged ones and the ones attending low performing schools – to change to better schools. Since school choice has always been available for well-off families through residential mobility and through enrolment in private schools, advocates suggest that expanding school choice to all, including low-income and minority students, will increase equity. Choice programmes can be perceived as leading to a general improvement in the quality of education, and fostering efficiency and innovation.

2. On the other hand, school choice critics suggest that school choice can exacerbate inequities, as it increases sorting of students between schools based on their socio-economic status, their ethnicity and their ability, and quality can become increasingly unequal between schools. They argue that it further advantages those who already have had a better start in life because of their parents. They also suggest that school choice reduces the unique potential of schools as social cohesion builders, as schools are further segregated by student characteristics.

3. This literature review on school choice analyses the impact of choice schemes on students and on school systems focusing on equity. Reviewing the evidence can be difficult, as the literature is often fragmented and inconclusive, and the political importance of this research often results in high-profile attention given to individual studies rather than systemically understanding collected from a larger empirical base (Berends, Cannata and Goldring, 2011). Different political groups use evidence that supports their positions in favour or against school choice, and their positions relative to school choice are largely based on their ideologies, rather than on empirical work and evidence of effectiveness (Levin and Belfield, 2004).

4. This report steps away from the ideological debate and provides research-based evidence on the impact of choice on disadvantaged students and schools. As “only with data on the consequences of different plans for school choice will we be able to reach sensible judgements rooted in experience (Fuller and Elmore, 1996, p. 8)”. It uses analysis and statements that are supported empirically and attempts to cover the widest possible scope of research<sup>1</sup>, and provide responses to the key question of how to balance choice with equity considerations.

5. When planning the introduction of school choice, education systems can use different schemes that can have different impact on students and on school systems. Why should countries introduce choice

---

<sup>1</sup> The aspect of the school choice debate that has received more attention is empirical reviews on the impact of school choice on student outcomes and the impact of increasing school choice on disadvantaged children. But there is also an interesting and important literature on the impact of competition between schools within the public sector, and on public and private voucher programs, and weighted student funding, also of interest for our work.

mechanisms in their education systems? What are the different ways to introduce choice? What is the impact of these mechanisms on individual students and on school systems? As the evidence shows that more parental choice leads to an increase polarization of students by ability and socio-economic background, how can countries mitigate the negative impact on equity that school choice mechanisms tend to have?

6. To answer these questions, this paper begins with a description and overview of existing choice arrangements across OECD countries and provides an assessment of their impact. It provides an account of the current empirical evidence on the effects of different school choice schemes, focusing more particularly on student achievement, especially on disadvantaged students, and on the allocation of students into schools. The paper then studies the impact of school choice on equity and ends with some policy suggestions on how different choice schemes can respond to equity considerations: how to combine the parental right to choose with the social imperative of equity.

## 1. WHAT IS SCHOOL CHOICE?

### **The rationale for school choice: the introduction of market mechanisms in schooling**

7. School choice programmes partly introduce market mechanisms in education, such as consumer choice and competition between schools: “school choice essentially positions parents as consumers empowered to select from several options – thereby injecting a degree of consumer-driven, market-style competition into the system as schools seek to attract those families” (Feinberg and Lubienski, 2008, p 2). The introduction of such mechanisms induces a change in the basic constraints that schools and students face - changes in student mobility, diversification of the supply, changes in funding and in parental behaviour - and therefore it induces changes in the educational structure.

8. A diverse provision of education is not completely absent from the traditional conception of schooling, which was articulated in terms of providing different types of education for different children, and differentiated opportunities for top performers with a higher status within the same system. However, in the new context in which standards and expectations for educational attainment have risen, “the very success of the policy efforts to equalise opportunities has produced new demands as households have sought to ensure that their own children have privileged access to the best schools and programmes” (OECD, 2006, p. 23). These new parental demands, for a much more diverse provision of education and for differentiated suppliers, have increased the pressure on countries “to deliver more diversified public service” (OECD, 2006) and also to allow other providers to do so. Pressures have also come from different public sectors, such as health, as efforts aim to raise the productivity of public services through the introduction of private providers.

9. The arguments that justify school choice can be classified according to three different premises: the introduction of market mechanisms in education to remedy inefficiencies; individualist-libertarian claims of a parental right for choice in education; and school choice as a way of making education systems more equitable.

### ***Introducing market mechanisms in education to remedy market inefficiencies***

10. The debate about school choice appeared in the 1950’s, especially with the publication by Milton Friedman of “*The Role of Government in Education*”, which launched the debate on market mechanisms in education and on parental choice. In this view, education is perceived as a service, that can be produced under a variety of arrangements and of which parents are natural consumers.

11. For the advocates of market mechanisms in education, the government-run public education sector has many problems, because it is publicly funded and is a monopoly. Therefore, it has no incentives for an efficient and effective use of resources, nor for innovation, which leads to uniformity of curriculum, organization and management. According to this line of thinking (as developed in Feinberg and Lubienski (2008)), school choice introduces competition of schools and forces them to improve their performance and their management, which will expand the supply of efficient and/or more innovative schools, since these schools are given the right to expand by attracting new students (Hoxby, 2006). Apparently low performing or inefficient schools risk losing students or/and funding, as consumers choose other alternatives. This idea is based on the premise that the quality of education is the main consideration in parents’ decisions about schools and that information about school programmes and performance is

available. Parents would exit their neighbourhood schools whenever it is feasible to obtain better educational value at an equal or lesser cost.

### ***The right of parents to choose a school***

12. For parental rights' advocates, it is legitimate for parents to have freedom to choose which education to give to their children, to be in accordance to the parents' way of life and this parental empowerment is perceived as a basic human right. This is being justified in a context in which the role of education has shifted from being the institution where citizens are formed towards having a key role in developing labour market skills, key to economic growth and social development.

### ***School choice to provide equality of opportunities for all***

*School choice represents the latest major attempt to restructure public education in order to equalize opportunities among students (Ryan and Heise, 2002)*

13. School choice can also be seen as a tool to promote social justice and not only as a goal in itself (Feinberg and Lubienski, 2008). Indeed, the better-off have always had the possibility to choose schools for their children by moving or by paying tuition for a private school. Therefore, introducing school choice for all students can also be seen as a way to institutionalize and formalize an arrangement that was the privilege of only a few.

14. Advocates argue that when school choice is not available for more disadvantaged students, they are trapped in low performing schools, while the most affluent ones have to option to move or to send their children to a private school. The main objective of making school choice options available for every student is to "level the playing field", allowing more disadvantaged children to access high quality schools they would otherwise not be able to attend. Therefore, the students would be the most likely to benefit from the introduction of school choice programmes are the ones who have the least access to it (Hoxby, 2003). For that reason, the introduction of school choice can be planned in the framework of equity-led reforms. For example, in the United States, school choice mechanisms – in particular magnet schools were originally advocated in the South as a way to avoid the segregation of public schools, and also as a way to empower poor and working-class families (Fuller and Elmore, 1996).

### **Conclusion**

15. School choice is a widely debated issue. Different political groups argue in favour or against choice, and there is a need to step away from the ideological debate and provide solid research based evidence on the impact it can have on performance and on equity. In fact, school choice can be viewed from different perspectives and responds to multiple needs: the pressure for more diversity in schools, for more efficiency, for more parental freedom in choosing their children's education and the necessity to give disadvantaged children the same opportunities than others.

## 2. DIFFERENT APPROACHES TO SCHOOL CHOICE

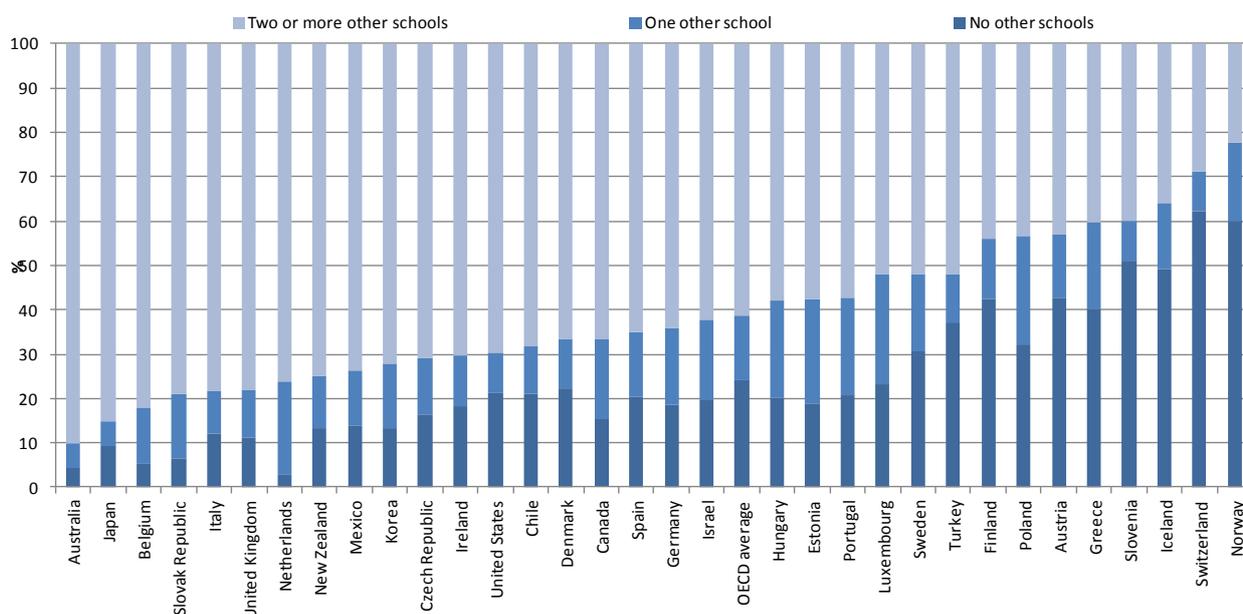
### Assessing the availability of choice

16. Since the 1990s<sup>7</sup>, many OECD countries have increased the extent of choice, particularly in secondary education. Nowadays, most countries allow parents and students to choose their school from a diverse array of choice, even though the majority of countries rely mostly on public schools to provide education at the primary and lower secondary levels (OECD, 2011).

17. The extent of choice can be assessed in different ways. In PISA 2009 for example, principals were asked to indicate whether there were other schools in the local area with which they had to compete for students, at the lower secondary level.

**Figure 2.1. Availability of school choice, as reported by principals (2009)**

Percentage of students in schools where the principal reported the following number of schools competing in the same area (PISA 2009)



Source: OECD (2010a), PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II), PISA, OECD, Paris.

18. For 60% of students on average across OECD countries, parents have, in the above sense, a choice of two or more schools for their children. In some countries, the percentage of students for whom school choice is available is even higher, such as Australia, Japan, the Slovak Republic, and Belgium. In other countries, choice available for students is more limited: in Norway, and Switzerland, more than 70 % of principals responded that they felt no competition from other schools, while less than 3 % responded that way in the Netherlands.

19. Nevertheless, caution is required when interpreting these results, since they are based on principals' self-perceptions. Also, the existence of other schools in the local area does not automatically imply that all parents have access to these, particularly if they are privately managed and ask for high fees, or are selective. The following section analyses these different configurations.

20. Studying parents' response to the availability of school choice allows to see if parents are sensitive to the incentives given to them by the availability of school choice. Ozek (2009) analysed household responses to the introduction of intra-district school choice in Pinellas Country schools in 2003. He showed that parents reacted very strongly to this new opportunity: the percentage of students attending another school than their local one went from 8 % to 33% for children passing from primary school to lower secondary education.

21. Understanding the different type of schooling available is important to assess the type of choice of schools that parents can make, according to the type of school ownership. In addition to public schools, there are government-dependent private schools and government-independent private schools that parents may choose from (Box 2.1).

#### Box 2.1. Definitions of type of schools, by ownership

**Public school:** a school is classified as public if it is controlled and managed directly by a public education authority ("*traditional public schools*"), or controlled and managed by a governing body, whose members are either appointed by a public authority or elected by public franchise ("*autonomous public schools*").

**Private school:** a school is classified as private if it is controlled and managed by a non-governmental organization or most of the members of its governing board are not appointed by a public authority.

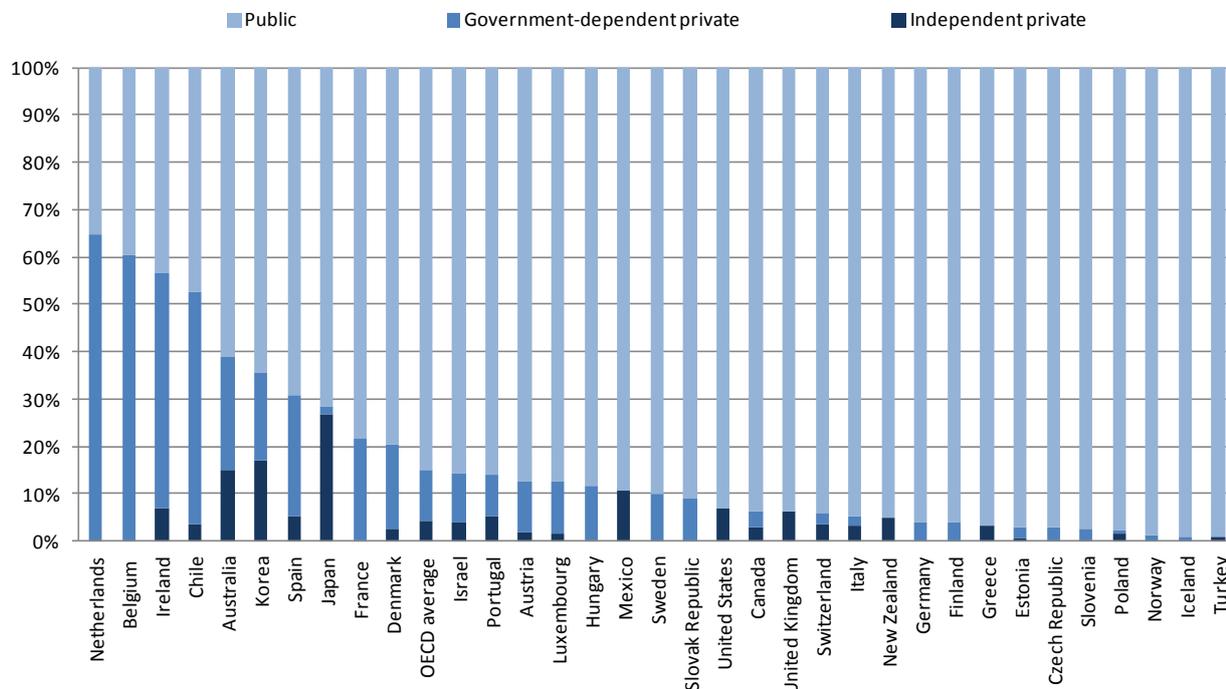
- A **government-dependent private school** is an institution that receives more than 50 % of its funding from government agencies.
- A **government-independent private school** is an institution that receives less than 50 % of its funding from government agencies

Source: OECD (2010a), PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II), PISA, OECD, Paris.

22. School choice has changed the distribution of students across different types of schools. New forms of delivery like government-dependent private schools have flourished in nearly all OECD countries, in addition to private schooling. In 25 out of the 33 OECD countries, public authorities finance private schools (except in Estonia, Greece, Ireland, Italy, Japan, Mexico and the United States). Figure 2.2 shows the distribution of students across schools in OECD countries.

**Figure 2.2. Student enrolment by type of schools (2009)**

Results based on school principals' reports (2009)



Note: For Belgium and France, results from Education at a Glance, 2011

Source: OECD (2010a), *PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes* (Volume II), OECD, Paris and OECD (2011), *Education at a Glance 2011: OECD Indicators*, OECD, Paris.

23. On average across OECD countries, 85% of students are enrolled in public education, with enrolment in government-dependant private schools exceeding 10 % of all students at the lower secondary level in 12 countries (the Netherlands, Belgium, Ireland, Chile, Australia, Korea, Spain, France, Denmark, Luxembourg, Hungary and Sweden) and enrolment in government-independent schools exceeds 10 % in Australia, Korea, Japan and Mexico. It is also worth highlighting that more than 50% of students in the Netherlands, Ireland and Chile are enrolled in privately managed schools. In contrast, in Turkey, Iceland and Norway, more than 98% of students attend schools that are managed publicly.

### Gauging school choice arrangements

24. The availability and use of school choice is very difficult to capture in a typology, as data on how many students attend a school other than their local school and how it relates to the availability of formal choice arrangements is very hard to collect. Additionally, this may vary considerable at the local level. This section categorises and describes school choice arrangements based on the criteria used to select students across different types of schools, whether public or private.

Table 2.1. The structures of choice in OECD countries (2009)

Primary							
Geographical assignment	Families who choose so can enrol their children in another public school	Criteria of admission for public schools			Expansion of choice within the public sector in the last 25 years		There are some financial incentives that allow parents to attend any private school (voucher, per-student funding that follows the student and tuition tax credits)
		Selective	On which criteria		Creation of new autonomous public schools	Students can attend government-dependent schools	
Australia	m	m	m	m	m	Yes	m
Austria	Yes	Yes	No	x	No	Yes	No
Belgium (Fl.)	No	Yes	No	x	m	Yes	Yes: school vouchers
Belgium (Fr.)	No	Yes	No	x	No	Yes	No
Canada	m	m	m	m	m	m	m
Chile	No	Yes	No	x	No	Yes	Yes: school vouchers and funding follow s students
Czech Republic	Yes	Yes	Yes	Academic	Yes	Yes	Yes: funding follow s students
Denmark	Yes	Yes	No	x	Yes	Yes	No
England	Yes	Yes	Yes	Academic, religious and gender	Yes	Yes	No
Estonia	Yes	Yes	Yes	Academic, religious, gender and any criteria they wish	m	Yes	Yes: school vouchers, funding follow s students, and tuition tax credits
Finland	Yes	No	Yes	Academic	Yes	Yes	Yes: funding follow s students
France	Yes	No	No	x	No	Yes	Yes: school vouchers and funding follow s students
Germany	Yes	No	Yes	x	Yes	Yes	Yes: school vouchers and tuition tax credits
Greece	Yes	No	Yes	x	No	No	No
Hungary	Yes	Yes	No	x	Yes	Yes	Yes: funding follow s students
Iceland	Yes	Yes	No	x	Yes	Yes	Yes: funding follow s students
Ireland	Yes	Yes	Yes	Religious and gender	m	Yes	Yes: funding follow s students
Israel	Yes	No	No	x	m	Yes	Yes: funding follow s students
Italy	No	Yes	No	x	Yes	No	Yes: school vouchers
Japan	Yes	No	Yes	Any criteria they wish	No	No	No
Korea	Yes	No	No	x	No	No	No
Luxembourg	Yes	Yes	No	x	Yes	Yes	No
Mexico	Yes	Yes	No	x	No	No	No
Netherlands	No	Yes	No	x	No	Yes	Yes: funding follow s students
New Zealand	No	Yes	Yes	x	Yes	Yes	Yes: school vouchers
Norway	Yes	No	No	x	No	Yes	No
Poland	Yes	Yes	Yes	x	No	Yes	Yes: school vouchers and funding follow s students
Portugal	Yes	Yes	Yes	x	No	Yes	Yes: funding follow s students and tuition tax credits
Scotland	Yes	Yes	No	x	Yes	Yes	Yes: money follow s students and tuition tax credits
Slovak Republic	Yes	Yes	No	x	Yes	Yes	Yes: money follow s students
Slovenia	m	m	m	m	m	m	m
Spain	Yes	Yes	Yes	Financial	No	Yes	Yes: school vouchers
Sweden	Yes	Yes	No	x	No	Yes	Yes: money follow s students
Switzerland	Yes	No	No	x	No	Yes	No
Turkey	Yes	Yes	No	x	m	No	Yes: school vouchers
United States	Yes	No	No	x	Yes	No	Yes: school vouchers, funding follow s students and tuition tax credits

Lower Secondary							
Geographical assignment	Possibility to apply to another public school (if places available)	Criteria of admission			Expansion of choice within the public sector in the last 25 years		There are some financial incentives that allow parents to attend any private school (voucher, per-student funding that follows the student and tuition tax credits)
		Selective	On which criteria		Creation of new autonomous public schools	Students can attend government-dependent schools	
Australia	m	m	m	m	m	Yes	m
Austria	Yes	Yes	Yes	Academic	No	Yes	No
Belgium (Fl.)	No	Yes	No	x	m	Yes	Yes: school vouchers
Belgium (Fr.)	No	Yes	No	x	No	Yes	Yes: school vouchers
Canada	m	m	m	m	m	m	m
Chile	No	Yes	Yes	Academic and gender	No	Yes	Yes: school vouchers and funding follow s students
Czech Republic	Yes	Yes	Yes	Academic	Yes	Yes	Yes: funding follow s students
Denmark	Yes	Yes	No	x	Yes	Yes	No
England	Yes	Yes	Yes	Academic, religious and gender	Yes	Yes	No
Estonia	Yes	Yes	Yes	Academic, religious, gender and other criteria	m	Yes	Yes: school vouchers, funding follow s students, and tuition tax credits
Finland	Yes	No	Yes	Academic	Yes	Yes	Yes: funding follow s students
France	Yes	Yes	No	x	No	Yes	Yes: school vouchers and funding follow s students
Germany	Yes	Yes	Yes	Academic	Yes	Yes	Yes: school vouchers and tuition tax credits
Greece	Yes	No	Yes	m	No	No	No
Hungary	Yes	Yes	Yes	Academic	Yes	Yes	Yes: funding follow s students
Iceland	Yes	Yes	No	x	Yes	Yes	Yes: funding follow s students
Ireland	Yes	Yes	Yes	Religious and gender	No	Yes	Yes: funding follow s students
Israel	Yes	No	No	x	m	Yes	Yes: school vouchers and tuition tax credits
Italy	No	Yes	No	x	Yes	No	Yes: school vouchers and tuition tax credits
Japan	Yes	No	Yes	Any criteria they wish	No	No	No
Korea	Yes	No	No	x	No	Yes	No
Luxembourg	Yes	Yes	No	x	Yes	Yes	No
Mexico	Yes	Yes	Yes	Academic	No	No	No
Netherlands	No	Yes	Yes	Academic	No	Yes	Yes: funding follow s students
New Zealand	No	Yes	m	m	Yes	Yes	No
Norway	Yes	No	No	x	No	Yes	No
Poland	Yes	Yes	Yes	x	No	Yes	Yes: school vouchers and funding follow s students
Portugal	Yes	Yes	Yes	x	Yes	Yes	Yes: money follow s students and tuition tax credits
Scotland	Yes	Yes	No	x	Yes	Yes	Yes: funding follow s students and tuition tax credits
Slovak Republic	Yes	Yes	Yes	Academic	Yes	Yes	Yes: school vouchers and funding follow s students
Slovenia	m	m	m	m	m	m	m
Spain	Yes	Yes	Yes	Financial	No	Yes	Yes: school vouchers and funding follow s students
Sweden	Yes	Yes	No	x	No	Yes	Yes: funding follow s students
Switzerland	Yes	No	No	m	No	Yes	No
Turkey	a	a	Yes	a	m	a	m
United States	Yes	No	No	x	Yes	No	Yes: school vouchers, funding follow s students, and tuition tax credits

Source: OECD (2011), Education at a Glance 2011: OECD Indicators, OECD, Paris.

25. Most school systems are based on geographical assignment of students to their neighbourhood school, combined with a certain flexibility to choose among other schools. However, parental choice is often restricted in different ways, including academic and other admission criteria. There are different types of criteria that govern choice, to ensure equity or quality, and which may limit the effective extent of choice available, and this will be developed in the following section. Table 2.1 provides an overview of the extent of school choice across OECD education systems.

***Limited school choice: geographical assignment***

26. In 27 out of the 33 OECD countries, the location of the family's residence and its proximity to the school is the principal criteria for assigning schools to students for both primary and lower secondary schools. Traditionally, this method has been the prevalent one, as it was seen as the most likely method to ensure that all students have access to a public school and to ensure everyday travel to and from school as short, safe and convenient, and to strengthen links with the community.

Table 2.2. School choice in primary and lower secondary public schools in OECD countries (2009)

Primary					
Initial assignment based on geographical area schools	Families are given a general right to enrol in any traditional public school they wish	There is free choice of other public schools if there are places available	Existence of restrictions and conditions: families must apply to enrol in a public school other than the assigned one	Others restrictions or conditions	
<b>Open enrolment</b>					
Belgium (Fl.)	No	Yes	Yes	No	No
Belgium (Fr.)	No	Yes	Yes	No	No
Chile	No	Yes	Yes	No	No
Italy	No	Yes	Yes	No	m
Netherlands	No	Yes	Yes	No	No
New Zealand	No	Yes	Yes	Yes	No
<b>Geographical assignment with choice among public schools</b>					
Austria	Yes	Yes	Yes	No	Yes
Czech Repu	Yes	Yes	Yes	Yes	No
Denmark	Yes	Yes	Yes	No	No
England	Yes	Yes	Yes	Yes	No
Estonia	Yes	Yes	Yes	Yes	No
Hungary	Yes	Yes	Yes	No	No
Iceland	Yes	No	Yes	No	No
Ireland	Yes	Yes	Yes	Yes	No
Luxembourg	Yes	Yes	Yes	No	No
Mexico	Yes	Yes	Yes	No	No
Poland	Yes	No	Yes	Yes	Yes
Portugal	Yes	Yes	Yes	Yes	No
Scotland	Yes	No	Yes	No	Yes
Slovak Repu	Yes	Yes	Yes	No	No
Spain	Yes	Yes	Yes	Yes	No
Sw eden	Yes	No	Yes	No	No
Sw itzerland	Yes	No	No	No	No
Turkey	Yes	No	Yes	No	No
United States	Yes	m	No	No	Yes
<b>No choice among public schools</b>					
Finland	Yes	No	No	Yes	Yes
France	Yes	No	No	No	No
Germany	Yes	No	No	Yes	No
Greece	Yes	No	No	Yes	No
Israel	Yes	No	No	No	No
Japan	Yes	No	No	Yes	No
Korea	Yes	No	No	No	Yes
Norway	Yes	No	No	No	m

Lower secondary					
Initial assignment based on geographical area schools	Families are given a general right to enrol in any traditional public school they wish	There is free choice of other public schools if there are places available	Existence of restrictions and conditions: families must apply to enrol in a public school other than the assigned one	Others restrictions or conditions	
<b>Open enrolment</b>					
Belgium (Fl.)	No	Yes	Yes	No	No
Belgium (Fr.)	No	Yes	Yes	No	No
Chile	No	Yes	Yes	Yes	No
Italy	No	Yes	Yes	No	m
Netherlands	No	No	Yes	Yes	Yes
New Zealand	No	Yes	Yes	Yes	No
<b>Geographical assignment with choice among public schools</b>					
Austria	Yes	Yes	Yes	Yes	Yes
Czech Republic	Yes	Yes	Yes	Yes	No
Denmark	Yes	Yes	Yes	No	No
England	Yes	Yes	Yes	Yes	No
Estonia	Yes	Yes	Yes	Yes	No
France	Yes	No	Yes	No	No
Germany	Yes	No	Yes	Yes	Yes
Hungary	Yes	Yes	Yes	Yes	No
Iceland	Yes	No	Yes	No	No
Ireland	Yes	Yes	Yes	Yes	No
Luxembourg	Yes	Yes	Yes	No	No
Mexico	Yes	Yes	Yes	Yes	Yes
Poland	Yes	No	Yes	Yes	Yes
Portugal	Yes	Yes	Yes	Yes	No
Scotland	Yes	No	Yes	No	Yes
Slovak Republic	Yes	Yes	Yes	Yes	No
Spain	Yes	Yes	Yes	Yes	No
Sw eden	Yes	No	Yes	No	No
United States	Yes	m	No	No	Yes
<b>No choice among public schools</b>					
Finland	Yes	No	No	Yes	Yes
Greece	Yes	No	No	Yes	No
Israel	Yes	No	No	Yes	No
Japan	Yes	No	No	Yes	No
Korea	Yes	No	No	No	Yes
Norway	Yes	No	No	No	m
Sw itzerland	Yes	No	No	No	No

1. No information for Australia, Canada, Slovenia, Turkey (for lower secondary)

Source: OECD (2011), *Education at a Glance 2011: OECD Indicators*, OECD, Paris.

27. Table 2.2 shows that no (or very limited) choice of schools is more common for the primary level than for lower secondary. In Finland, France, Germany, Greece, Korea, Norway and Switzerland, initial school assignment for primary school student is based on geographical area: pupils are usually placed in the school nearest to their house. Similarly, in the United States, even if the way students are assigned to schools varies according to each State and each district, zoning schemes prevail in most cases: children are

sent to a zoned neighbourhood school, determined by a school planner (Schneider, Teske and Marschall, 2000). In most OECD countries, the array of choice for parents is wider at the lower secondary level than it is at the primary level, and catchment areas, very common at the primary level, are somewhat less common at the secondary school level: only in two countries (Greece and Korea) secondary school students have to attend the school in their catchment area. Even in the countries where school choice is available, students are initially assigned to school on a geographical basis, with the exception of Belgium (Flanders), Chile, the Netherlands and New Zealand.

28. However, it can be acknowledged that even without any formal choice mechanisms, some parents still find ways to exercise choice and choose the school for their children, finding ways to go around the official policies (by declaring another address than their real residence for example), buying into a neighbourhood to gain access to a particular school, and even engaging themselves in the definition of catchment boundaries. As this capacity is strongly linked to their social, cultural and economic resources, it is considered un-equitable and is one of the reasons that lead countries to the introduction of more choice in their public schooling.

### ***School choice within the public sector***

#### *Flexible choice and initial geographical assignment: a frequent configuration in OECD countries*

29. A majority of countries combine geographical assignment of students to schools with certain flexibility beyond the initial assignment, through a variety of choice mechanisms that have emerged since the 1970s. In 23 out of 33 OECD countries, parents are allowed to choose another public school if there are places available at the primary school level. In Sweden for example, intra-district school choice was introduced at the beginning of the 1990s (*skolvalsreformen*). The previous figure indicates that 24 out of the 33 OECD countries allow a certain degree of choice within public schools at the lower secondary level.

30. However, even if choice exists in many countries, it is restricted in different ways, which *de facto* can limit the exercise of choice: parents have to apply for a different public school in 20 countries for lower secondary schools, as shown in Table 2.3. Depending on the admission criteria, they are not sure to be able to attend the school of their choice. In Poland, parents can choose another lower secondary school than that automatically assigned but the headmaster can refuse, even if the school has free places. In Ireland, parents have a strong voice in the choice of lower secondary school for their child, but that choice may be modified because of availability or advice from teachers, psychologists, or other education personnel regarding the suitability of a school for the child, the same configuration also existing in Germany. In France, even if there has been no major reform concerning school choice, local assignment rules to schools have become more flexible for lower secondary schools (*assouplissement de la carte scolaire*). As there is little data on how this flexibility is exercised, its extent is difficult to assess.

**Table 2.3. Selection criteria for public schools across OECD countries (2009)**

	Academic criteria	Financial criteria (family income)	Religious criteria	Gender criteria	Any criteria they wish
Public primary schools cannot be selective					
Austria	No	No	No	No	No
Belgium (Fl.)	No	No	No	No	No
Belgium (Fr.)	No	No	No	No	No
Chile	No	No	No	Yes	No
Denmark	No	No	No	No	No
France	No	No	No	No	No
Germany	No	No	No	No	No
Greece	No	No	No	No	No
Hungary	No	No	No	No	No
Iceland	No	No	No	No	No
Luxembourg	No	No	No	No	No
Mexico	No	No	No	No	No
Netherlands	No	No	No	No	No
New Zealand	No	No	No	No	No
Poland	No	No	No	No	No
Portugal	No	No	No	No	No
Norway	No	No	No	No	No
Scotland	No	No	No	No	No
Slovak Republic	No	No	No	No	No
Sweden	No	No	No	No	No
Switzerland	No	No	No	No	No
Turkey	No	a	No	No	No
United States	No	No	No	No	No

	Academic criteria	Financial criteria (family income)	Religious criteria	Gender criteria	Any criteria they wish
Public lower secondary schools cannot be selective					
Belgium (Fl.)	No	No	No	No	No
Belgium (Fr.)	No	No	No	No	No
Denmark	No	No	No	No	No
France	No	No	No	No	No
Iceland	No	No	No	No	No
Italy	No	No	No	No	Yes
Korea	No	No	No	Yes	No
Luxembourg	No	No	No	No	No
Norway	No	No	No	No	No
Poland	No	No	No	No	No
Portugal	No	No	No	No	No
Scotland	No	No	No	No	No
Sweden	No	No	No	No	No
Switzerland	No	No	No	No	No
United States	No	No	No	No	No

	Academic criteria	Financial criteria (family income)	Religious criteria	Gender criteria	Any criteria they wish
Public lower secondary schools can be selective					
Austria	Yes	No	No	No	No
Chile	Yes	No	No	Yes	No
Czech Republic	Yes	No	No	No	No
England	Yes	No	Yes	Yes	No
Estonia	Yes	No	Yes	Yes	Yes
Finland	Yes	No	No	No	No
Germany	Yes	No	No	No	No
Greece	No	No	No	No	No
Hungary	Yes	No	No	No	No
Ireland	No	No	Yes	Yes	No
Israel	No	No	Yes	Yes	No
Japan	No	No	No	No	Yes
Mexico	Yes	No	No	No	No
Netherlands	Yes	No	No	No	Yes
New Zealand	No	No	No	Yes	No
Slovak Republic	Yes	No	No	No	No
Spain	No	Yes	No	No	No

	Academic criteria	Financial criteria (family income)	Religious criteria	Gender criteria	Any criteria they wish
Public primary schools can be selective					
Czech Republic	Yes	No	No	No	No
England	Yes	No	Yes	Yes	No
Estonia	Yes	No	Yes	Yes	Yes
Finland	Yes	No	No	No	No
Ireland	No	No	Yes	Yes	No
Japan	No	No	No	No	Yes
Israel	No	No	Yes	Yes	No
Spain	No	Yes	No	No	No
Italy	No	No	No	No	Yes
Korea	No	No	No	Yes	No

1. No information for Australia Canada, Slovenia and Turkey (for lower secondary)

Source: OECD (2011), *Education at a Glance 2011: OECD Indicators*, OECD, Paris.

31. The criteria to apply to another school vary according to the country and to the schooling level. In primary education, there are not many selection criteria beyond the location of residence. Only in four countries (Czech Republic, England, Estonia and Finland<sup>2</sup>) are primary schools allowed to be selective academically.

32. It is more common for lower secondary schools to be selective, as is the case in 17 countries out of 33. In Japan and in the Netherlands, schools are free to set any admission criteria. The academic criterion is common to decide how children are assigned to schools, and it is determinant in 10 countries (Austria, Chile, the Czech Republic, England, Estonia, Finland, Germany, Hungary, Mexico, the Netherlands and the Slovak Republic).

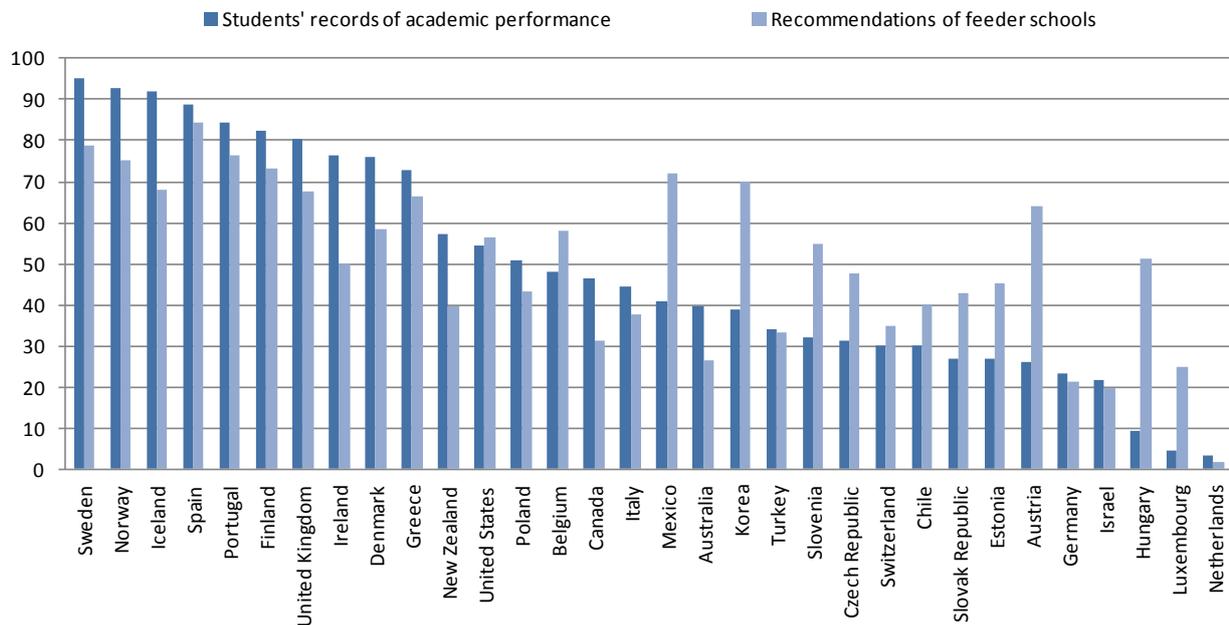
33. Other important criterion is the specialization of the school's programmes. In the United States, some districts place students in schools with consideration to academic diversity, class size and income

<sup>2</sup> This does not mean that all primary schools in these countries select their students on this basis, but that there are entitled to.

diversity. In England, all parents can express preferences about which school their children will attend, but admission policies vary drastically from region to region, and even from school to school, as the criteria depends of the local education authority. Some of them give priority to proximity, some schools can also select on the basis of ability. Parents have no guarantee of being able to attend the school of their choice if the school is oversubscribed. Only 50% of students attend their neighbourhood school.

**Figure 2.3. Selectiveness of schools' admission criteria, as reported by principals (2009)**

Percentage of students in schools where the principal never considers the following statements as a "prerequisite" or a "high priority" for admittance at school



1. no data for France

Source: OECD (2010a), PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II), PISA, OECD, Paris.

### Box 2.2. School choice arrangements in selected OECD countries

*Denmark:* Parents have the right to enrol their children in the municipal school of their choice, if the school is willing to take the children. Also, in some municipalities, parents can choose freely, according to the guidelines agreed on by the municipal council, between district schools and other schools in the municipality. Approximately 9% of students apply to go to a school other than their local school, and 86 % of these demands are granted (OECD, 2006).

*Finland:* Students may apply to a school other than the one assigned to them. For the selection of students that are not in their catchment area, schools can choose the criteria (presence of siblings in school, distance from home, students' language choice and other academic criteria) but must apply the same criteria to everybody (OECD, 2006).

*Hungary:* there is open enrolment to any school in the district, and access to schools outside the district can only be denied to parents if there is a lack of places. Primary schools are not allowed to hold entrance exams (OECD, 2006).

*New Zealand:* an open enrolment scheme was introduced in 1989. In 1991, children were no longer guaranteed a place in their local school. Even if schools receive most of their funding from the government, they are also allowed to supplement that funding with fund-raising activities, non-compulsory fees from parents and grants from foundations and firms. Oversubscribed schools have the right to determine their selection criteria, which in general are residence or having siblings in the school. However, principals can also select the children according to their ability (Ladd and Fiske, 2001). Schools can also charge additional "student fees" (even if public schools continue to be free) (Morphis, 2009).

*Poland:* since 1990, there is open enrolment to any public school. Nevertheless, there are long administrative procedures for certain highly demanded schools (OECD, 2006).

*Spain:* Parents are given the right to choose in the Spanish Constitution. Criteria for attendance in oversubscribed schools depend on the jurisdiction, such as the proximity to the family home or attendance of siblings (OECD, 2006).

*United States:* increasing parental choice has been one of the leading themes of educational policy during the last 25 years. Along these lines, open enrolment programmes, such as inter-district or intra-district school choice, have become more and more popular: as for 2005, 27 States had passed legislation authorizing districts to implement intra-district school choice schemes, and 20 States have done the same for inter-district choice programmes (Ozek, 2009).

*Source:* OECD (2006), Demand-Sensitive Schooling? Evidence and Issues, OECD, Paris ; Ladd H. and Fiske E. (2001), "The Uneven Playing Field of School Choice: Evidence from New Zealand", Journal of Policy Analysis and Management, Vol. 20 ; Ozek U. (2009), "The Effects of Open Enrolment on School Choice and Student Outcomes", Working Paper N° 26, National Center for Analysis of Longitudinal Data in Education Research ; Morphis E. (2009), "The Shift to School Choice in New Zealand", National Center for the Study of Privatization in Education, Teachers College, Columbia University.

#### *Full parental choice among public schools*

34. There are a few countries where parents have complete freedom to choose among public schools. In Belgium, Chile, Italy, the Netherlands and New Zealand, students are not assigned to public schools on a geographical basis. With the exemption of the Netherlands, where schools can select students on academic criteria, parents apply to the school of their choice, on the principle "first-come, first-serve": their application can only be rejected if the school is at full capacity.

#### *Choice by enhancing diversity of provision by public schools*

35. Since 1985, more opportunities for school choice at the primary and the lower secondary levels in public education have been developed through the diversification of the public supply of education in nearly all OECD countries. This includes more traditional public schools, as well as public schools with a special emphasis ("specialized schools": art schools, schools with strong music programmes, technology schools), or different facilities that draw students from across a district (e.g. in the United States, magnet

schools). In Poland for example, candidates for the first grade can choose between a school in their area of residence, a sports school, a school with sport classes, a school of sport proficiency, or a school of fine arts of an appropriate level. For both of these cases, children who live within the area of a particular primary school have priority for admission (OECD, 2006).

**Box 2.3. Selected examples of specialized schools**

*Czech Republic:* schools can establish special programmes that have a specific focus (foreign languages, sports, sciences, visual arts): 10% of students attend these schools. Parental demand for these types of programmes is high, especially for intensive teaching in language and in sports.

*England:* English State schools have been given considerable freedom to specialize and to offer additional services to students, and any school can apply to become a specialist school: specialist schools can focus on a special subject, while meeting the National Curriculum requirements.

*Hungary:* due to the decrease in the number of children, lower secondary schools have free resources to develop specialized profiles, responding to a diverse demand for students. Schools can decide their own school curriculum (based on the national core curriculum). As a consequence, most schools offer advanced programmes, sometimes in subjects that are not taught in other schools (history of art, drama, etc.). Popular schools organize entrance examinations.

*Poland:* general secondary schools are allowed to choose their curriculum. There is a strong competition among schools to attract the best students.

*United States:* public specialist schools, “magnet schools” became a form of school choice in 1973, after the Supreme Court ruled that Northern cities had to desegregate. They first emerged in Cincinnati and Milwaukee, to then spread to the rest of States. Implemented in low-income neighbourhoods, their goal was that educational diversity in public schools and minimum educational requirements would hold back into the public school system the white middle-class urban population. By introducing innovative curricula and instructional approaches, magnet schools can contribute to improve the overall educational quality of the school system.

*Source:* Elmore R. and B. Fuller (1996), “Empirical Research on Educational Choice: What Are The Implications for Policy-Makers?” in Fuller B. and R. Elmore (eds) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press: New York; OECD (2006), *Demand-Sensitive Schooling? Evidence and Issues*, OECD, Paris.

**Table 2.4. Diversity within public schooling (2009)**

	Some public schools benefit of an increased level of autonomy.		Students can attend government-dependent private schools.		Students can attend government-independent private schools.	
	Primary	Low er secondary	Primary	Low er secondary	Primary	Low er secondary
Australia	m	m	Yes	Yes	No	No
Austria	No	No	Yes	Yes	Yes	Yes
Belgium (Fl.)	m	m	Yes	Yes	No	No
Belgium (Fr.)	No	No	Yes	Yes	No	No
Canada	m	m	m	m	m	m
Chile	No	No	Yes	Yes	Yes	Yes
Czech Republic	Yes	Yes	Yes	Yes	No	No
Denmark	Yes	Yes	Yes	Yes	Yes	Yes
England	Yes	Yes	Yes	Yes	Yes	Yes
Estonia	m	m	Yes	Yes	No	No
Finland	Yes	Yes	Yes	Yes	No	No
France	No	No	Yes	Yes	Yes	Yes
Germany	Yes	Yes	Yes	Yes	Yes	Yes
Greece	No	No	No	No	Yes	Yes
Hungary	Yes	Yes	Yes	Yes	Yes	Yes
Iceland	Yes	Yes	Yes	Yes	Yes	Yes
Ireland	Yes	No	Yes	Yes	Yes	Yes
Israel	m	m	Yes	Yes	Yes	Yes
Italy	Yes	Yes	No	No	Yes	Yes
Japan	No	No	No	No	Yes	Yes
Korea	No	No	No	Yes	Yes	No
Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes
Mexico	No	No	No	No	Yes	Yes
Netherlands	No	No	Yes	Yes	Yes	Yes
New Zealand	Yes	Yes	Yes	Yes	Yes	Yes
Nor way	No	No	Yes	Yes	Yes	Yes
Poland	No	No	Yes	Yes	Yes	Yes
Portugal	No	Yes	Yes	Yes	Yes	Yes
Scotland	Yes	Yes	Yes	Yes	Yes	Yes
Slovak Republic	Yes	Yes	Yes	Yes	No	No
Slovenia	m	m	m	m	m	m
Spain	No	No	Yes	Yes	Yes	Yes
Sw eden	No	No	Yes	Yes	No	No
Sw itzerland	No	No	Yes	Yes	Yes	Yes
Turkey	m	m	No	a	Yes	a
United States	Yes	Yes	No	No	Yes	Yes

1. m indicates that no data is available.

Source: OECD (2011), Education at a Glance 2011: OECD Indicators, OECD, Paris.

36. In a large number of countries (Czech Republic, Denmark, England, Finland, Germany, Hungary, Iceland, Ireland, Italy, Luxembourg, New Zealand, Portugal, Scotland, the Slovak Republic and the United States), during the 1980s' and 1990s', some public schools were given more autonomy from educational

authorities (e.g. in the United States, “charter schools”), at the primary and the lower secondary level. The existence of this type of autonomous schools allows to include a certain degree of diversity in the supply of education, as they are allowed to vary in their management, organization and even in some countries, curriculum.

37. Parents who do not want their children to attend traditional public schools can also, in many OECD countries, choose government-dependent private schools, that have been promoted by a number of reforms since the 1980s. Government-dependent private schools are allowed in 27 countries at the primary level, and in 28 at the lower secondary level out of 36 OECD countries. These schools are generally free of charge as they are financed by public authorities, thus offering new options for parents and their children.

38. Their importance varies according to countries as shown in Figure 2.2: in some countries, only a very small portion of the students enrol in government-dependant private schools, but in others, the majority of the student body attend these schools (65 % of students in the Netherlands, 60 % in Belgium, 50 % in Chile and Ireland, 30 % in the Spanish *centros concertados*, 20 % in France).

39. The success of diverse school providers, such as magnet and charter schools, and other types of autonomous schools show that many parents are willing to exercise school choice, in order to find higher quality education for their children, without leaving the public education system (Fuller and Elmore, 1996), while also allowing to develop positive externalities that dynamise the rest of the school system (Blank, Levine and Steel, 1996). Therefore, supporters of autonomous schools and government-dependant private schools argue that they can improve student achievement and attainment, serve as laboratories for innovation, provide choice to families that have few options, and promote healthy competition with traditional public schools.

### ***Financing school choice between private and public schools***

#### *Universal voucher schemes: mechanisms to incentivise and extend school choice*

40. In some countries, financial mechanisms exist to promote school choice and are also available for private schools. Parents are given a voucher (that can also be virtual, if school funding is per-student and money follows the child) that covers the costs of tuition of the school they wish to attend, or they can be offered tuition tax credits to offset the price of private school. This type of configuration is nevertheless not very common in OECD countries, and the precise design of these mechanisms can vary quite significantly from country to country (Table 2.5). Vouchers are also more wide-spread for government-dependant private schools than for independent private schools.

**Table 2.5. Financial mechanisms to promote school choice at the lower secondary level (2009)**

	School vouchers (also referred to as scholarships) are available and applicable			Funding follows students when they leave for another public or private school (w within the school year)			Tuition tax credits are available to help families offset costs of private schooling	
	Public schools	Government-dependent private schools	Independent private schools	Public schools	Government-dependent private schools	Independent private schools	Government-dependent private schools	Independent private schools
Austria	No	No	No	No	No	a	No	No
Belgium (Fl.)	Yes	Yes	No	No	No	a	No	m
Belgium (Fr.)	Yes	Yes	No	No	No	a	No	a
Chile	Yes	Yes	a	Yes	Yes	a	No	No
Czech Republic	No	No	a	Yes	Yes	a	No	a
Denmark	No	No	No	No	No	a	No	No
England	a	a	No	No	No	a	No	No
Estonia	Yes	Yes	a	Yes	Yes	a	Yes	a
Finland	a	a	a	Yes	Yes	a	No	a
France	Yes	Yes	No	Yes	Yes	No	No	No
Germany	Yes	Yes	a	No	No	a	Yes	a
Greece	No	a	No	No	a	a	a	No
Hungary	No	No	a	Yes	Yes	a	No	a
Iceland	No	No	a	Yes	Yes	a	No	a
Ireland	No	a	No	Yes	a	No	a	No
Israel	Yes	Yes	a	No	No	m	No	No
Italy	Yes	a	No	No	a	No	a	Yes
Japan	No	a	No	No	a	No	a	No
Korea	No	No	a	No	No	a	No	a
Luxembourg	No	No	No	No	No	No	No	No
Mexico	a	a	a	No	a	a	a	No
Netherlands	No	No	No	Yes	Yes	Yes	No	No
New Zealand	Yes	Yes	Yes	No	No	No	No	No
Norway	No	No	No	No	No	a	No	No
Poland	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Portugal	a	a	a	No	Yes	Yes	Yes	Yes
Scotland	No	No	No	Yes	m	Yes	No	Yes
Slovak Republic	Yes	Yes	a	Yes	Yes	a	No	a
Spain	Yes	Yes	a	No	No	a	No	No
Sweden	No	No	a	Yes	Yes	a	No	a
Switzerland	No	No	No	No	No	a	No	No
United States	a	a	Yes	m	a	Yes	a	Yes

1. a indicates that no data is available.

Source: OECD (2011), Education at a Glance 2011: OECD Indicators, OECD, Paris.

41. The Flemish educational system (Belgium) is characterized by a large autonomy for schools, a public funding for all schools and an almost unlimited parental choice. Indeed, parents and students can choose among different providers and most importantly, they can choose among a diversity of schools. There is an important amount of competition among schools, differentiated along religious lines, pedagogy

or by the governing body that organizes them (municipality, confession, non-profit organization). As money depends on the number of students enrolled and schools are not allowed to charge extra fees, this represents a virtual voucher for parents to choose the school of their choice, among all schools, public and private. Until 2003, school choice was largely unregulated and operated as a quasi-market (Cantillon, 2009) as parents could choose any school for their children and schools were free to set their admission policies. This configuration was not positive for equity, as schools were able to select their students, by for example starting registration long in advance, of which disadvantaged parents were unaware of. From 2003, new admission policies for all schools were established, on the basis of "first come, first served", with a common registration data for all schools, publicly communicated. Schools are no longer allowed to be selective and have to give priority to siblings of children already in the schools and children from disadvantaged background. Since 2008, schools can also use geographical criteria when demand for a school exceeded its capacity.

#### **Box 2.4. Spotlight on Sweden's voucher system**

The Swedish voucher reform is particularly interesting for three reasons:

- The reform was radical: in 1992, a universal voucher system has replaced the previous centralized system of school financing and school choice was introduced. Parents were allowed to use a virtual voucher, equivalent in value to the average cost of educating a child in a public school, in the public or private school they wish. Schools cannot select students on any other basis than "first-come-first serve". Parents cannot "top up" the voucher, which also means that private schools cannot charge any additional fees.
- This reform resulted in a very rapid growth of the number of private schools. Any school can be eligible for public funding, as long as they follow the national curriculum and do not select their students, based on 'first come, first served'.
- Most of these new private schools are non-denominational and compete with public schools for the same groups of students.

*Source* : Böhlmark A. and M. Lindahl (2007), "The Impact of School Choice on Pupil Achievement, Segregation and Costs: Swedish Evidence", IZA Discussion Paper No. 2786

#### *Universal progressive vouchers*

42. A number of countries have developed choice schemes that aim to respond to both choice and equity concerns. In the Netherlands, formula funding with additional weights for disadvantaged students was adopted for all primary schools in 1985 and these funding schemes act as a virtual vouchers, technically universal. The funding attached to each voucher that goes to the school varies according to the characteristics of the student, and schools receive more funding per students if they enrol students whose parents have lower educational attainment. Such a system can be defined as a universal progressive voucher scheme. Although the level of funding for each school is determined by the needs of individual students, there is no requirement that schools use these extra resources directly on these students. Empirical research conducted by Ladd and Fiske (2009) show that these mechanisms have succeeded in distributing differentiated resources to schools according to their different needs: primary schools with a high proportion of "weighted" students have on average about 58% more teachers per student, and also more support staff.

43. Chile also has a progressive voucher scheme: in 1981, the country began financing public and most private schools with vouchers and equal weights for all students, combined with unrestricted school choice. This means that public schools and private schools that do not charge tuition received a per-student

voucher of the same amount, as fee charging selective private schools continue operating without public funding. Research indicates that it significantly increased segregation between schools (Elacqua, 2009). In 2008, the system was reformed and the flat-rate voucher was turned into weighted one, to provide more resources for students from lower socio-economic background: the value of the voucher is 50% higher for students from low socio-economic backgrounds and for indigenous children, and in 2011 the voucher has been increased 21% for the most disadvantaged students (approximately 40% of the recipients). There is preliminary evidence that shows that this weighted voucher system can mitigate the segregation effects between schools (Elacqua, 2009).

44. Some countries have universal but partial voucher systems; as is the case in Australia. Since 1974, every student who chooses to enrol in a private school can obtain a government subsidy worth between 15 % and 85 % of total tuition costs<sup>3</sup>. The level of the subsidy (combined federal and state grant) varies according to the financial means of the students' families, and there are government regulations on how the money should be spent (Watson and Ryan, 2009).

*Targeted voucher programmes to incentivise disadvantaged families to choose schools*

45. Targeted vouchers are part of a further set of choice policies that allow certain students (in the basis for example of their family income, education, school they attend) to choose private as well as public schools. Their aim is to provide choice and alternative educational opportunities to families that cannot easily exercise choice by residential selection or by attending private schools. Most of these programmes are not nation-wide, but operate at a local level, in a school district for example.

46. This is the case of Milwaukee's (Wisconsin) voucher programme. This targeted programme is one of the oldest still operating in the United States, as it began operation in 1990, and also one of the most extended. Under this programme, private schools receive public funds equivalent to the Milwaukee public school per-member state aid tuition fees for the student (maximum tuition level: \$6.607). Only children from low income families that attend public schools can apply for a voucher<sup>4</sup>. Ohio's educational choice scholarship pilot programme, implemented in 2006, is a state-wide system in which vouchers for private schools are provided to students in repeating failing schools (213 schools in 34 school districts in early 2008).

---

<sup>3</sup> Students attending independent schools (18 % of secondary school students) receive a federal voucher weighted accordingly to their neighbourhood's socio-economic status, plus an additional grant from the state government (about half of the federal one). Catholic schools (22 % of students) receive a combined federal and state grant that covers 85 % of the school's costs.

<sup>4</sup> In 2008, this programme served 19 414 students.

## **Conclusion**

47. The analysis of the development and availability of school choice schemes shows that choice has become prevalent across OECD countries, and is increasing. Choice depends on the way education is provided: on one side are countries in which almost all schools are public, while in the other extreme are education systems in which education is delivered by private providers supported with public funding. The difference of choice schemes depends on the type of education provision, with choice varying within public schools or across public and government funded private providers of education or private providers.

48. There are more possibilities for parents to exercise choice in secondary education as opposed to primary education. Geographical assignment is the main approach to assign children to schools, but there is a general trend in OECD countries to allow parents to choose beyond their local neighbourhood school. This is done through different schemes such as changing catchment areas, or establishing criteria for schools to select their students, or making them more flexible. In addition, another trend that appears is the repeated efforts to extend school choice in the public sector or under its control by enhancing the development of more diverse provision of education: specialized schools, autonomous public schools, and publicly-funded private schools.

49. There are two main types of school choice schemes which are very different theoretically: universal and targeted programmes. Universal programmes (universal voucher, open enrolment, etc.) are based on the libertarian argument that parents have the right to choose the school for their children and on the idea that the generalized introduction of market mechanisms can make schooling systems more efficient. On the other hand, targeted programmes (such as vouchers for low income students) are more based on the assumption that some students have a disadvantage (due to family, socio economic status background, etc), and that they would benefit from a “special” treatment that would allow them to move to higher performing schools. Giving them choice would allow them to benefit from better schools and contribute to more equity and social cohesion. The next chapter reviews the effects of these programmes on students, schools and educational systems.

### 3. SCHOOL CHOICE AND ITS IMPACT ON EQUITY

#### **The impact of school choice on student performance: “grand claim, modest evidence”<sup>5</sup>**

50. The question of whether school choice improves the quality of schooling is subject of hearty debate, as reviewed in the introduction. There are two arguments to support this. First, students might be able to have access to higher quality schools, or schools that suit their needs and their interest more adequately. Second, choice theoretically induces competition among schools, which would provide them with an incentive to improve their quality (Böhlmark and Lindahl, 2007). Choice should improve average school achievement by reallocating students and resources from inefficient schools to efficient ones, increasing the overall quality of schools. In this case, the extent to which school choice improves student achievement relies’ on parents’ capacity and willingness to sent their children to better schools. This chapter reviews the empirical evidence on the impact of choice on student and school performance, especially focused on disadvantaged students and schools.

#### ***The impact of school choice for those opting out (exiting their local school)***

51. Testing the impact of exercising choice (leaving their local school) on student outcomes has been proven to be difficult methodologically, due to the highly selective nature of those who exercise choice (Ozek, 2009). Indeed, the main issue is that those who exercise choice might differ for their non-chooser peers along unobservable characteristics, such as their motivation to excel, that have an impact in itself on their achievement<sup>6</sup>. The literature highlights the difficulties in assessing the link between opting out of the local school and improved educational outcomes. Critics of choice worry that they might skim the cream-enrolling the best students at the expense of lower achievers lefts in their neighbourhood schools – and that school choice may further stratify an already stratified system.

52. To overcome these methodological obstacles, a significant body of research analyses randomized lotteries, usually employed in school districts and schools to determine the assignment in oversubscribed schools. Comparing student performance between lottery winners and losers, these studies find no significant benefit in terms of achievement in attending another public school than their local one for transferring students (e.g. Cullen, Jacob and Levitt, 2006 ; Hastings, Kane and Staiger, 2005, 2006). Cullen and Jacob (2007) also exploit randomized lotteries among primary and secondary schools in the Chicago school district and find no overall improvement in academic achievement among lottery winners that get admitted to the school of their choice, compared to lottery losers who stay in their assigned school.

53. Nevertheless, some studies do highlight the benefit of opting out for certain groups of students. Hastings, Kane and Staiger (2005, 2006) find that those whose parents have a strong preference for academic quality experience significant achievement gains as a result of attending their chosen school. On the other hand, children whose parents weighted academic excellence less heavily experience academic losses in compared to similar children that stayed in the local school.

---

<sup>5</sup> Fuller and Elmore, 1996, page 11.

<sup>6</sup> As explained by Ozek (2009), if there are unobservable characteristics that influence the probability of changing schools, traditional ordinary least-squares approach fails to provide unbiased estimates of the casual relationship between choosing another school and student outcomes.

54. Ozek (2009) uses another method to estimate the causal relationship between choosing and student's results, using data from the entire primary and lower secondary school student population of Pinellas County in the United States between 2001 and 2005. This case study is very interesting as parents are since 2003 now allowed to choose among any public school in this school district. He finds that there are no significant benefits of choice on test scores. Additionally he concludes that the students who leave their local schools often perform significantly worse in reading than similar students who did not change schools. But the effects are not the same for every subgroup in the sample, as shown by the studies based on randomized lotteries. Ozek studied more particularly the effects of opting out for children that were originally assigned to low performing schools, or schools where the majority of students are eligible for free lunch ("high poverty schools"), and he found that these children experience higher gains in terms of test scores than students that attend more advantaged schools.

55. Using similar approaches, Hsieh and Urquiola (2006) found that benefiting from increased school choice has no positive effect on student achievement in Chile. However, Dijkgraaf *et al.* (2008) found that attending a private school has a positive effect on student achievement in the Netherlands, even after controlling for students' socioeconomic background, and correcting for selection effects. In the same way, Hoxby (2003) also concluded that students' achievement increased when they attended the school of their choice, using data from the United States (but without controlling for selection effects).

56. Zimmer *et al.* (2011) used a longitudinal, within-student analysis, using student fixed-effect variables, to measure the impact of attending an autonomous public school (charter school in the United States). This approach is very interesting methodologically, as it allows controlling for any time-invariant characteristics, such as socio-economic status (SES) and ability that do have an impact on performance. This added-value approach allows to measure the benefit of attending a charter school on a student's performance. They follow students moving between traditional public schools and charter schools to examine the distribution of students both by socio-economic background and by ability. In 5 out of 7 case-studies (cities, or State), they find no substantial gains for students that transferred to charter schools than those from local schools. However, in Chicago and Texas, charter schools perform significantly worse than public schools. Lubienski and Lubienski (2006) have similar findings: after controlling for student's socio-economic characteristics, students in charters schools perform below public schools.

57. Rouse and Barrow (2008) reviewed research papers that evaluate the impact of charter schools on student achievement, comparing the achievement of students who switch to charter schools to those who stay in the traditional public schools. They show that these studies typically find that the achievement of students in charter schools is no greater than in public schools<sup>7</sup>. They also review the econometric studies that use individual-level fixed effects, to capture non observable variables, such as their intrinsic motivation to succeed in school<sup>8</sup>: the papers they reviewed find that charter schools have a slight negative impact on a student's performance gains, compared to their performance if they would have stayed in their local school.

58. How do students who attend private schools perform, compared to students who attend public schools? As student characteristics, such as their socio-economic status, differ between public and private schools and also as in some countries, private schools are unevenly spread across different school types, such as general and vocational programmes, which may, in turn, be related to performance (OECD, 2007), there is no straight forward answer.

59. A systematic comparison using PISA data by Dronkers and Robert (2003) on the effectiveness of public schools, private-dependent and private independent schools in 22 OECD countries finds that,

<sup>7</sup> For example, Eberts and Hollenbeck (2002), Bettinger (2005).

<sup>8</sup> The studies by Sass (2006), Bifulco and Ladd (2006), Hanushek *et al.* (2007).

although a large part of the achievement differences between public and private-dependant schools can be attributed to differences in the composition of the student body, private dependent schools still have a higher achievement in reading than comparable public schools. They hypothesize that government-dependent schools are more effective because they combine two benefits: a steady stream of funding, allowing them to plan ahead, and institutional autonomy (Perry, 2007).

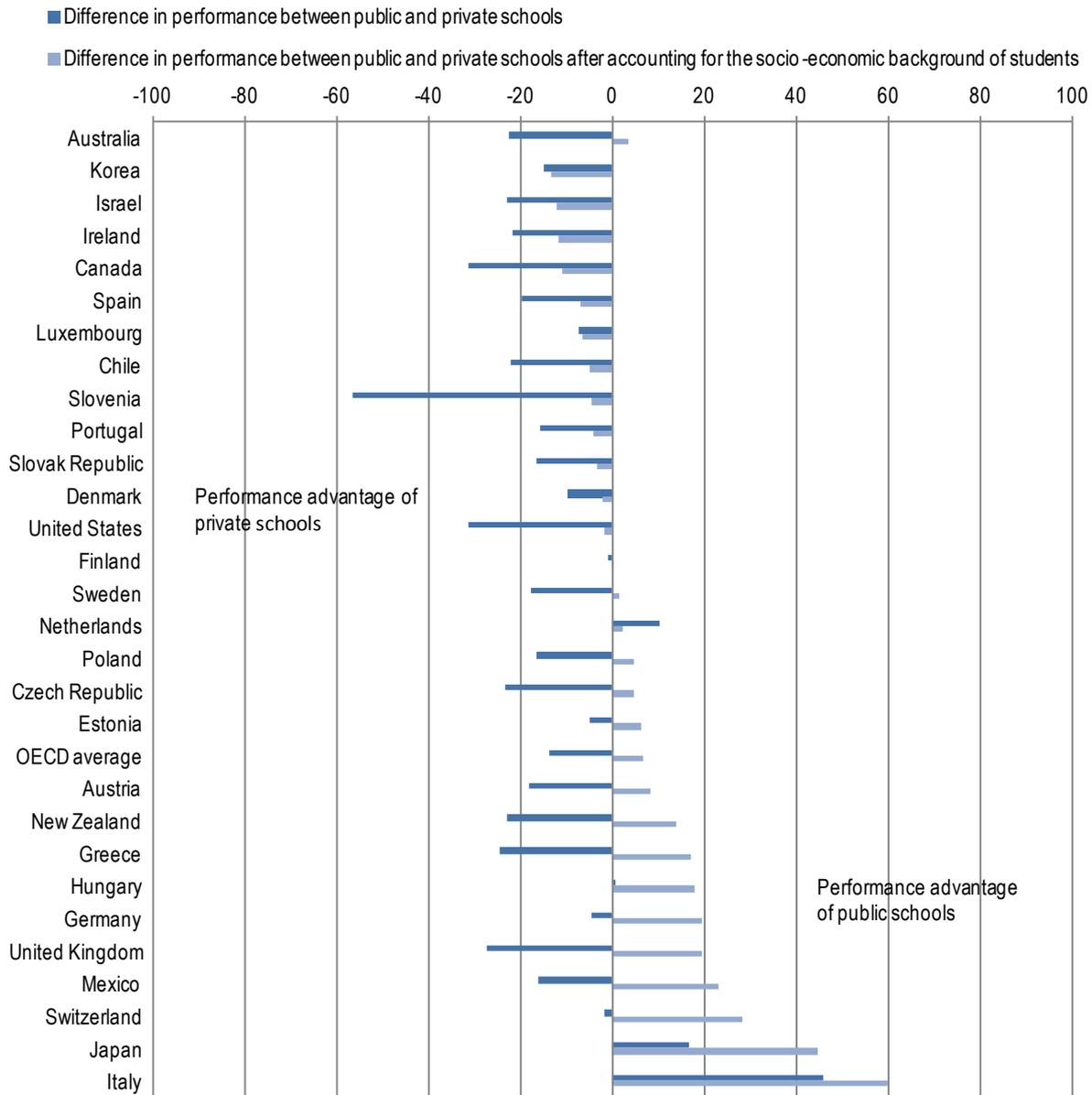
60. The results from PISA 2009 (OECD, 2010) suggest within OECD countries, on average, students who attend private schools (irrespective of whether they are publicly or privately funded) perform 25 score points higher in reading than students who attend public schools and this is the case in 15 OECD countries, although this difference varies depending on student and school characteristics. Students who attend private schools are also from more advantaged socio-economic backgrounds, so part of the positive relationship between private schools and performance is due to the socio-economic characteristics of the school and students, rather than to an advantage intrinsic in private schools. After accounting for the socio-economic and demographic characteristics of students and schools, the OECD average is reduced to 3.4 score points and is no longer statistically significant. The conclusion is that there are no differences in overall performance in relation to the extent of private schooling within a country<sup>9</sup>.

---

<sup>9</sup> Only 3 countries show a clear advantage in attending private school: in Slovenia, Canada and Ireland, students of similar backgrounds who attend private schools score at least 24 points higher in the reading assessment than students who attend public schools. In contrast, in Japan and the United Kingdom, students from similar backgrounds who attend private schools score at least 31 points lower than students who attend public schools.

**Figure 3.1. Performance differences between public and private schools measured on the PISA 2009 reading scale**

Difference in performance on the reading scale between public and private schools after accounting for the PISA index of economic, social and cultural status of students (2009)



1. No data for France

Source: OECD (2010b), *PISA 2009 Results: What Makes a School Successful?: Resources, Policies and Practices (Volume IV)*, OECD, Paris.

61. Dronkers and Avram (2010) use propensity score matching, to take into account that the students that attend government-dependant private schools are self-selected, and they also find that the students that attend private-dependant schools perform significantly better than their counterpart from public schools in 9 countries (Belgium, the Czech Republic, Germany, Hungary, Ireland, the Netherlands, Portugal, Chile and Canada). However in Austria students in private dependant schools have lower reading scores than

those attending public school, and in most countries they find no significant difference between the scores of students in both types of schools (Denmark, Finland, France, Italy, Luxembourg, Norway, the Slovak Republic, Spain, Sweden, Switzerland and Korea).

62. Parents choose private schools for other reasons: even though there may be no performance advantage for private schools after accounting for socioeconomic background, private schools may still be an attractive alternative for parents who want to capitalise on the socio-economic advantages that these schools offer, including student peers from advantaged backgrounds, or additional resources or practices that can be found in more socio-economically advantaged schools (OECD, 2010).

63. Therefore, critics worry that even though autonomous and government-dependent private schools perform no better than public schools, they exacerbate stratification by ethnic origin and ability. Indeed, in most of the OECD countries (for example, in the United States, Hungary, Austria, Poland, Czech Republic), autonomous and specialized schools are often competitive and selective, and they tend to attract the privileged parents. There are also concerns and that this harms the students left in public schools, as financial resources and motivated families are skimmed away (Zimmer *et al.*, 2009).

### ***The impact of school choice for those staying in their local schools***

64. One of the arguments for school choice is that as the types of choice increase, there will be competitive pressures on public schools to improve. Hoxby's research paper (2003) presents empirical evidence on how choice affects school productivity and student achievement (data from Milwaukee, Michigan and Arizona), through the competition it creates among public and private establishments. Her findings reveal that student achievement and productivity in public schools increased strongly in response to significant competition from vouchers programmes and charter schools. This "competition effect" is especially strong for the public schools that initially had below-average achievement, as they are forced to become more productive. She concluded that "school choice is a tide that lifts all boats"<sup>10</sup>. Nevertheless, the evidence shows that this effect is not strong enough to counterbalance the negative effects for public schools of having the most motivated students leave to private schools on a period shorter than 20 years (Hoxby, 2003).

65. This report was reviewed by other researchers: Ladd (2003) reviews Hoxby's findings and suggests an alternative explanation: to the extent it is the students with below-average test scores who opt out of the traditional public schools, these schools experience higher gain in test scores, not due to the effects of competition and a rise in their productivity, but simply to a change in their student body composition. Rothstein (2007) also assesses Hoxby's study and finds that her results depend on how the instrumental variable is constructed (Rouse and Barrow, 2008). Hoxby's methodological choices seem highly controversial, as they lack robustness. Many studies are faced with similar methodological issues: Belfield and Levin (2001) did a comprehensive review of the effects on public schools of competition from private schools, and they reported that over half of the estimates from 14 studies they review were statistically insignificant, and that the studies that did find positive effects were too small or/and questionable methodologically.

---

<sup>10</sup> Nevertheless, there are certain methodological limits to her approach (Godwin and Kemerer, 2002, page 55): data availability is limited to secondary schools, so it is not certain whether the competition effect has an impact in earlier stages of education when the learning curve for students is the steepest. Also, there might be a selection bias to the study as private schools can select their students and the study does not control factors such as motivations of the students and parental expectations for those who send their children to private schools. Godwin and Kemerer (2002) conclude that the evidence is not very robust to say that competition with private schools make public ones more efficient.

66. Sandstrom and Bergstrom (2005) use data from Swedish public and private schools students and show that the increased school choice in Sweden since the 1990s has led to an improvement in public school results, due to an increased degree of competition between schools. They conclude that this competition effect is especially strong when the quality of public school is low. Böhlmark and Lindahl (2007) try to calculate the precise impact of the competition effect in Sweden: they separate the private school attendance effect from the competition effect, using variation in school choice between siblings. The individual gain from attending a private school is estimated to be only a small part of the total effect; therefore, the total achievement gain effect is driven by other people's choice of private schools. They conclude that an increase in the private school-share of 10 % increases average student achievement by 1%, due to more competition among schools.

67. However, Dijkgraaf *et al* (2008) show that using another methodology (measuring the extent of competition in terms of market shares), the results are no longer statistically significant and sometimes negative<sup>11</sup>. The explanation suggested by the authors is that competition does not improve student performance because schools that have to compete among each other compete not on academic quality, but rather on secondary elements such as sport and music facilities, and the attractiveness of the building. A study by Andersen (2008) on the Danish voucher systems found similar conclusions: there is no average effect on achievement of competing against other schools. His finding is that to put into place a voucher scheme is not enough to raise school performance, as parents also choose schools for reasons other than the school's academic quality.

68. Additionally, the existence of autonomous public schools provides another mean to study the potential competition effects on traditional public schools. Bettinger (2006), Bilfulco and Ladd (2006) and Sass (2006) estimate whether being near a charter school, and therefore having to compete with it for students, improves the results of students in traditional public schools. Bettinger (2006) and Bilfulco and Ladd (2006) find no evidence that the achievement of students who remain in their local traditional public school improve with the competition of charter schools, although Sass (2006) found some improvement in mathematic achievement. Zimmer *et al.* (2009) find no evidence that charter schools are positively affecting the achievement of students in nearby public schools and they conclude that "charter-school competition is unlikely to create a rising tide of school performance (p 8)".

69. Overall, only a few studies find a link between increased choice and enhanced student outcomes, and when they do exist, the effects are quite small and not always statistically significant, partly due to methodological difficulties. However, cross-country correlations of PISA do not show a relationship between the degree of competition and student performance. Among school systems in the OECD countries, the proportion of schools that compete with other schools for student enrolment seems unrelated to the school system's overall student performance, with or without accounting for socio-economic background (OECD, 2010a; OECD, 2011). The majority of the evidence suggests that different schemes of school choice (open enrolment, charter schools) do not, through the competition they create for local schools, induce them to improve, nor those it improve the student achievement of those who take advantage of more school choice and opt out of their local school as the evidence reviewed shows.

### ***The impact of targeted school choice programmes (vouchers)***

70. In the United States, there are a number of interesting studies that focus on the effects of voucher programmes, on those benefiting from them, but also on those that are not participating. In studies

---

<sup>11</sup> They use data from the Netherlands to measure the effects of competition on achievement, and find that when more schools compete against each other for student in a precise area, the effects on student achievement is negative, and that on the contrary, less competition leads to better student achievement, and therefore, improves the quality of education.

comparing voucher students to a randomly selected comparison group of students in the Milwaukee public schools and controlling for students background characteristics, Witte (1996, 2011) reported higher parental satisfaction for voucher students, but did not find a positive effect on their achievement. Rouse (1997) also found no consistent impact on reading, but found a small positive impact in mathematics: voucher students gained between 1.5 and 2.3 percentile points per year in math, but no consistent impact on reading, in the first years of the programmes.

71. Criticizing these approaches, Peterson *et al* (2005, 2011) rely on an experimental design that longitudinally examine test scores of students who won the voucher lotteries compared to students who lost the lottery and did not receive a voucher in New York City, Washington D.C., and Dayton. They estimate that the children that enrol after two years in a private school thanks to the voucher have on national reading and math tests a score higher by 6 % on average than members of a control group remaining in public school. They also highlight that African American students benefit the most from the vouchers. This study also reports higher parental satisfaction levels for voucher-users, fewer discipline problems, more communication with schools, and more student homework than parents in the control group.

72. Other research has raised the questions about whether this is merely the consequence of shock effects, that then wears off through time. This idea has been further supported by research showing no significant improvement in schools that face increased competition. Rouse and Barrow (2008) review the evidence on the impact of education vouchers on student achievement on a long period of time and find no significant gains in any publicly and privately funded voucher programmes in the United States. Although there is some evidence that African American benefit from attending a private school in one New York City study, studies using alternative methodologies, with the same sample are less robust in their findings (Howell and Peterson, 2002 and Mayer *et al.*, 2002).

73. As a conclusion, studies of voucher programmes have found little or no effects for children using vouchers to attend public schools, and that studies that have found larger gains have been harshly criticized on methodological grounds. Nevertheless, these studies have furthered the ongoing debate about whether vouchers are beneficial for disadvantaged students and are worthy of public investment. Research on the charter movement has indicated relative academic benefits from these types of schools in some states, but detriments in others, and studies of national samples in the United States have not been too promising. The lack of clear evidence on the academic benefits of choice are even more surprising since the programmes that were evaluated operate under certain advantages<sup>12</sup>. Also, these targeted school programmes rely on the idea that parents are inclined to choose better schools for their children, if they are given that possibility. Nevertheless, in practice, school choice plans usually depend on parents to get and filter the information. Even if there are potential productivity effects of such programmes, critics worry about its effects in inequity.

### **School choice poses risks that can exacerbate inequities**

74. Not only is it important to understand the effects of school choice on student outcomes, but also it is important to understand another issue of critical relevance: the mechanisms and processes of how parents choose schools (Berends, Cannata and Goldring, 2011). Supporters of school choice argue that if parents are free to choose the school of their choice for their children, they will actively compare the qualities of alternative schools and push for better quality and more accountability at the level of their neighbourhood. To see empirically if this is the case, it is necessary to divide this question in two:

---

<sup>12</sup> Since they are all voluntary choosers, they are composed of parents that are informed and willing to get involved in their kids' education, and therefore are perceived as being better judge of quality education and where to get it (which schools to choose) than similar parents (same socioeconomic characteristics) who don't participate.

1. Are certain types of parents more likely to exercise choice and exit the school close to their home?
2. If so, and if parents' tendency to exercise choice varies according to certain of their characteristics (such as their income, their ethnicity), will school choice reinforce socio-economic inequities in education?

*Certain types of parents are more likely to exercise choice*

75. Research on parental choice seems unanimous: more affluent parents are more likely to exercise school choice. In the Netherlands, a study showed that parents that take their children out of their local schools have a higher socio-economic status than the ones who do not: 35% of parents that do not send their children to the local school, 35 % are upper-level employee, while 10 % are working class (Denessen, Slegers and Smit, 2001). Similar evidence can be found elsewhere: studies of choice programmes in the United States (such as Witte, 1996) have shown for example that choosing parents are better educated and more involved in their children's education than parents whose children attend local public schools. Similarly, Wells (1996) found that disadvantaged families who participated in a certain choice programme (the St Louis plan) came from relatively more educated families than others. Martinez, Godwin and Smith (1996) highlighted that students and parents who chose magnet schools over regular public school were significantly more educated than those who did not attend, even after controlling for income level. Willms and Echols (1993) similarly concluded that parents in Scotland who exercised choice had more education than those who did not.

76. In fact, many parents do not choose even when they are offered several school choice options, in particular parents of minority ethnic backgrounds and from low socio-economic background. Many school choice arrangements are designed to empower low income families. But empirical studies show that low income families are quite diverse in their commitment towards their children's schooling and the importance they give to it, and in their use of school choice (if they look for alternatives to their local neighbourhood school and if they do, toward which alternative do they orient themselves). Parents also choose differently depending on their SES level: some studies on magnet schools show that better off and more educated parents give more importance to quality when choosing a school for their child than other parents, from lower SES level, who may value more other factors, such as proximity and familiarity of local schools (Elmore and Fuller, 1996), and these selection patterns bias enrolment in school choice towards upper socioeconomic status students.

77. The main issue is that it is very difficult to entice parents to exercise choice: Henig's study of student transfer to magnet schools (1996) in Montgomery County (United States) suggests that the range of diversity in academic emphases and teaching styles that are available is insufficient to motivate minority families to transfer. In the same way, even if the No Child Left Behind Act offered parents of children attending "failing" schools to choose another school, the vast majority of parents (up to 97 % according to Ben-Porath (2009)) chose not to change schools.

78. To understand differences in how parents choose schools for their children, PISA asked parents a series of questions regarding school choice in eight OECD countries (Chile, Denmark, Germany, Hungary, Italy, Korea, New Zealand and Portugal). While parents from all backgrounds cite academic achievement as an important consideration when choosing a school for their children, socio-economically advantaged parents are, on average, 10 percentage points more likely than disadvantaged parents to cite that consideration as "very important" (PISA Volume IV).

79. Information is the key component in school choice and it is essential for parents to collect the available information and to analyse it, in order to make an optimal decision. The reason of why less

affluent parents exercise choice less may be that they have access to less information, or lower quality information, and may not have the adequate resources. Haeringer and Klijn (2005) highlighted that parents, when they have to choose (by submitting a preference list) adopt strategic behaviours and manipulate their preferences, applying to a “safety school”, even if it is not the optimal choice for them. Experimentally, they show that this has a large negative effect on efficiency, and that it increases segregation, as more educated parents have the skills and social capacity to elaborate the more effective strategy to get their children into their preferred schools. Consequently, it is possible to say that “The evidence in question is that those who take advantage of [school choice programmes], even when they are targeted to the poor, are not all of the poor, or the poorest of the poor, but the putatively most ambitious among the poor. The main beneficiaries are children whose parents have the personal resources to take up the opportunity and negotiate the [choice schemes] (pag 24)” (Feinberg and Lubienski, 2008).

80. The evidence that has been briefly reviewed here shows that information acquisition has very high costs, especially for parents who lack the needed social capital, the resources, the time, the connections or the cultural resources to effectively choose. Additionally, it is also costly to develop an adequate strategic behaviour with the information collected, which is very demanding, and “the resources necessary for making informed choices about schools is not available for many parents” (Ben-Porath, 2009, pag 536), especially when choice mechanisms can also change and evolve very quickly.

81. All in all, concerns about whether families – particularly less educated ones and minorities, have enough information to make informed decisions, and whether parental preferences will lead parents to select schools based on the ethnic or socio-economic status composition of their students, rather than on academic quality, seem to be justified. Even though theoretically, choice can be introduced into schooling systems to improve the opportunities disadvantaged children can receive, at the same time, the same policy arrangements have other effects that hinder equity, as the possibility of exercising choice is not the same for all parents. Indeed, “let’s suppose that explicit choice has no benefits for the lowest 10 % of achievers, but does raise the achievement of the next 10 percent thus increasing the gap between the lowest 10 percent and the rest; but decreases the gap between the next 10 percent and the subsequent deciles. Has the system improved, or worsened, with respect to equity?” (Brighthouse, 2000).

### ***Parents may choose schools for reasons other than academic performance***

82. Why and how do parents choose schools? The key element in much of the thinking on school choice is that parental preferences for schools revolve around academic quality. But research shows that reasons that parents lead to a choice of school, or simply not to choose, are much more complex than just based on academically rational reasons: they choose schools not only on academic considerations but also student demographics, location, after school activities, their children’s friendships, etc.

83. Using data from the implementation of a district-wide public school choice plan in North Carolina (Mecklenburg County), Hastings, Kane and Staiger (2005) estimate parental preferences for school characteristics, using parental rankings of their top three choices of schools matched with student demographic and test score data. They find parents have different preferences over schools, even after controlling for income and academic achievement. These heterogeneous parental preferences may lead to “vertical separation” across schools: this means that schools perceived by parents as high quality may compete intensely for students with strong preferences for school quality, while neighbourhood schools may serve the remaining students with strong preferences for proximity and lower preferences for school quality.

84. Even if parents that have chosen charter schools typically affirm that their choices are based primarily on teacher quality, on the quality of the academic programmes, and on the schools approaches to discipline) (e.g. Arizona Board of Charter Schools, 2003 ; Texas Education Agency, 2003 in OECD,

2006), a study showed that the majority of parents were incorrect in their assessment of schools academic quality: only 44 % were satisfied with the highest performing schools and 15 % were highly satisfied with the worst schools (Bast and Walberg, 2004). A study in Chile also show that parents have tenuous sources of information and are largely incorrect when asked to identify high quality and low quality schools (Gauri, 1999). Woodfield and Gunby's study (2003) on New Zealand conclude that the parents' assessments of 'high quality' were probably based on the socio-economic characteristics of the students, rather than an actual academic quality

85. Although parents may be concerned about equity and integration and may support their neighbourhood school, they seek at the same time the "best" education for their children (Raveaud and Van Zanten, 2007). For parents, there are both educational and social reasons to choose a school (Denesse, Slegers, Smit, 2001), such religious view, linkages to community, socio-economic status level of the other students (OECD, 2006). Research shows that parents prefer schools with populations ethnically and socio-economically similar to their own family (Fiske and Ladd, 2000, for New Zealand; McEwan and Carnoy, 2000, for Chile; Willms and Echols, 1993, for Scotland, Cullen, Jacob and Levitt, 2000, for Chicago, Crozier *et al.*, 2008 for the United Kingdom, Raveaud and Van Zanten, 2007 for France<sup>13</sup>). Fiske and Ladd (2000) talk about a "flight of students to schools with higher socio-economic status". Many empirical studies reveal this "flight" of more advantaged parents to certain schools, increasing between school segregation.

- Wells (1996) studied the characteristics of the low-income minority parents that participated in the St. Louis inter-district transfer programme. The evidence suggested that in selecting between the 160 suburban schools available to their children, very few parents considered the specific educational offering of the individual schools, but rather the social status of schools.
- A study by Denessen, Slegers and Smit (2001) based on the Netherlands concluded that schools are segregated not because they have different performance levels, but rather because parents' perception of their social climate varies according to the proportion of minority students in the school.
- Riedel *et al.* (2009) focusing on one major German city in North-Rhine Westphalia showed that parents take into account the socio-economic composition of a school's student body and its share of migrant students when making their choice.
- In a study reviewing the existing research, Dronkers and Avram (2010) highlight that children who have parents more concerned with education have more odds to be sent to private schools, and that the average SES of the student body of a school influences greatly the parents' choice, therefore leading to more segregation by ability and by socio-economic status.

86. The flight of higher SES students from schools with lower SES or higher concentrations of migrants can have a negative effect on equity. As disadvantaged families tend to send their children to their local school, more advantaged families make segregating choices: as a result, the level of segregation in schools is high and exceeds the level of residential segregation.

---

<sup>13</sup> Raveaud and Van Zanten (2007) after conducting interviews of middle class parents in Paris and in London find that these parents have chosen their children's schools because they are considered to have a sufficient number of middle class children to influence the learning context and general atmosphere, but also because the concentration of certain middle class groups sharing similar resources and similar values favours the emergence of a local norm that presents choice of the local school as the normal and good thing to do. Parents naturally explain that they want 'the best' for their child.

87. As seen earlier, enhanced school choice is often justified as a strategy for improving educational opportunities. This is based on the idea that disadvantaged parents are trapped by circumstances in bad schools, so that providing them a way out of these schools, through voucher schemes for example, or open enrolment is a way to provide chances for these parents to put their children into better schools. But we have also seen that the empirical evidence to show that this is not the case in practice, even in the case of school choice programmes that were explicitly designed to remedy inequities (like the Milwaukee voucher programme), the parents who exercise choice are the ones who are relatively more educated and who have relatively higher incomes (in the low income category), and are more involved in their children's schooling than the parents that do not participate in these programmes. One of the most important questions in the field of school choice is to study the impact of choice on the sorting and stratification of students across schools and to see how students will allocate themselves among schools when allowed to choose schools freely, and if it results in a greater segregation of students, by ability, income, ethnic background.

***Parental choice leads to more stratification of school systems: sorting and segmentation***

88. Ladd and Walsh (2002) analyse that the flight of students to higher SES schools is consistent with higher student outcomes, and also with greater gains in test scores from one year to the next. Schools serving advantaged students are generally considered of higher quality than schools serving disadvantaged students, because such schools are able to command more resources, and to attract and retain higher quality teachers: to the extent that the quality of schools serving advantaged students is higher, families who have the resources to invest in their children's education have an incentive to select schools serving advantaged students (Ladd, Fiske and Ruijs, 2011).

89. Table 6 summarises studies from around the world that show that increased parental choice leads to more segregated schools than would otherwise be the case. To sum up, while choice can be seen as a mechanism that levels the "playing field" and provides the same opportunities for all, the evidence shows that it may not have the intended effects: better-off families and more educated parents are the ones who exercise choice, and that will enjoy access to a wider variety of schooling options. While the students who stay in the public schools might theoretically benefit from the effects of competition (as explained earlier), they might be hurt by the departure of classmates and teachers to the other seemingly higher performing schools, or might suffer from the loss of resources due to reallocation. Therefore, the introduction of school choice mechanisms can lead to segregation across schools and to more disadvantages for those who are worse off.

**Table. 3.1. Overview of the existing research on the impact of an increased parental choice on segregation by ability, by SES and by ethnicity**

Study	Country studied	School choice configuration	Scope	Methodology	Findings
Ladd, Fiske and Ruijs (2009)	Netherlands	Open enrolment	Examination of the patterns and trends of segregation of immigrant students between 1997 and 2005 in primary schools in 27 cities	Isolation index (measure of the extent to which disadvantaged immigrant students are in schools with other students like themselves), dissimilarity index (measure of the extent to which immigrant students are unevenly distributed across schools), segregation index (a gap-based measure of segregation that measures the extent to which schools are unbalanced)	Find that migrant students are highly segregated by schools, and this segregation has increased over the 9-year-period, despite little or no increase in the proportion of migrants. Close to 80% of the migrant students are in schools that have more 50% of their student body composed of migrants.
Watson and Ryan (2009)	Australia	Universal voucher system	Study of two cohorts of students from 1975 and from 1998, from two national longitudinal surveys	Examination of data on the socio-economic background of private school students in the mid-1970' and the late 1990s; to assess the impact of changed enrolment patterns on schools in public and private sector	Find that since the introduction of the voucher system, increase segregation by income level between public and private schools: public schools have a higher share of low SES students than private schools than in the 1970s, as students who transferred from public schools to private tended to be from the top half of the SES distribution.
Ladd and Fiske (2001)	New Zealand	Open enrolment	Study of the distributional effects of the parental choice in Auckland, Wellington and Christchurch using data from the 1991-1997 period.	Regression analysis of government data on the composition of schools to measure the sorting of students by ethnic and socioeconomic status	Finds an increase of stratification by minority status and by SES level over the period. Evidence that parents are changing their children from schools where the student body is in majority from lower SES and ethnic origins, to schools with more advantaged student composition.
Woodfield and Gunby (2003)	New Zealand	Open enrolment	They look into the results of the Ladd and Fiske study.	Focus on the impact of open enrolment on student achievement and sorting of students.	No evidence that the overall student achievement level has improved but they find that the dispersion of performance across schools has increased.
Hsieh and Urquiola (2006)	Chile	Universal voucher system	Panel data for about 150 municipalities, from 1982 to 1988. Analysis of the dataset from the Chilean Ministry of Education, with student level characteristics for	Regression analysis to measure the effects of school choice on educational outcomes, and in particular on school productivity and sorting (by ability).	Find no evidence that choice improved average educational outcomes. However, evidence that the voucher program led to increased sorting, as the best public school students left for private schools.
Elaqua (2009)	Chile	Universal voucher system	public and voucher schools .	Regression analysis to see what determines the percentage of disadvantaged students in a school, to study of the segregation among public and private schools, and also among private schools.	Finds that public schools are more likely to serve disadvantaged students than private schools, and private voucher schools 'cream skim' off high income and high ability children from public schools, as parents seek schools in which their children's peers are of similar SES background.
Soderstrom and Uusitalo (2005)	Sweden	Open enrolment	Database from the Institute for Labor Market Policy Evaluation that covers all the students and that included information on the students' gender, age, immigrant status, residence, grades, parental income, education and migrant status.	Longitudinal analysis of 4 cohorts of students (1998 to 2001) to study the distribution of students over schools as consequence of the introduction of open enrolment in the city of Stockholm. Segregation is measured before and after 2000 through a dissimilarity index, along three dimensions: ability, immigrant status and family background.	Find that the composition of students across schools has changed, as children are now much more segregated by ability. Additionally, segregation between migrant and native students has also increased since 2000.
Böhlmark and Lindahl (2007)	Sweden	Universal voucher system	Longitudinal panel of students, from 1988-2003, with student and parental characteristics	Differences-in-differences econometrical approach, to assess the impact of the 1992 reform and to study the impact of school choice on segregation between schools along poverty and ethnic lines	Find more segregation for migrant students since the reform, as parents with long education tend to choose private schools for their children.
Burgess et al (2005)	England	Inter-district school choice	Use the Pupil Level Annual School Census dataset, part of the National Pupil Dataset. Analysis of the cohort which transferred to secondary school in 1997 and took their final exams in 2002.	Dissimilarity index to examine the different degree of sorting of students across schools relative to their sorting across neighbourhoods. Student sorting is characterized across three different dimensions: ability, ethnicity and disadvantage.	Find relatively low ability and poverty segregation, but high ethnic segregation. They show that the more schools available in a neighbourhood, the more segregated schools are.
Jacot and Maldonado (2006)	Spain	Government-dependant private schools	Country-wide statistical information about student enrolment by type of school.	Statistical analysis to see if the presence of government-dependant private schools has increased the segregation of migrant students in schools.	Find that there is an increasing polarization between the student body composition of public schools and centros concertados: 82% of immigrants students in Spain attend public schools and only 18%, centros concertados in 2003, when centros concertados educate 31.3% of the total Spanish students.
Zimmer et al (2009)	United States	Charter schools	Longitudinal, student-level data from Chicago, San Diego, Philadelphia, Denver, Milwaukee, Ohio, Texas, Florida	Examination of the population of students who are transferring to charter schools, to provide evidence on the effects of charter schools on ethnic stratification. Comparison of the composition of the sending (traditional public) and the receiving charter school of students transferring to charters.	Find that transfers to charter schools tend to increase ethnic segregation in Philadelphia and in Texas, when compared to the student body composition of the traditional public schools of the area, but also to reduce it in Chicago.
Riedel et al (2009)	Germany	Public denominational schools	Data from Wuppertal, a city in North-Rhine-Westphalia from 2007	Statistical analysis: using individual level data from schools, on their student body, and the neighbourhood they are in.	Find that as disadvantaged families tend to send their children to their local school, more advantaged parents make segregating choice, and send their children to a denominational school: as a result, the level of segregation in schools is high and exceeds the level of residential segregation.
Shindler Randvid (2007)	Denmark	Open enrolment	Data from each of the 50 municipalities of the Copenhagen region.	Probit regression to determine the characteristics of students that choose a different school than their local one.	Find that Copenhagen combines a moderate residential segregation with high level of school ethnic segregation and conclude that it is school choice, and more particularly private school choice that leads to these high level of polarization.

Source: see first column for references of the empirical studies

#### 4. DESIGNING SCHOOL CHOICE SCHEMES COMPATIBLE WITH EQUITY

90. The introduction of school choice schemes can correct some of the imperfections of having a sole public education provider, and to allow each child to benefit from a high quality education. However, policy makers have to acknowledge that these same policies increase segregation between schools without necessarily improving school performance. Indeed, the evidence consistently shows that more advantaged parents are the ones who exercise choice the most, leading to more segregation by socio-economic background and ability between schools.

91. However, some evidence shows that it is possible to combine school choice and equity, through well-designed school choice configurations. The previous chapter shows that school choice schemes have to be well designed and managed, in order to combine parental choice, diversity of supply and to limit the negative impact that school choice can have on equity. How to make school choice more equitable? How to adopt school choice policies that gives all parents the opportunity to search out a better education for their children?

##### **Basic features of choice policies to support equity**

92. Some evidence shows that choice can be an effective policy to create opportunities and close achievement gaps if they are targeted and supported to serve primarily disadvantaged population. They have to be structured in ways that do not concentrate benefits only for those who are already better-off.

93. As the effects of choice programmes are highly dependent on local conditions (for example: the particular organizational characteristics of a particular school choice programme, the linkage between the community and the parents, the parents' financial and educational resources and their commitment are highly significant), the local context has to be analysed in-depth, as there is no "one-size-fits-all" solution. However, in order to limit the negative effects, some features have to be taken into account:

##### ***Topped-off vouchers should be avoided***

94. It has been proven that systems that combine school choice and the possibility to ask for extra fees to parents are the ones that tend to have more segregation. The New Zealand case is particularly eye-opening: the decile system (that ranks schools according to the composition of their student body) has increased the separation of ethnic groups according to schools, as minority and low income students have been unable to afford the student fees associated with attending a high ranked school, clearly giving an advantage to well-off families, constraining disadvantaged students in the lower performing schools. Elacqua's study (2009) of Chile also shows that the policies that provide schools with incentives to charge tuition fees lead to more school segregation. Watson and Ryan (2009) show in a study on the Australian voucher system that when vouchers that do not cover all the tuition fee are provided to parents, parents from higher SES groups are more likely to choose private schools than parents from lower SES background, provoking an increased polarization in the school system. This is due to the fact that private schools that receive vouchers use the extra resources to increase the quality of schooling, and further therefore, increase the achievement gap between public and private schools, and the gap between high SES students and lower SES students.

95. Vouchers should be combined with government regulations on the fees, to ensure that the voucher is translated into lower fees. If private schools use the extra resources provided by vouchers to improve quality, while maintaining the same tuition fees, or even increasing them, it will contribute to further drain advantaged students from public schools.

***Selection criteria should be fairer***

96. Cream-skimming and further segregation may occur if schools have discretion over admission criteria, time of registration or tuition fees. For example, better-off and better-informed parents tend to enrol their children in the school of their choice very early on to obtain a spot in the highest quality schools (Ladd, Fiske and Ruijs, 2011). If admission policies and student enrolment procedures are homogeneous, fixed and controlled by a central authority, schools have fewer opportunities to select students.

97. When schools are allowed to apply selective academic and income criteria, this aggravates school composition segmentation, as oversubscribed schools tend to hand-pick their students, crowding out disadvantaged students and students with low performance. The criteria to enrol in a school should be the same for all students, clear and transparent, based on proximity and presence of siblings and on lottery systems, or on formulas to achieve a heterogeneous mix of students. The proximity to school should also always be taken into account into the selection criteria when schools are oversubscribed. For instance in Chile, since 2009, government dependent private schools cannot select students based on academic criteria or on socio-economic criteria until the end of primary education (Brandt, 2010).

98. Soderstrom and Uusitalo (2005) studied a reform led in the school district of Stockholm that changed the admission system of public secondary schools. As the city is segregated into neighbourhoods, the intent of this reform was to improve equity, by making it possible to high achievers from all over the city to attend the best schools in the high income areas. Whereas students are guaranteed to have a place in the school nearer to their house, since 2000, the admission is based on student test scores. This has resulted in a change in the composition of students across schools, with children now much more segregated by ability, but also by SES and migrant status, the opposite effects to what was intended.

***Parents should be supported in making well-informed choice***

99. For school choice to be effective, public institutions must take into account the limitation that certain parents have in making choices, by minimizing the cost of information acquisition. It is extremely difficult for individuals, especially disadvantaged families, to access information about the results and quality of a school as they may lack the needed social capital, the resources, the time, the connection, the cultural resources to effectively participate in choice. The accessibility of information not only reduces the cost of acquiring it, but also supports the development of skills that improve the quality of the decision making process (Ben-Porath, 2009).

100. Parents should be informed about alternative schools, the strengths and weaknesses of these, as well as the dates and procedures for school enrolment. To lower the costs of obtaining this information for the most disadvantaged parents, it should also be available in selected foreign languages and should be accessible to parents with limited literacy (OECD, 2010c).

101. In some countries performance indicators are published to foster competition, while in others this information is not published to avoid further segregation. Whatever the rules on publication, information may not be easy to understand. Value-added information, which measures the actual contribution of the school, should be preferred to raw performance data (OECD, 2008).

**Table 4.1. Information to parents about school choice structures for lower secondary**

	Government is responsible for providing detailed information on specific school choice alternatives within families' location	The information contains performance data
Austria	Yes	No
Belgium (Fl.)	No	a
Belgium (Fr.)	Yes	No
Chile	Yes	Yes
Czech Republic	Yes	No
Denmark	No	a
England	Yes	Yes
Estonia	No	a
Finland	No	a
France	Yes	No
Germany	Yes	No
Greece	Yes	m
Hungary	Yes	Yes
Iceland	Yes	m
Ireland	No	a
Israel	Yes	No
Italy	No	a
Japan	No	a
Korea	No	a
Luxembourg	Yes	No
Mexico	Yes	No
Netherlands	Yes	No
New Zealand	Yes	Yes
Norway	No	a
Poland	Yes	No
Portugal	Yes	No
Scotland	Yes	No
Slovak Republic	Yes	No
Slovenia	No	a
Spain	Yes	No
Sweden	No	a
Switzerland	No	a
United States	Yes	Yes

1. a means no information is available.

Source: OECD (2011), *Education at a Glance 2011: OECD Indicators*, OECD, Paris.

102. Table 4.1 shows that at the lower secondary level, in 12 countries parents are not informed by the government about school choice options available to them. Furthermore, even when the government is responsible for providing the information to parents on school choice, in very few cases is data available on the performance of these schools: only 5 countries (Chile, England, Hungary, New Zealand, the United States) reported that this type of information are included in the information available for parents.

103. Designers of school choice programmes have to take into consideration that there are parents of higher SES participate in choice options more often and that they have different preferences, leading to more stratification per school. The design of school choice programmes should focus more on getting large proportions of families to choose, rather than simply catering to the preferences of active choosers (Elmore and Fuller, 1996), through for example targeted and active parent information programmes.

***Low performing schools should receive additional support***

104. School choice is part of a strategy to promote freedom of choice but also to improve school performance. Therefore, to ensure higher education quality overall, school choice should be complemented with strategies to provide effective support to schools that might be performing at non satisfactory levels or losing students with the choice arrangements. Only through effective support can the problem of stratification of schools be diminished.

**Combining school choice and equity through well-thought design**

105. In many countries, policies efforts are made to tackle the problem of segregation due to school choice. Two types of design allow combining school choice and more equity: controlled choice programmes, and progressive voucher schemes.

***Controlled choice schemes***

106. Controlled choice programmes, also called flexible enrolment plans, are student allocation schemes that while providing parental choice, also allow to limit segregation issues. These schemes rely on the introduction of mechanisms to ensure that students are more diversely distributed across schools, by considering the need to integrate students of different background (in terms of parental socio-economic status, ethnical origin, etc). They allow families to choose within their zone, provided that their choice will not upset the ethnic and socio-economic status balance at that school, and that in the event of oversubscription, disadvantaged and low performing students will not be overcrowded and forced to enrol in another school (Alves and Willie, 1990).

107. The allocation mechanisms vary across countries, so as their effectiveness: it depends on their effectiveness in matching parents' preferences for quality schools with a consistent application of priority criteria for disadvantaged students.

108. This approach balances choice while ensuring that schools remain integrated, with the overall intent of school improvement. A number of education systems use this approach, including the United States and the Netherlands (Box 4.1). The allocation mechanisms vary across countries, and their exact design can very much vary, in respect to the priority criteria set and preferences taken into account, leading to variation in their effectiveness (Abdulkadiro *et al*, 2006; Ehlers, 2010). Moreover, controlled choice schemes require a certain level of centralisation, to prevent inefficiencies such as multiple registrations and higher administrative costs.

#### Box 4.1. Examples of controlled choice schemes

In **Cambridge (United States)** there is a choice programme that ranks the preferred schools and reviews and allocates students centrally, taking capacity and diversity criteria into consideration. This controlled scheme plan was first implemented in 1981. The Cambridge plan has evolved into a system where new families visit a central registration area, choose four schools, and rank them in order of preference. The district reviews the lists and tries to assign students to their choices, but it also tries to ensure that no school exceeds its capacity and all schools reflect the district's racial and ethnic composition.

A central subscription system to assign students also exists in **Nijmegen (Netherlands)** for primary schools, to reach a share of 30% of disadvantaged students in each school. All the primary schools have agreed on a central subscription system based on the distribution of students in different categories. In the event of oversubscription, priority is given to siblings and children who live nearby. Subsequent priority is given to either advantaged or disadvantaged students, in order to reach the required balance, by lottery system. This policy was introduced in April 2009 and has not been evaluated yet. **Rotterdam** provides an example of double waiting lists, which allow oversubscribed schools to give preference to children who would enrich their ethnic and socio-economic mix.

*Source:* Kahlenberg, R. (2006), "Helping Children Move From Bad Schools to Good Ones", *Education Week*, the Century Foundation. Ladd H., E. Fiske and N. Ruijs (2011), "Does Parental Choice Foster Segregated Schools? Insights from The Netherlands" in Berends M., M. Cannata and E. Goldring (Eds), *School Choice and School Improvement*, Harvard Education Press, Cambridge.

109. Given the strong relationship between student achievement and SES status of a student's peers, choice arrangements that increase integration are likely to increase student achievement as well, since all students throughout the school can benefit from higher achieving classmates (Hanushek *et al.*, 2003). Research has shown that the promotion of integration through a comprehensive design has positive effects for disadvantaged children, without hindering top-performers. The study by Angrist and Lang (2004) on the effects of a school choice programme, Metco, that integrates mostly low income children from minority groups into higher income school districts, in Boston suburbs, concludes that there are no negative peer effects for higher achievers students, but does find an increase in Metco students' achievement.

#### *Progressive voucher schemes and weighted student-funding formula*

110. As an alternative to controlled choice schemes, countries establish incentives to make disadvantaged and/or students with low performance more attractive to schools. Progressive voucher schemes and weighted student-funding ("virtual vouchers") are based on two main elements: funding follows the students on a per-student basis to the school they attend and this amount depends of the educational needs of the children. As a consequence, disadvantaged students bring more funding to their school, compared to "regular" students.

111. The objective of this approach is to combine the promotion of an equal quality schooling across schools, taking into account that some children are more challenging to education than others, to "foster a level playing field among them" (Ladd and Fiske, 2009) and to ensure full parental choice. Since the amount of the voucher is higher for children that have the biggest needs, schools will have greater incentives to attract such students and to provide them with resources that address their needs (Levin and Belfield, 2004), without contributing to further segregation.

112. This progressive voucher scheme was adopted in the Netherlands for all primary schools in 1985, and schools with substantial numbers of weighted students received more funds. Once the level of funding for each school is determined based on the need of individual students, there is no requirement that schools will use directly these extra resources on these students. They can for example choose to reduce the number of students per class. The "weight" of each student is determined by his parents' educational level. Empirical research conducted by Ladd and Fiske (2009) shows that it has succeeded in distributing

differentiated resources to schools according to their different needs: primary schools with a high proportion of weighted students have on average about 58 % more teachers per pupils, and also more support staff.

113. In recent years, policy makers from other countries have given thought and consideration to this policy tool: several cities in the United States have also put them into place: Seattle, San Francisco and Houston (Baker, 2009). Likewise, a weighted voucher was adopted by the Chilean education system in 2008, providing an extra per student subsidy for disadvantaged students: low SES and indigenous children's voucher is 50 % higher than children that are not considered priority. Elacqua (2009) proposes that this type of financing schemes provides the right type of incentives for schools to enrol more disadvantaged children and therefore reduce segregation, and that it can mitigate the stratifying effects of unrestrained universal voucher programme.

114. Progressive voucher schemes and other similar weighted funding formulas provide an effective combination for school choice and equity: they rely on market mechanisms, and foster parental choice, and they allow directing extra resources to children and schools that need them the most and this way promoting equity. This design combines individual concerns of parents, that are allowed to choose their children's school and social concerns, of allowing more equity, and an equal playing field for all children.

## 5. CONCLUSION

115. School choice policies are aimed at achieving a number of diverse goals: from the point of view of the individual, the most significant goal is the enhancement of parents' freedom and their right to decide over the education of their children. From the point of view of society, school choice aims to improve student achievement and provide equal access to high quality schooling. Therefore, school choice should be designed to be at the same time freedom enhancing and justice enhancing.

116. Educational systems where choice is provided to some but not to others are inherently unfair, especially when opportunities are determined by socio-economic background. Since the option of school choice through residential mobility or through enrolment in private schools has always been available to wealthy families, school choice programmes can allow to expand this right to every student. Theoretically this can improve equity, as parental income and education becomes less important in determining access to a high quality education.

117. Nevertheless, the theoretical benefits of introducing market mechanisms in education are not easily identified empirically, and it seems that choice schemes do provide enhanced opportunities for some advantaged parents and students who have a strong achievement orientation, but also harm others, often more disadvantaged and low SES families.

118. School choice therefore requires some balance to ensure that all parents and families are able to exercise it and benefit from it, especially disadvantaged parents, who are the ones who exercise it the least. Indeed, evidence shows that parents are not always capable of acquiring the information necessary to make well informed and optimal educational choices for their children. Also, parents do not necessarily base their decisions on academic aspects but primarily on other factors, such as proximity, peer socio-economic status, the school's facilities, etc. As a consequence, schools become more and more segregated, and experts put into evidence "native flight" and "white flight" from certain schools. Disadvantaged parents and students, whose expectations are less well formed, that do not have access to the right type of information and whose knowledge on how to take advantage of complex mechanisms of school choice is limited, are further isolated.

119. However, a careful design of school choice schemes can allow to combine parental freedom, enhanced opportunities for disadvantaged children and equity. These need to be ensured through fair selection criteria for schools, availability of information on school performance and on choice arrangements for all families and support to schools which may be harmed through choice schemes. In addition, specific choice schemes that have had positive results in combining choice with equity are controlled choice plans and progressive voucher schemes.

## 6. BIBLIOGRAPHY

- Abdulkadiro, A., *et al.* (2006), "Changing the Boston School Choice Mechanism", NBER Working Paper No. 11965.
- Alberger S., *et al.* (2009), "Closing the Student Achievement Gap: the Overlooked Strategy of Socioeconomic Integration", Paper presented to Prof. Jal Mahta, Harvard Graduate School of Education.
- Albert, C. and C. Garcia-Serrano (2010), "Cleaning the Slate? School Choice and Educational Outcomes in Spain", *Higher Education*, Vol. 60, N° 6.
- Andersen, S. (2008), "Private Schools and the Parents that Choose Them: Empirical Evidence from the Danish School Voucher System", *Scandinavian Political Studies*, Vol. 31.
- Angrist, J. and K. Lang (2004), "Does School Integration Generate Peer Effects? Evidence from Boston's Metco Program", Discussion Paper No. 976, IZA.
- Arellano, M. and G. Zamarro (2007), "The Choice Between Public and Private Schools With or Without Subsidies in Spain", Preliminary and incomplete preprint.
- Bast, J. and H. Walberg (2004), "Can parents choose the best schools for their children? ", *Economics of Education Review*, Vol. 23, N° 4.
- Belfield, C. and H. Levin (2001), *The Effects of Competition on Educational Outcomes: a Review of the U.S. Evidence*, Occasional Paper 25, Teachers College, National Center for the Study of Privatization in Education, Columbia University.
- Belfield, C. and H. Levin (2002), "The Effects of Competition between Schools on Educational Outcomes: a Review for the United States", *Review of Educational Research*, Vol. 72, N°2.
- Ben-Porath, S. (2009) "School Choice as a Bounded Ideal", *Journal of Philosophy of Education*, Vol. 43.
- Berends, M., M. Cannata and E. Goldring (2011), "School Choice Debates, Research and Context: Towards Systematic Understanding and Better Educational Policy" in Berends M., M. Cannata and E. Goldring (Eds), *School Choice and School Improvement*, Harvard Education Press, Cambridge.
- Bettinger, E. (2005), "The effects of Charter Schools on Charter Students and on Public Schools, *Economic of Education Review*, Vol. 24 N° 2.
- Bifulco, E. and H. Ladd (2006), "The Impact of Charter Schools on Student Achievement: Evidence from North Carolina", *Educational Finance and Policy*, Vol. 1 N° 1.
- Blank, R., R. Levine and L. Steel (1996), "After 15 Years: Magnet Schools in Urban Education" in Fuller B. and R. Elmore (eds), *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- Böhlmark, A. and M. Lindahl (2007), "The Impact of School Choice on Pupil Achievement, Segregation and Costs: Swedish Evidence", Discussion Paper No. 2786, IZA.

- Brandt, N. (2010), "Chile: Climbing on Giants' Shoulders: Better Schools for all Chilean Children", *OECD Economics Department Working Papers*, No. 784.
- Brighouse, H. (2000), *School Choice and Social Justice*, Oxford University Press, Oxford.
- Buchinsky, M., A. Mezza and D. McKee (2010), "The Dynamics of Educational Choices in the United States", Preliminary and incomplete draft, University of Los Angeles.
- Bunar, N. (2010), "Choosing for Quality or Inequality: Current Perspectives on the Implementation of School Choice Policy in Sweden", *Journal of Education Policy*, Vol 25 N° 1.
- Burgess, S., *et al* (2005), "The Impact of School Choice on Sorting by Ability and Socio-economic Factors in English Secondary Education", Working Paper, University of Bristol.
- Butler, T. and A. Van Zanten (2007), "School Choice: a European Perspective", *Journal of Education Policy*, Vol. 27 N° 1.
- Calero, J. (2007), "An Assessment of Educational Equity in Spain" in R. Teese, S. Lamb and M. Duru-Bellat (eds.), *International Studies in Educational Inequality, Theory and Practice Volume 2: Inequality in Education Systems*, Springer.
- Cantillon, E. (2009), 'Policy Brief - School Choice in Belgium', Report Prepared for the Conference on School Choice Procedures in Brussels, January 2009.
- Carnoy, M., *et al* (2007), *Vouchers and Public School Performance*, Economic Policy Institute, Washington DC.
- Crozie, G., *et al.* (2008), "White Middle-class Parents, Identities, Educational Choice and the Urban Comprehensive School: Dilemmas, Ambivalence and Moral Ambiguity". *British Journal of Sociology of Education*, Vol. 29 N° 3.
- Cullen, J. and B. Jacob (2007), "Is Gaining Access to Selective Elementary Schools Gaining Ground? Evidence from Randomized Lotteries," in *The Problems of Disadvantaged Youth: An Economic Perspective*, National Bureau of Economic Research, Washington DC.
- Cullen, J., B. Jacob and S. Levitt (2000), "The Impact of School Choice on Student Outcomes: An Analysis of the Chicago Public Schools," NBER Working Papers N°7888, National Bureau of Economic Research.
- Cullen, J., B. Jacob and S. Levitt (2006), "The Effects of School Choice on Participants: Evidence from Randomized Lotteries", *Econometrica*, Vol. 74 N° 5.
- Denessen, E., P. Sleegets and F. Smit (2001), "Reasons for School Choice in the Netherlands and in Finland", Occasional Paper No° 24, National Center for the Study of Privatization in Education, Teachers College, Columbia University.
- Diem, A. and S. Wolter (2011), "Who is Afraid of School Choice?", CESifo Working Paper No. 3385.
- Dijkgraaf, E., *et al.* (2008), "School Choice and Competition: Evidence from the Netherlands", Tinbergen Institute Discussion Paper.

- Dronkers, J. and S. Avram (2010), A cross-national analysis of the relations of school choice and effectiveness differences between private-dependent and public schools, *Educational Research and Evaluation*, Vol. 16 N° 2.
- Dronkers, J. and P. Robert (2003), "The Effectiveness of Public and Private Schools from a Comparative Perspective", N° EUI Working Paper N° 2003-13, European University Institute.
- Ehlers, L. (2010), "School Choice with Control", Working paper, Department of Economics and CIREQ, Université de Montréal.
- Elacqua, G. (2009), "The impact of school choice and public policy on segregation: Evidence from Chile", Centro de Políticas Comparadas de Educación, Universidad Diego Portales, Santiago, Chile
- Elmore, R. and B. Fuller (1996), "Empirical Research on Educational Choice: What Are The Implications for Policy-Makers?" in Fuller B. and R. Elmore (eds) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- Epple, D. and R. Romano (2003), "Neighborhood Schools, Choice, and the Distribution of Educational Benefits", in Hoxby C., *The Economics of School Choice*, the University of Chicago Press, Chicago.
- Fazekas, M. (in press), "School funding formulas", OECD Working Paper, OECD, Paris.
- Feinberg, W. and C. Lubienski (2008), *School Choice Policies and Outcomes: Empirical and Philosophical Perspectives*, State University of New York Press, New York.
- Figlio, D. and M. Page (2003), "Can School Choice and School Accountability Successfully Coexist?" in Hoxby C., *The Economics of School Choice*, the University of Chicago Press, Chicago.
- Fox, R. and N. Buchanan (2008), "School Choice in the Republic of Ireland: An Unqualified Commitment to Parental Choice", University of Hawaii's Charter School Resource Center.
- Friedman, M. (1955), "The Role of Government in Education", *Economics and the Public Interest*, Rutgers University Press, New Brunswick, NJ.
- Gauri, V. (1999), *School Choice in Chile: Two Decades of Educational Reform*, University of Pittsburgh Press, Pittsburgh.
- Glenn, C. (1999), "Why are Progressives so Hostile to School Choice Policies?", *Current Issues in Comparative Education*, Teachers College, Columbia University, Vol.1 N° 2.
- Godwin, K. and F. Kemerer (2002), *School Choice Tradeoffs: Liberty, Equity and Diversity*, University of Austin Press, Austin.
- Gorard, S., J. Fitz and C. Taylor (2001), "School Choice Impacts: What Do We Know?", *Educational Researcher*, Vol 30.
- Haeringer, G. and F. Klijn (2005), "Constrained School Choice", *Working Paper n°294*, Barcelona Economics Working Paper Series.
- Hanushek, E., and S. Rivkin (2005), "Does Public School Competition Affect Teacher Quality?" in Hoxby C., *The Economics of School Choice*, the University of Chicago Press, Chicago.

- Hanushek, E. *et al* (2003) "Does Peer Ability Affect Student Achievement?", *Journal of Applied Econometrics*.
- Hastings, J. and J. Weinstein (2008), "Information, School Choice, and Academic Achievement: Evidence from Two Experiments", NBER Working Paper No. 13623, National Bureau of Economic Research.
- Hastings, J., T. Kane and D. Staiger (2005), "Parental Preferences and School Competition: Evidence from a Public School Choice Program", NBER Working Paper n°11805, National Bureau of Economic Research.
- Hastings, J., T. Kane and D. Staiger (2006), "Preferences and Heterogeneous Treatment Effects in a Public School Choice Lottery", NBER Working Paper n°12145, National Bureau of Economic Research.
- Henig, J. (1996), "The Local Dynamics of Choice: Ethnic Preferences and Institutional Responses", in Fuller B. and R. Elmore (eds) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- Holmes, G., J. DeSimone and N. Rupp (2003), "Does School Choice Increase School Quality?", Working Paper 9683, NBER Working Paper Series, National Bureau of Economic Research.
- Howell, W. and P. Peterson (2002), *The Education Gap: Vouchers and Urban Schools*, Brookings Institution Press, Washington, DC.
- Hoxby, C. (2003), "School Choice and School Productivity: Could School Choice Be a Tide that Lifts All Boats?", in Hoxby C., *The Economics of School Choice*, the University of Chicago Press, Chicago.
- Hoxby, C. (2006), "School Choice: The Three Essential Elements and Several Policy Options", Keynote Speech Delivered on 30 June 2005 to the New Zealand Association of Economists, Christchurch, New Zealand, Education Forum.
- Hsieh, C. and M. Urquiola (2006), "The Effects of Generalized School Choice on Achievement and Stratification: Evidence from Chile's Voucher Program," *Journal of Public Economics*, Vol. 90.
- Jacott, L. and A. Maldonado (2006), "The Centros Concertados in Spain, Parental Demand and Implication for Equity", *European Journal of Education*, Vol. 41.
- Kahlenberg, R. (2006), "Helping Children Move From Bad Schools to Good Ones", *Education Week*, the Century Foundation.
- Kelly, A. (2009), "Juxtaposing Some Contradictory Findings from Research on School Choice", *Revista Internacional de Investigacion en Educacion*, Vol. 2 N° 3.
- Ladd, H. (2003), "Comment on Caroline M. Hoxby: School Choice and School Competition: Evidence from the United States", *Swedish Economic Policy Review* n°10.
- Ladd, H. (2008), "Reflections on Equity, Adequacy and Weighted Student Funding", *Education Finance and Policy*, Vol. 3 N° 4.
- Ladd, H. and E. Fiske (2001), "The Uneven Playing Field of School Choice: Evidence from New Zealand", *Journal of Policy Analysis and Management*, Vol. 20.

- Ladd, H., E. Fiske and N. Ruijs (2011), "Does Parental Choice Foster Segregated Schools? Insights from The Netherlands" in Berends M., M. Cannata and E. Goldring (Eds), *School Choice and School Improvement*, Harvard Education Press, Cambridge.
- Ladd, H. and Fiske E. (2003), "Does Competition Improve Teaching and Learning? Evidence from New Zealand", *Educational Evaluation and Policy Analysis*, Vol. 25 N°1.
- Ladd, H. and E. Fiske (2009), "The Dutch Experience with Weighted Student Funding: Some Lessons for the U.S.", Working Paper N° 3, Working Papers Series, Duke University.
- Larocque, N. (2005), "School Zoning: Locking Kids Out or Letting Them In?", Paper prepared for the Education Forum, Wellington, New Zealand.
- Lauen, D. L. (2007), "Contextual Explanations of School Choice", *Sociology of Education*, Vol. 80.
- Lee, V., R. Croninger and J. Smith (1996), "Equity and Choice in Detroit", in Fuller B. and R. Elmore (eds) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- Levin, H. (2009), "Economic Perspectives on School Choice" in Berends M., M. Springer, D. Ballou and H. Walberg (eds.), *Handbook of Research on School Choice*, Lawrence Erlbaum Associations, Mahwah, NJ.
- Levin, H. and C. Belfield (2004), "Vouchers and Public Policy: When Ideology Trumps Evidence", National Center for the Study of Privatization in Education, Teachers College, Columbia University.
- Lubienski, C. and S. Lubienski (2006), "Charter, Private and Public Schools and Academic Achievement: New Evidence from NAEP Mathematic Data", National Center for the Study of Privatization in Education, University of Illinois.
- Martinez, V., K. Godwin and F. Kemerer, "Public School Choice in San Antonio: Who Chooses and With What Effects?", in Fuller B. and R. Elmore (eds.) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- Mayer, D., *et al.* (2002), "School choice in New York City after three years: an Evaluation of the School Choice Scholarships Program", *American Economic Review*, Vol. 97 N° 5.
- McEwan, P. and M. Carnoy (2000), "The Effectiveness and Efficiency of Private Schools in Chile's Voucher System", *Educational Evaluation and Policy Analysis*, Vol. 33.
- Miron, G., *et al.* (2010), "Schools Without Diversity: Education Management Organizations, Charter Schools and the Demographic Stratification of the American School System", Education and the Public Interest Center and Education Policy Research Unit, University of Colorado.
- Morphis, E. (2009), "The Shift to School Choice in New Zealand", National Center for the Study of Privatization in Education, Teachers College, Columbia University.
- Nechyba, T. (2003), "School finance, spatial income segregation, and the nature of communities", *Journal of Urban Economics*, Vol. 54.
- Nechyba, T. (2005), "Introducing School Choice into Multi-District Public School Districts" in Hoxby C. (ed.), *The Economics of School Choice*, University of Chicago Press, Chicago.

- OECD (2006), *Demand-Sensitive Schooling? Evidence and Issues*, OECD, Paris.
- OECD (2007), *No More Failures. Ten Steps to Equity in Education*, OECD, Paris.
- OECD (2008), *Measuring Improvements in Learning Outcomes: Best Practices to Assess the Value-Added of Schools*, OECD, Paris.
- OECD (2010a), *PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II)*, OECD, Paris.
- OECD (2010b), *PISA 2009 Results: What Makes a School Successful?: Resources, Policies and Practices (Volume IV)*, OECD, Paris.
- OECD (2010c), *Closing the Gap for Immigrant Students: Policies, Practice and Performance*, OECD Reviews of Migrant Education, OECD, Paris.
- OECD (2011), *Education at a Glance 2011: OECD Indicators*, OECD, Paris.
- Ozek, U. (2009), "The Effects of Open Enrolment on School Choice and Student Outcomes", Working Paper N° 26, National Center for Analysis of Longitudinal Data in Education Research.
- Perry, L. (2007), "School composition and Student Outcomes: A Review of Emerging Areas of Research", Referred paper presented at the annual conference of the Australian Association for Research in Education, Nov. 2007 in Fremantle, WA.
- Peterson, P. and M. Viarengo (2011), "Eight Graders and Compliance: Social Capital and School Sector Impacts on the Non-cognitive Skills of Early Adolescents", in Berends M., M. Cannata and E. Goldring (Eds), *School Choice and School Improvement*, Harvard Education Press, Cambridge.
- Peterson, P., *et al.* (2005), "School Vouchers: Results from Randomized Experiments" in Hoxby C., *The Economics of School Choice*, the University of Chicago Press, Chicago.
- Raveaud, M. and A. Van Zanten (2007), "Choosing the local school: middle class parents' values and social and ethnic mix in London and Paris". *Journal of Education Policy*, Vol. 22 N° 1.
- Riedel, A., *et al* (2009), "School Choice in German Primary Schools: How Binding Are School Districts?", Schumpeter Discussion Papers, University of Wuppertal.
- Rothstein, J. (2005), "Does competition among public schools benefit students and taxpayers?", Working Paper N°11215, National Bureau of Economic Research.
- Rouse, C. (1997), "Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program" NBER Working Paper No. 5964, National Bureau of Economic Research.
- Rouse, C. and L. Barrow (2008), "School Vouchers and Student Achievement: Recent Evidence, Remaining Questions", FRB of Chicago Working Paper No. 2008-08.
- Ryan, J. and M. Heise (2002), "The Political Economy of School Choice", *The Yale Law Journal*, Vol. 111
- Sandström, M. and F. Bergström (2002), *School vouchers in practice: competition won't hurt you!* Working Paper No. 578, IUI, Stockholm.

- Sass, T. (2006), Charter schools and student achievement in Florida. Ed. Finance and Policy
- Schindler, B. (2007), "Living and Learning Separately? Ethnic Segregation of School Children in Copenhagen", *Urban Studies*, Vol. 44, N° 7.
- Schneider, K., *et al.* (2011), "The effect of free primary school choice on ethnic groups – Evidence from a policy reform", Schumpeter Discussion Papers, University of Wuppertal.
- Schneider, M., P. Teske, and M. Marschall (2000), *Choosing Schools: Consumer Choice and the Quality of American Schools*, Princeton University Press
- Sliwka, A. and D. Istance (2006), "Choice, Diversity and "Exit" in Schooling – A Mixed Picture", *European Journal of Education*, Vol. 41, n° 1
- Söderström, M. and R. Uusitalo (2005), "School choice and segregation: evidence from an admission reform," Working Paper Series, IFAU - Institute for Labour Market Policy Evaluation.
- Stasz, C. and C. Van Stolk (2007), "The Use of Lottery Systems in School Admissions", Working Paper N° 460, RAND Europe
- Stewart, T., P. Wolf, and S. Cornman, (2005), "Parent and student voices on the first year of the DC opportunity scholarship program", *School Choice and Demonstration Project*, University of Georgetown
- Teelken, C. (1999), "Market Mechanisms in Education: School Choice in the Netherlands, England and Scotland in a Comparative Perspective", *Comparative Education*, Vol 35, N° 3.
- Thieme, C. and E. Treviño (2011), "School Choice and Market Imperfections: Evidence From Chile", *Education and Urban Society*, Vol 20, N° 1.
- Viteritti, J. (2010), "School Choice and Market Failure: How Politics Trumps Economics in Education and Elsewhere", *Journal of School Choice*, Vol 4, N° 2.
- Walsh, P., (2009), "Effects of School Choice on the Margin: the Cream is Already Skimmed", *Economics of Education Review*, Vol 28, N° 2.
- Watson, L. and C. Ryan (2009), "Choice, Vouchers and the Consequences for Public High Schools: Lessons from Australia", NCSPE Research Paper No. 181, National Center for the Study of Privatization in Education, Teachers College, Columbia University.
- Weissburg, R. (2009), "Correctly Understanding "School Choice"", Note Prepared for the Symposium "Public Dilemmas Revisited", *Society*, Vol 46, N°4.
- Wells, A. (1996), "African-American Students' View of School Choice", in Fuller B. and R. Elmore (eds) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- West, A. (2006), "School Choice, Equity and Social Justice: The Case for More Control", *British Journal of Educational Studies*, Vol 54, N°1.
- Whitty, G. and T. Edwards (1998), "School Choice Policies in England and the United States: an Exploration of their Origins and Significance", *Comparative Education*, Vol. 34, N° 2.

- Wiborg, S. (2011), "Swedish Free Schools: Do They Work?", LLAKES Research Paper n°18, Centre for Learning and Life Chances in Knowledge Economies and Societies.
- Willms, J. and F. Echols (1993), "The Scottish Experience of Parental School Choice", in Rasell E. and R. Rothstein (Eds), *School Choice: Examining the Evidence*, Economic Policy Institute, Washington DC.
- Witte, J. (1996), "Who Benefits from the Milwaukee Choice Program?" in Fuller B. and R. Elmore (eds) *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice*, Teachers College Press, New York.
- Witte, J., *et al.* (2004), "The Political Economy of School Choice", Working Paper No. 002, La Follette School of Public Affairs, University of Wisconsin, Madison.
- Woodfield, A. and P. Gunby (2003), "The Marketization of New Zealand Schools: Assessing Fiske and Ladd", *Journal of Economic Literature*, Vol n°41.
- Zimmer, R., *et al.* (2011), "Charter Schools: Do They Cream Skim, Increasing Student Segregation?" in Berends M., M. Cannata and E. Goldring (Eds), *School Choice and School Improvement*, Harvard Education Press, Cambridge.
- Zimmer, R., *et al.* (2009), "Charter Schools In Eight States: Effects On Achievement, Attainment, Integration and Competition", RAND Corporation.