Choice and Selection in School Admissions

the experience of other countries

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Foreword

Governments increasingly look abroad to compare how their schools are performing and to seek inspiration from apparently successful education reforms elsewhere. Next month's national test results from the Programme for International Student Assessment will be the most eagerly anticipated yet by education ministers across the globe. Driving up education standards has become a universal concern.

As the Coalition Government prepares to publish its first White Paper outlining its school plans to Parliament later this month, this report provides a timely opportunity to step back and consider England's education system in an international context. Looking at how other countries organise their schools can expose some of the long-held assumptions about our own schools. As in any country, there is a tendency for education debates to become inward-looking - all too often ending in stalemate and the continued status quo.

This is the third in a series of reports putting England's education system into an international perspective from the Centre for Education and Employment Research. 'England's Education' in 2004, and 'Blair's Education' in 2007, focused primarily on the relative performance of England's schools in comparison with other industrialised countries in the Organisation of Economic Co-operation and Development (OECD). English schools were found to perform a little above average compared with other countries. However, there was no other advanced country where the gap in performance between the independent and state sectors was as large.

In this latest report Professor Alan Smithers and Dr Pamela Robinson compare the structures and admissions policies in lower and upper secondary education across the diverse and varied school systems of 30 OECD countries. As the report explains, at the heart of every school system is a key question: how do children get to go to the schools that they do? And, equally important, what type of education choice is available for them?

So, what lessons for England emerge? First, England remains an outlier in terms of 'upper secondary' education - tellingly a term alien to English ears. This is a distinct phase in most other countries in the OECD in which academic, vocational, and work based pathways are clearly set out for pupils. In England, the report concludes, the structure of education, and consequently school admissions, 'have become complex and confusing and would seem ripe for reform'.

In most countries, differentiation of children into different pathways occurs at some stage of post primary education - whether based on the results of tests, recommendations by teachers or preferences made by pupils. In England, however, it could be argued that differentiation effectively occurs by default at age 14 when children choose which GCSEs or equivalent qualifications to pursue.

The problem is that there is little genuine choice for pupils and parents. The school attended tends to determine the options available. A previous report published by the Sutton Trust for example found that able children in schools serving disadvantaged neighbourhoods were ten times more likely to take a particular vocational qualification than similarly able pupils in more advantaged schools.

The point here is not that academic routes are necessarily the better option for children, but that their choice should be dictated by their own talents and interests, not the school they happen to be in. Moreover parents often complain that there is no real choice and diversity among local state schools - just 'good' or 'bad' schools.

Professor Smithers and Dr Robinson propose a radical solution to bring England into line with international practice: undertake GCSE examinations at age 14 instead of age 16, and offer pupils a set of distinct and credible educational routes thereafter. While the Government may baulk at such a fundamental reform, the report also suggests that at the very least a sharpening up the options available to children is urgently required.

Another clear conclusion from the review is that no country in the OECD has developed a magic solution to address the contentious issue of school admissions, and in particular how to decide which pupils gain places when schools are over-subscribed. Indeed ‘parental choice’ has become a mantra that has spread from England to other nations.

The authors argue that the national admissions code in England has become unwieldy. Meanwhile, the Government's supply-side reforms - 'more good schools' - if successful will only partially address the issue as preferences will never exactly match places available. The Sutton Trust continues to support the use of ballots alongside other selection criteria to decide places in over-subscribed schools: quite simply, this is the fairest way of deciding.

The report suggests that one possible way forward is to allow schools to develop their own 'enrolment schemes' within a general national framework for admissions. Such a move would be in line with the current policy direction in England to give schools more freedom. But an immediate concern for the Trust would be that historically those schools in charge of their own admissions have been the most socially selective. The issue is how to strike the right balance of enabling school autonomy with the right checks and balances to ensure that all children benefit from our schools not just those from the most privileged homes.

I am extremely grateful to Professor Smithers and Dr Robinson for producing a stimulating and thought-provoking report. It has been a real challenge to encapsulate the diverse and varied school systems across the OECD so that they can be compared in a meaningful way. I hope the lessons they take from this international perspective will lead to a lively and open-minded debate about the future of some of the most crucial but often unquestioned aspects of our school system.

Sir Peter Lampl
Chairman
The Sutton Trust

Executive Summary

This is the third[1] in our series of reports for the Sutton Trust based on the triennial surveys of OECD's Programme for International Student Assessment (PISA). In our analysis of the 2006 data we focus on how children get to go to the schools that they do. In our description of education systems we draw extensively on individual country reports, particularly those of the European Commission Network on Education (Eurydice).

In order to compare, as far as possible, like with like we have adopted the distinction of the International Standard Classification of School Education (ISCED)[2] between lower and upper secondary education. 'Lower secondary' is the first three years of secondary education and 'upper secondary' the years of schooling that follow. Although these terms with their precise meanings are unfamiliar in England they are widely used elsewhere.

Across the 30 countries of the OECD twelve methods of deciding school admissions were identified, ranging from free parental choice to pupils being assigned to particular schools by some authority. 14 countries attempt to give parents some measure of choice. Where applications exceed places, residence is the main tie-breaker, followed by priorities expressed in a national admission code, and religion.

Upper secondary education differs from lower secondary education in being voluntary in 19 of the 30 OECD countries. In ten of those countries over 90 per cent of the age group opted to stay in education to take the courses on offer without a requirement to do so. In 26 of the countries upper secondary education consists of a clear array of pathways spanning pre-university, technical training and preparation for employment. In the United States, Canada and New Zealand the technical and work-related pathways open up post-school. England with its untidy mix and ill-defined pathways, particularly with regard to technicians, is a conspicuous exception.

Entry to lower secondary education is determined by ability in nine countries. In addition, 11 countries selected on entry to upper secondary education. The others differentiated by orientation years, lower secondary leaving certificates or steering by teachers.

Contrary to the OECD's long standing claim that non-selective systems do better, there were indications in PISA 2006 and the 2007 Trends in International Mathematics and Science Study (TIMSS) that countries with selective education systems, if anything, score higher in science.

Alongside mainstream education, 15% of pupils across the OECD attended private schools. They performed better than pupils in government-run schools. The OECD

[1] *England's Education* (2004) was an analysis of PISA 2000 and *Blair's Education* (2007) an analysis of PISA 2003.

[2] *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications.* Paris: OECD (2004).

claims that the difference is due to differences in socio-economic status (SES)[3]. SES, however, correlates so closely with ability that to measure one is to measure the other. An alternative interpretation of the PISA results is that the ability differences in school intakes have been removed along with socio-economic factors.

Countries beside England have been promoting a diversity of secondary schools. In the United States charter schools admit by random allocation. In Sweden the schools set up by for-profit providers are assumed to expand with demand so they can admit on first-come-first-served. In the United States, Japan, Korea and Turkey there are specialist science schools, which unlike those in England, admit on talent for the subject. The state of Victoria in Australia is opening new grammar schools to enable the government-run system to compete with the independent sector.

There are lessons for the Government in the data on both admissions and the structure of education.

On admissions, the government should ask itself how it wants pupils to be distributed across the system.

- If it is happy for pupils to divide on social lines as now then it could take much of the pain out of school admissions by ensuring children get a place at their local school.
- If it wants school intakes to become more like each other, it should back random allocation among applicants.
- If it wants children to be grouped on educational merit, it should allow more academic selection.

But it would not be necessary for the Government to determine entry criteria centrally if it allowed schools to set their own enrolment policies. It could follow the example of New Zealand where admission arrangement are in the hands of the schools (subject to public agreement), or it could go the whole hog and allow state schools the same freedoms as independent schools. Where there was local demand the schools might include some element of academic selection, but that would be a local not a central decision.

Individual enrolment schemes would seem entirely consistent with the Government's stated policy of more autonomy for schools.

On structure, the lessons from the OECD would appear to be that in upper secondary education:

- there needs to be a comprehensive array of equivalent pathways leading to university, to technician training and to employment;

[3] *PISA 2006 Science Competences for Tomorrow's World, Volume 1 – Analysis*, p 231, 'the performance of private schools does not tend to be superior once socio-economic factors have been accounted for'. Paris: OECD (2007).

- the pathways will be of intrinsically different lengths so it is counterproductive to squeeze them into the strait jacket of a common leaving age;
- that entry to those pathways requires objective information from a national examination;
- there needs to be a clear institutional framework for the pathways with a case for reintegrating sixth form colleges into the schools sector.

If the Government wished it could make education 14-18[4] a reality by moving and adapting GCSE to become the national examination for 14-year-olds. This would then become the natural starting point for an array of awards taking young people in different directions. If these were sufficiently attractive, young people would want to stay on for as long as it took to gain a qualification and there would be no need for the sticks necessary to impose compulsory staying on.

Recognising 'Education 14-18' as a distinct phase in which differentiation was the norm would go some way to moving on from the sterile debates about academic selection. There would be an opportunity to make sense of the specialist schools programme by allowing some to become genuinely specialist by selecting on talent for the subject, as is the case in the United States, Korea, Japan and Turkey.

An alternative scenario would be to agree a more complete qualification array for education 16-18 by creating technician and work-related qualifications that genuinely opened doors. But that would still leave lower secondary education over-long and upper secondary education short by OECD standards and do nothing to clarify education 14-16.

The Government has already committed itself to raising the participation to age 18, but it should re-think. Allowing free choice of courses is an important means of ensuring the quality of what is on offer.

[4] 'Education 14-19' is the expression that has caught on, but in this report we go with 'education 14-18' to contrast it with the two years 16-18.

1. School Admissions

1.1. How do children get to go to the schools that they do? This question would be irrelevant if all schools were the same but they are not. There are different types of schools. Even if nominally the same some schools may be better than others. If education means anything at all the school attended will have a major influence on a person's life. How school places are offered has become a very sensitive issue in England. But how do other countries manage? In this report we examine how who gets the school places is decided in the 30 countries of the Organisation of Economic Co-operation and Development (OECD) which brings together many of the leading industrial nations of the world. There is also the prior question of what places are available. How are the school systems organised and at what points do decisions have to be taken about the awarding of places. This report, therefore, focuses on the structure of education systems within the countries of the OECD and the admissions processes that are adopted when pupils move from one stage to the next.

1.2. School admissions have come to the fore in England as successive governments have pursued policies of creating diversity and enabling parents to choose a school for their children. Inevitably, the choices have not always corresponded with the places available so that parental choice in practice has become being able to express a preference. When more parents have wanted their children to go to a school than there is room for, how are the places offered? This has become very emotion-laden and some parents, especially in the cities, have found it a nightmare getting their sons and daughters into a good school.

1.3. Hovering in the background has been the question of whether schools should admit on educational merit. Academic selection was the basis of the major re-organisation of education brought about by the Butler Education Act of 1944. A test at age 11 was used to decide whether children would go to grammar, technical or secondary modern schools. It enabled children from low income backgrounds to receive a high quality education and it narrowed the gap between independent and state education, but the children who did not pass the 11+ got a very raw deal. The Wilson Labour Government aspired to create grammar schools for all by bringing together the different types of school into neighbourhood comprehensives[5]. It, however, requested rather than required the local authorities to re-organise. Some did not do so and within them the grammar schools survived. Currently, 164 of the 3,092 maintained secondary schools are grammars. Some schools which are officially comprehensives, like Watford Boys and Girls Grammar Schools, retained the right to admit part of their intakes on ability. In 2009, there were 44 schools which were partially selective.

1.4. The Blair Government's main approach to creating diversity was to greatly extend and expand the technology schools initiative of the Major Government to become a specialist schools programme. Schools were given extra funds to specialise in one of a range of subjects. Science and maths schools, among others, came into being alongside the technology schools introduced under Major. In many ways it was a good idea. Not enough young people were studying the sciences and maths to a high level and specialist schools could have given the subjects a real boost. But, curiously, although

[5] Smithers, A. and Robinson, P. (1991). *Beyond Compulsory Schooling*. London: Council for Industry and Higher Education, Chapter 5.

bearing subject labels they were not allowed to select on ability[6] in the subject. Selection at 11 was an absolute anathema to the Labour party. Tony Blair was only rescued from losing a vote at the Labour Party Conference in 1995 by a powerful speech from David Blunkett, the Secretary of State, who said: "Read my lips: no selection, either by examination or interview, under a Labour government." This was thought to be a pledge to get rid of the remaining grammar schools, but Blunkett later admitted that he had misspoke and he should have said, "no *further* selection". The grammar schools were safe, therefore, but it did confuse the concept of specialist schools.

1.5. The various policy decisions and political compromises have left England's education system lacking a coherent shape. There are specialist schools, city technology colleges, academies and trust schools; there are schools run by the churches and other faiths, and secular schools; there are grammar schools and secondary moderns left over from another era; there are single-sex and coeducational schools, secondary education can be provided in schools which begin at age 11 or 13 and continue to age 16 or 18, or in sixth form and tertiary colleges (now part of a different sector) which can cater for 14-year-olds upwards.

1.6. The schools differ considerably in popularity. A few admit on educational merit, but most on parental choice. To enable them to make decisions between competing claims for places an admissions code was introduced in 1998. It was at first voluntary but since September 2008 has been mandatory. The code set out the criteria deemed acceptable, for example, sibling links, distance from school, ease of access by public transport, religious affiliation, and medical or social grounds. Priority was given to 'looked after' children (that is, those in care) in 2003. The first code has been continually revised to plug gaps and the latest code is 89 pages long and consists mainly of prohibitions.

1.7. The structure of education has become complex and confusing. School admissions procedures would seem ripe for reform. But politicians have been treading very warily. This is partly because they are inclined to duck the upheaval a structural reform would involve. But it is mainly because they fear upsetting too many of the swing voters on whom the outcome of elections depend. Some parents have become very adept at manipulating the present arrangements and would not take kindly to losing that control. Nevertheless getting your child into a good school has become a major undertaking. There is also mounting evidence[7] that academic selection has been replaced by social selection, which many would think to be unfair.

1.8. Some future UK government, possibly the present one, may find itself having to make changes and to help them we have posed the question: are there lessons to be learned from the other countries of the OECD? What is the structure of their education system and how do children get to go to the schools that they do? What sort of differentiation is there, at what age(s) does it occur, how is it accomplished, and what are the outcomes? Our focus is mainstream government-funded education, but we take in

[6] Some schools, including those specialising in sports, performing arts and modern languages are allowed to select up to 10 per cent of their intakes on the specious grounds that these require aptitudes, whereas science and maths depend on abilities.

[7] Smithers, A. and Robinson, P. (2010) *Worlds Apart: Social Variation Among Schools*. London: Sutton Trust.

variants where they illustrate important differences. We also consider private education because it is an important aspect of parental choice.

1.9. In Chapter 2, we look to see if there is a coherent basis for comparing the education systems of OECD countries in terms of ages and stages, and adopt the ISCED[8] distinction between 'lower secondary education', the first three years after primary, and 'upper secondary education', the years of schooling that follow. We describe the age at which pupils go to different types of schools. We also consider whether education is voluntary or compulsory, and how this relates to participation.

1.10. In the next two chapters we examine lower secondary education in detail, its structure in Chapter 3 and the admissions processes in Chapter 4. Lower secondary education is compulsory in all OECD countries except perhaps Turkey where there is a leaving age of 14 and the whole of compulsory education is regarded as elementary. We consider the types of lower secondary education and attempt to arrive at a summarizing pattern. This is tested against the schools' own perceptions. In Chapter 4 we describe the main approaches to school admissions including academic selection, allocation by authority and the various forms of parental choice ranging from open access to choice limited by school type, assignment or geography. We go on to review the various approaches to resolving the competition for places, which include residence, admissions codes and enrolment schemes, religious affiliation, random allocation, and first-come-first-served.

1.11. Chapter 5 focuses on upper secondary education. It is noted that the choice/selection process at this stage is completely different from that in lower secondary education because in 19 of the 30 countries participation is voluntary. Applicants, therefore, have the option of not being involved at all. All the OECD countries, with the possible exception of the United States and Canada, operate selection in the transition from lower to upper secondary though it is not always regarded as such. We describe patterns in the entry processes and how they relate to prior attainment. Most countries of the OECD have a clearly defined stage of education called upper secondary within which there are a number of pathways taking pupils in different directions. These structures are analysed and contrasted with England where, in international statistics, sometimes upper secondary education appears as education 14 to 18 and sometimes as education 16 to 18.

1.12. Not all differentiation occurs between schools. In Chapter 6 we examine the data on ability grouping within schools including pupils being asked to repeat a whole year – which although uncommon in England is frequently the way in other countries. Diversity of schools, perhaps encouraged to promote parental choice, is a feature of other countries beside England. In Chapter 7 we consider how they conduct their admissions. In particular, we look at private schools in England, charter schools in the United States and 'free schools' in Sweden. We contrast the approach to specialist schools in a number of countries with that in England. We also note that Australia is opening new grammar schools.

1.13. Describing the structures and admission processes is all very well, but what are the impacts and outcomes? In Chapter 8 we piece together the evidence on what bearing selection in lower secondary education has on performance. We also consider the social

[8] International Standard Classification of School Education. *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications*, OECD 2004.

outcomes. Parental choice is increasingly being introduced in the belief that pressure from parents will lever up performance. In Chapter 8 we also ask: is this belief being borne out by the results?

1.14. In the final chapter, Chapter 9, we review the education structures across the OECD and the admissions arrangements for lower and secondary education in an attempt to draw out the policy implication for England. We list at least twelve ways in which decisions are taken about admissions. But we argue that no country has come up with a complete solution to resolving competing claims for places. We suggest that the Government needs to ask itself what sort of distribution of pupils it would like to see since the different approaches to admissions can lead to uneven social distribution, more uniform intakes, or grouping on educational merit. Or it could free schools to set their own admissions criteria, content to allow the shape of the national system to emerge.

1.15. We also compare the structure and admissions processes for upper secondary education. England stands out as lacking the clear structure and array of pathways of nearly all the other countries. The pointer we take from this is the Government needs to decide whether it wants to make 'education 14-18'[9] a reality or stay with the present 16-18 which is short by OECD standards. If upper secondary is to begin at 14, the lesson from the OECD is that there needs to be a national assessment at that age to enable decisions about what pathway to follow. The different pathways are not necessarily of the same length so the Government needs to re-consider the raising of the leaving age to 18[10]. We conclude by setting out the options for Government, challenging it to say how it wants children to be distributed across secondary education.

[9] 'Education 14-19' is the expression that is frequently used but we prefer 'education 14-18' which refers to the final four years at school, in contrast to the two of 'education 16-18'.

[10] The indications are that the Coalition Government will press ahead with plans to raise the leaving age to 18 (see Cook, C 'Gove set to rule out penalty for post-16 truants', *Financial Times*, 8 November 2010). But it is not too late to re-consider.

2. Ages and Stages

2.1. The shape of education differs considerably across the 30 OECD countries[11]. Some, like Sweden and Norway, have single structure schools from the age of entry to the end of compulsory education. In others, like France and Japan, there are stand-alone middle schools. Elsewhere, as in Belgium and Portugal, education is organised as a sequence of cycles. More often the main distinction is between primary and secondary. Secondary education itself is frequently divided into lower and upper stages, with the latter not always compulsory. Lower secondary education can be selective, as in Germany and the Netherlands, or non-selective, as in Australia and Canada. The requirement to attend school can last from 8 years as in Turkey to 13 years as in the Netherlands. Compulsory starting ages range from four in Luxembourg to seven in Finland, Sweden and parts of Switzerland.

Chart 2.1: International Standard Classification of School Education (ISCED)

ISCED Level	Description	Criteria
0. Pre-Primary	Initial stage of organised education, intended primarily to introduce young children to a school-type environment.	Centre or school-based with trained staff for children of at least age 3.
1. Primary	Normally designed to give children a sound basic education in reading, writing and maths.	Nationally designated primary institutions or programmes providing systematic studies characteristic of primary education.
2. Lower Secondary	Continues basic programme but teaching is typically more subject-oriented, with more specialist teachers.	Where starting point does not correspond to a transfer between schools or programmes then lower secondary is deemed to commence after six years of primary education.
3. Upper Secondary	Organised on subject-matter lines, with more highly qualified teachers. Can last from from 2 to 5 years. Subdivided into A (academic), B (preparation for vocational/ technical), and C (aims for labour market or ISCED 4).	Where there is no system break between lower and upper secondary only the first 3years following primary is counted as lower secondary.

Source: OECD (2004). *Handbook for Internationally Comparative Education Statistics*, adapted from Table 5.1, page 88.

Four Steps

2.2. In order to make meaningful comparisons we need a framework that enables us, as far as possible, to compare like with like. Fortunately, the OECD has been able to win acceptance for a classification[12] which captures the essence of the different national systems. Chart 2.1 sets out the first four steps of this ladder covering pre-schools and schools. (There are three more levels referring essentially to further, undergraduate and postgraduate education.) In most cases, these standard stages correspond to the

[11] As the OECD was in 2006 which, as we write, is the latest year for which PISA comparative performance statistics have been published.

[12] *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications*, OECD 2004.

transitions between institutions or programmes. But when they do not the boundaries are set by OECD definitions.

2.3. We focus in this report on ISCED Levels 2 and 3, lower and upper secondary education. We leave aside Levels 0 and 1, since selection by ability does not usually come into play at those stages. We also leave aside special educational needs since these are usually a matter of specialist diagnosis. Education is often organised within regions rather than nationally. In Australia, Germany, and the United States it is within the states, in Belgium, the communities, in Canada, the provinces, and in Switzerland, the cantons. In order not to get lost in detail, where possible, we attempt general country descriptions based on the mainstream pattern. Since this report is written for an English audience we use familiar terms like 'pupil' and 'headteacher' rather than OECD's 'student' and 'principal', even if these are used in the countries themselves.

Age Selection Starts

2.4. Although countries' education systems differ in many ways, it is possible to make a broad division between those where there is early academic selection and those where differentiation comes later. Chart 2.2 lists the countries grouped in this way. In nine of the 30 OECD countries there are different types of school in lower secondary education so admissions decisions have to be taken at 10 to 12 years of age. In 12 countries, including England, differentiation is delayed to upper secondary education. The start of upper secondary education often coincides with the end of compulsory education though not invariably so. In nine other countries, reflecting the shapes of their educational systems, differentiation occurs at an age in-between.

Chart 2.2: Selection Starts[1]

Age 10-12	Age 13-15	Age 16
Austria	Belgium	England
Czech Republic	France	Australia
Germany	Greece	Canada
Hungary	Ireland	Denmark
Luxembourg	Italy	Finland
Mexico	Japan	Iceland
Netherlands	Korea	New Zealand
Slovak Republic	Portugal	Norway
Switzerland	Turkey	Poland
		Spain
		Sweden
		USA

1. Some may be surprised at this listing, but it is based on the intended mainstream pattern of education. England, of course, has variants, including some early selection, as do other countries.

Source: Adapted from PISA 2006, volume 2, Table 5.2, page 162.

2.5. England is hard to classify in terms of the OECD stages and the expressions 'lower secondary' and 'upper secondary' are not commonly used. It has ostensibly a system of similar schools through to age 16. Differentiation between institutions thus begins officially in upper secondary education. But there is both selection by ability and social selection in lower secondary education. Selection by ability governs entry to the 164 grammar schools and plays a part in admissions to 44 comprehensive schools which have retained or gained the right to select part of their intake. There are also big differences in the social composition of the comprehensive schools associated with

competition for places. For parents, getting their children into a good school at age 11 has become one of life's punctuation points.

2.6. An important difference between early and late selection needs to be flagged up at the outset. Lower secondary education is compulsory so there has to be some means by which all can be accommodated. Any child out-of-step in a particular school has to be found a place elsewhere. Upper secondary education, however, often begins at the point when compulsory education ends, so there is the option of not being involved at all. Education at this stage thus becomes more an array of opportunities than a prescribed requirement. If a particular programme or institution does not suit, then the pupil can walk away. We will look in detail at lower secondary education in Chapters 3 and 4, and upper secondary education in Chapter 5, bearing in mind this crucial difference.

2.7. Not all differentiation occurs between schools. Within schools, pupils can be put into different streams or grouped by ability into sets for particular subjects. Some countries assess children every year, or at the end of educational phases or cycles, and pupils not up to the mark can be asked to repeat a year. In Spain, Portugal and Belgium, among others, progression by achievement is the norm. Elsewhere, as in England, progression is by age, with hardly any kept back. When this is the case, separation within schools into streams or sets is more likely. We will focus on repetition and ability grouping within schools in Chapter 6.

Participation

2.8. All OECD countries oblige young people by law to be in education for some part of their lives, whether they want to be or not. Chart 2.3 shows that compulsory education, according to country or region, begins at age 4 to 7, and ends, between 14 and 18. In only three countries (Canada, Hungary and the Netherlands) is it compulsory full-time to age 18 and in a further three part-time (Belgium, Germany and Poland). In most countries compulsory education lasts nine or ten years, but increasingly this is being raised to 13 years. Turkey is something of an outlier requiring just eight.

2.9. Chart 2.3 brings out the important difference between what is required and what people choose to do. It shows that in 24 countries (out of 29, no data for Canada), 90 per cent or more of the age group are to be found in education for more years than they have to be. The minimal requirement is exceeded for two reasons. The first has been the growth of pre-school education so that in 21 countries, including England, nearly all children are in education before the obligatory starting age. In seven countries, it is as young as three, even when the required age is six or, in the case of Sweden, seven. It is only Turkey where not all children are in school by the specified starting age. Secondly, in 12 countries (not including England) the majority of young people continue in upper secondary education beyond the minimum school leaving age working towards qualifications. In nine countries, pupils both start earlier and complete later. There can be a substantial difference between the lengths of required education and the years spent in education. In Sweden children attend for 16 years whereas only nine are obligatory, in Japan, it is 14 against nine, and in Ireland 14 rather than 10.

Chart 2.3: Overview of Participation

Country	Compulsory Education[1]		90% Participation[2]	
	Age Range	Years	Ages	Years
England	5-16	11	4-16	13
Australia	5/6-15/16	9/10	5-16	12
Austria	6-15	9	5-16	12
Belgium	6-15 (18)	9	3-17	15
Canada	6/7-16/18	9/10 (12)	-	-
Czech Republic	6-15	9	5-17	13
Denmark	6-16	10	3-16	13
Finland	7-16	9	6-18	13
France	6-16	10	3-17	15
Germany	6-15/16 (18)	9/10 (12)	4-17	14
Greece	6-15	9	6-15	10
Hungary	5-18	13	4-17	14
Iceland	6-16	10	3-16	14
Ireland	6-16	10	5-18	14
Italy	6-15	10	3-15	13
Japan	6-15	9	4-17	14
Korea	6-14	9	6-17	12
Luxembourg	4-15	11	4-15	12
Mexico	6-15	9	5-14	10
Netherlands	5-18	13	4-17	14
New Zealand	6-16	10	4-15	12
Norway	6-16	10	4-17	14
Poland	6-16 (18)	10 (12)	6-18	13
Portugal	6-14	9	5-16	12
Slovak Republic	6-16	10	6-17	12
Spain	6-16	10	3-16	14
Sweden	7-16	9	3-18	16
Switzerland	6/7-15/16	9	5-16	12
Turkey	6-14	8	7-12	6
USA	6-16	11	6-17	11

1. Different regions may operate different systems so starting and leaving ages may vary within a country. Age in brackets in data columns signifies at least part-time education compulsory to this age. The period of compulsory education is obtained by subtracting the age of entry from the age of completion ie counting the spaces between telegraph poles.

2. Ages at which 90% of the population is enrolled either full-time or part-time in public and private institutions. The total number of years is inclusive so in a line of telegraph poles it is counting the poles.

Sources: EURYDICE, National Summary Sheets on Education Systems in Europe; International Review of Curriculum and Assessment Frameworks Internet Archive (September 2009). INCA Comparative Tables. London: QCDA; OECD (2009). *Education at a Glance*, Table C1.1, page 301.

Continuing Reform

2.10. Countries' education systems are continually being reformed. Parental choice, autonomy and accountability are discussed in the increasingly frequent international forums, and policies are passed from one country to another. What may have been two very different national systems a decade or so ago could have been converging to a considerable extent. We are, therefore, having to freeze-frame a moving target. In this report it is the year 2009 that we try to hold in focus.

Résumé

2.11. The shape of educational systems varies considerably across the 30 OECD countries. In nine of these countries there is academic selection at the start of lower secondary education; in 12 it occurs at the start of upper secondary education; and in the other nine it falls in between. Entry to upper secondary education often coincides with the end of compulsory education so pupils have the choice of not being involved at all. Compulsory education, depending on country or region, starts somewhere between the ages of 4 and 7 and ends between the ages of 14 and 18. In only three countries (Canada, Hungary and the Netherlands) is it compulsory full-time to age 18 and in a further three at least part-time (Belgium, Germany and Poland). In 24 countries pupils go to school for longer than they are obliged to, in 21 they begin earlier and in 12 they continue for longer (in nine countries it is both).

3. The Structure of Lower Secondary Education

3.1. The OECD defines lower secondary education (see Chart 2.1, page 5) as the first three years of secondary education following six years of primary education. In content it continues basic education, becoming more subject focused with more specialised teachers. It is not always a discrete phase in education.

Types of Lower Secondary Education

3.2. We have identified five main ways in which lower secondary education as defined by the OECD is provided. Chart 3.1 shows the countries in these categories.

I ***Non-Selective Secondary Schools*** - lower secondary education merges seamlessly with upper secondary.

II ***Selective Secondary Schools*** - selective lower secondary education merges seamlessly with upper secondary.

III. ***Cycles*** - education is organised into sequenced stages, one or more of which can be identified as lower secondary;

IV. ***Stand Alone*** - lower secondary education is stand alone, either in separate schools or with a distinct qualification;

V ***Single Structure*** - lower secondary comprises the final years of basic education in all-through schools which run from the start of formal education to the completion of compulsory education.

Chart 3.1: Types of Lower Secondary Education[1]

I. Non Selective Secondary Schools	II. Selective Secondary Schools	III. Cycles	IV. Stand Alone	V. Single Structure
England Australia Canada New Zealand	Austria Czech Republic[2] Germany Hungary[2] Luxembourg Mexico Netherlands Slovakia[2] Switzerland	Belgium Italy Portugal Spain	France Greece Ireland Japan Korea Poland USA	Denmark Finland Iceland Norway Sweden Turkey

1. Based on intended mainstream pattern. England has some selective secondary schools and also middle schools. Australia has grammar schools. Some provinces in Canada have stand alone schools, and not all of the states in the USA do.

2. Selective in the sense than pupils can sit for grammar entrance, or otherwise continue in single structure schools.

Source: EURYDICE individual country reports plus ministry websites.

3.3. This sequence is run from left to right above and from top to bottom in tables which follow throughout the report to give prominence to England as the point of reference. First come the countries where the majority of secondary schools are intended to be similar. The schools, however, are not the same and popular schools receive many more applications than they have places. There has, therefore, to be some kind of selection to decide who gets in. What distinguishes I from II is that in 'non-selective' systems selection is intended to be by means other than ability.

3.4. Column II lists nine OECD countries where selection by ability for different types of schools is mainstream. Five have entrance exams, and four award places on prior attainment. Decisions are taken at a young age, but these are not irrevocable. The different types of schooling can begin with a common first year with opportunities to move, and there are bridges later. Education in the four countries put in column III is organised as sequenced stages. Progression from one to the next depends on successful completion of the preceding cycle. Those not making the grade can be asked to repeat a year. In the later cycles there can be different pathways within the same school. In Belgium, for example, in the second cycle of secondary education there are four routes - general, technical, artistic and vocational.

3.5. The seven countries of column IV have stand alone lower secondary schools which are variously called 'middle', 'intermediate' or 'junior high schools'. Progression to upper secondary is usually by certificate or examination. Korea and Japan are particularly interesting in this respect. In both countries entry to the senor high schools is by competitive assessment and examination. Competition is fierce because particular high schools are closely linked with the top universities. This can wash back into the middle schools. Korea, in an attempt to minimise the impact of parents crowding into particular schools, assigns pupils to middle schools by random allocation within zones. Japan used to assign pupils to the nearest junior high school, but in some parts of the country some limited parental choice is now allowed. Going to a good senior high school is hugely important in Japan and many pupils are sent to crammers - 'Juku' - to study after regular school. This can lead to twelve-hour days before homework. It is possible to leave formal schooling after junior high school, but over 90 per cent go on to high school even though it means paying (see Chart 2.3, page 8).

3.6. Column V is essentially the Scandinavian pattern of all-though schools running from the start of formal education to the completion of compulsory education. Turkey is included because it too has all-through schools, but these are primary schools for the age range 6-14. In the Nordic countries formal education begins at the relatively late age of six or seven so in terms of OECD stages lower secondary education is the final three years in all-through schools – from age 13 to age 16. The schools are non-selective and progression is by age. As with other comprehensive systems there can be some selective schools. In Finland, for example, there are selective music and language schools. Sweden is notable for encouraging parental choice by opening up the school system to for-profit providers.

3.7. The classification of structures in Chart 3.1 corresponds to the groupings by age at which selection starts shown in Chart 2.2 (page 6). When lower secondary education takes place in non-selective secondary schools (I) or in all-though schools (V) selection is deferred to the start of upper secondary schooling; where it is part of selective secondary education (II) selection is early; and where it is stand-alone (IV) or part of a sequence of cycles (III) it generally comes in-between. The fit is not exact but very close.

Quibbles

3.8. There is much that can be quibbled with, in our classification of educational systems. The Czech Republic, Hungary and Slovakia are classed as selective systems although most pupils go to single structure schools. But the systems do include competitive examinations from a young age for what we in England would call grammar schools. In

Ireland most pupils continue in the same school after lower secondary education (81 per cent in 2007) and the secondary schools differ in type, so it could go with the selective secondary systems. But we have put it with the middle schools since there is an externally set and marked junior certificate which completes lower secondary education. Entry to the different types of school also is by choice rather than selection. The systems based on a sequence of cycles could be incorporated into the primary and secondary distinction, but in Belgium this would reduce lower secondary education to two years.

3.9. Lower secondary is less meaningful as a category when it merges seamlessly into upper secondary education. If the OECD definition were strictly applied to England it would cover the 11-14 age range. But the more natural break is at age 16 when GCSE is taken. This, however, reduces upper secondary education to only two years. A further complication is that in number of countries, including Australia, Belgium, Canada, Germany, Switzerland and the United States education is organised not nationally but within regions, and the regional systems differ. In order to make our descriptions manageable we have attempt to compress these differences – we hope without too much distortion – into a single narrative.

Patterns in Lower Secondary

3.10. In spite of the reservations the classification is important in enabling us to detect any patterns. Chart 3.2 sets out the numerical differences between Groups I to V. The major distinction is between those countries where there is selection by ability for different types of lower secondary education (Group II) and those which are non-selective at this stage (the rest). In the selective group there are different school types which children go to on the basis of an entry examination or prior attainment.

3.11. Only Ireland outside the selective grouping has different school types - including vocational schools run by vocational education committees - but there are no entry examinations and it is left to parents to apply as they think appropriate. Countries classed among those with selective systems are not the only ones in which performance in primary education plays a part in school entry. In Belgium, Greece and Poland progression from primary requires a certificate, but its purpose is not to differentiate, but to attest to readiness for secondary education. Pupils not reaching the standard may have to repeat a year as indeed they could be asked to do at other stages of their education. Differentiation, therefore, does not have to be between schools; it can take place within schools by repeating years or grouping by ability. We will explore this further in Chapter 7.

3.12. Other columns in Chart 3.2 bring out the length of lower secondary education, whether there is a completion qualification and at what age it is taken. Outside of the Scandinavian countries and those with stand-alone schools, the length only rarely corresponds to the three years deemed by the OECD. Completion of lower secondary often coincides with the end of compulsory education, and it is generally marked by the award of a qualification. The Scandinavian pattern is very neat with all-through schools to age 16 when certificates are awarded which determine opportunities in optional upper secondary education. As we saw in Chart 2.3 (page 8) the great majority of pupils do decide to stay on.

Chart 3.2: Lower Secondary Education[1]

Group	Country	Age Range	Ability School Types	Age Selection Starts[2]	Progression from Primary	End Award
I	England	11-16	1	16	Age	Yes
	Australia	12/13-15/16	1	16	Age	No
	Canada	12-15	1	15	Age	No
	New Zealand	11-16	1	16	Age	No
II	Austria	10-14	2	10	Exam	No
	Czech Republic	11-15	3	11	Exam	No
	Germany	10-16	4	10	Acad Record	Yes
	Hungary	10-14	2	10	Exam	No
	Luxembourg	12-15	2	12	Acad Record	Yes
	Mexico	12-14	2	12	Exam	No
	Netherlands	12-15	3	12	Acad Record	No
	Slovakia	11-15	3	11	Exam	No
	Switzerland	10/12-15/16	3	10/12	Acad Record	No
III	Belgium	12-14	1[3]	14	Certificate	No
	Italy	11-14	1	14	Acad Record	Yes
	Portugal	12-15	1	15	Acad Record	Yes
	Spain	12-16	1	16	Acad Record	Yes
IV	France	11-15	1	15	Age	Yes
	Greece	11.5-14.5	1	15	Certificate	Yes
	Ireland	12-15	4[4]	16	Age	Yes
	Japan	12-15	1	15	Age	No
	Korea	12-15	1	14	Lottery	No
	Poland	13-16	1	16	Certificate	Yes
	USA	12/13-15	1	16	Age	No
V	Denmark	13-16	1	16	Age	Yes
	Finland	13-16	1	16	Age	Yes
	Iceland[4]	13-16	1	16	Age	Yes
	Norway	13-16	1	16	Age	Yes
	Sweden	13-16	1	16	Age	Yes
	Turkey	12-14	1	14	Age	Yes

1. Stage does not necessarily correspond to transition between institutions.

2. A number of countries, besides England, have a small number of selective schools in lower secondary education, including Australia and Finland (music, languages).

3. A and B strands within schools.

4. Common curriculum across types, including vocational schools run by the vocational education councils, with admission by parental preference.

Sources: EURYDICE, National Summary Sheets on Education Systems in Europe; International Review of Curriculum and Assessment Frameworks Internet Archive (September 2009), *INCA Comparative Tables*, London: QCDA; OECD (2009). *Education at a Glance*, Table C1.1, page 301.

3.13. Stand alone lower secondary schools, too, generally have completion qualifications. In Japan and Korea, where again the great majority of pupils continue on to high schools, there is intensive competition for entry settled by prior attainment and examination. In the United States some specialist high schools have entry by examination, but most

pupils carry forward a transcript of performance and attendance. Where education consists of cycles the completion of lower secondary may lead to an award. In secondary schools lower secondary education is less clearly demarcated and whether or not there is a qualification depends on how it is defined. In England if it is treated as 11-16 then there are GCSEs, but after three years there is no longer even a key stage test.

Schools' Perspectives

3.14. The distinction we made between academic selection and other methods of selection in Chart 2.1 (page 5) is borne out by headteachers' descriptions of how pupils are admitted to their schools. In PISA 2006, representative samples of about 300 headteachers with 15-year-olds taking part in the tests were asked to what extent they considered the following when admitting pupils: residence; academic records (including placement tests); recommendations from feeder schools; parents' endorsement of the instructional or religious philosophy of the school; pupils' needs or desires for a specific programme; and the past or present attendance of other family members at the school. Their responses are set out in Chart 3.3.

3.15. In order to bring out the patterning of responses we highlight those which were 0.5 standard deviation or more above the OECD average. It needs to be borne in mind that the 15-year-olds will have been admitted to the schools that they were in at different ages according to the structure of the particular educational system. In the all-through schools of Scandinavia they will have been admitted at age 6 or 7; in selective lower secondary systems it will have been at 10, 11, 12, and for the high schools in Korea and Japan it will have been at 14-15. The PISA sample also contains a mix of schools including in England a majority of comprehensive schools, but also independent and grammar schools.

3.16. Across the OECD, 47 per cent of the headteachers said that where the pupils lived was the major consideration. This emerged particularly strongly for the Scandinavian all-through schools, but was important also in Canada, England, Switzerland, Germany, Spain, Portugal, Poland, the United States and Greece. Just over a quarter of the headteachers said that admissions were decided by ability. Perhaps not surprisingly, but validating our classification, academic record (including examinations) along with advice from feeder schools dominated entry to the selective secondary schools. It also emerged strongly in Japan and Korea reflecting the competitive entry to their high schools.

3.17. The non-selective secondary schools of England and the Commonwealth are distinctive in that a wide variety of criteria come into play - residence, specific programmes, family links, and religious/instructional philosophy - but, of course, not prior attainment. Whether or not there is a brother or sister at the school is second only to residence. 'Family links' is also especially important in Spain and Portugal where it is interpreted more widely to include a parent having attended, working in, or working near the school. The religious/instructional philosophy of the school is a major criterion in Belgium, Ireland and Australia (where Catholic schools funded in part by the government and charging low-cost fees take nearly a fifth of the school population). Needs or desire for a specific programme are an important factor in Austria, Portugal, and Canada.

Chart 3.3: Admissions According to Headteachers[1, 2]

Country[1]	Residence	Academic Record	Advice Feeder Schools	Specific Programme	Family Links	Educational/ Religious Philosophy
England	**60.6**	9.8	7.0	9.6	**32.6**	12.4
Australia	41.5	9.3	18.2	**24.6**	**41.9**	**27.5**
Canada	**77.6**	10.4	**22.2**	**36.9**	**26.4**	15.2
New Zealand	49.3	9.3	15.8	19.0	**30.7**	**19.2**
Austria	25.0	**65.2**	5.2	**43.9**	12.5	10.5
Czech Republic	21.0	**42.2**	3.1	10.3	4.3	10.8
Germany	**64.8**	38.8	**37.8**	21.5	17.4	10.6
Hungary	3.9	**64.4**	1.2	**30.4**	3.9	**22.9**
Luxembourg	42.3	**41.6**	7.8	11.2	**40.8**	7.3
Mexico	9.9	38.1	8.7	12.2	10.5	5.9
Netherlands	10.3	**65.3**	**90.3**	19.6	4.5	**19.5**
Slovak Republic	19.3	**46.5**	3.2	18.4	2.6	7.4
Switzerland	**80.1**	**51.1**	**40.0**	21.2	1.7	1.6
Belgium	2.4	25.6	7.4	13.2	9.9	**40.3**
Italy	11.3	7.1	6.6	**33.2**	11.3	10.2
Portugal	56.8	6.7	1.2	**41.4**	**31.5**	10.2
Spain	**67.9**	3.0	2.4	13.0	**47.6**	13.8
Greece	**71.3**	4.5	1.3	13.6	**24.3**	4.0
Ireland	42.0	2.5	11.8	13.7	**37.5**	**27.3**
Japan	20.1	**86.3**	**26.1**	**28.9**	5.8	8.7
Korea	22.6	**59.1**	11.4	15.3	0.7	3.6
Poland	**81.8**	13.5	6.1	4.7	5.0	5.7
USA	**81.1**	7.9	9.3	22.4	9.7	5.0
Denmark	55.5	3.9	8.7	16.6	**24.2**	**19.5**
Finland	**75.2**	4.2	2.1	16.6	12.8	9.9
Iceland	**93.9**	1.1	6.5	18.5	9.9	9.7
Norway	**78.7**	-[3]	0.8	3.1	4.9	2.2
Sweden	57.3	1.9	0.5	10.2	12.0	3.2
Turkey	35.3	29.0	1.4	5.4	2.6	1.3
OECD Average	46.9	26.7	12.6	18.9	16.5	11.9

1. France did not participate.

2. Percentages 0.5 SD or more above OECD average shown in bold.

3. No response from Norway because category not applicable.

Source: PISA 2006, volume 2, Table 5.1, page 161.

Résumé

3.18. Lower secondary education in OECD educational systems can be classified in five groups: I, as the first years of non-selective secondary education (four countries); II, as the first years of selective secondary education (nine countries); III, as one of more of a sequence of cycles of education (four countries); IV, in stand-alone schools (six countries); and V, following on from primary education in all-through schools (six countries). Headteachers of 15 year-olds, some of whom would have been in lower

secondary education and others in upper secondary education, indicated that the main method of deciding admissions to their schools was residence (47%), followed by academic record (27%), application for specific programme (19%), family links (17%), advice from feeder schools (13%) and the educational or religious philosophy of the school (12%).

4. Admissions to Lower Secondary Education

4.1. Broadly speaking there are three main ways of deciding who goes to which school: (1) the schools may select on the basis of tests, academic record or recommendation; (2) there can be allocation by some authority; or (3) parents are, in theory, free to choose, but in practice it may amount to no more than being able to express a preference. These are not mutually exclusive. Allocation may be the main method but parents are able to request an exemption or apply to other schools. Or in a selective system parents may be able to choose within a school types. Or again, parents may be able to choose but receive strong advice from the primary school as to which type of school is appropriate.

4.2. Chart 4.1 attempts to show where the emphasis lies in OECD countries. Selection, allocation or parental choice may operate in strong or weak forms which we have represented by closed and open triangles. 'Weak' means that it comes into play only to modify the main basis for deciding places. The symbol is not used when the criterion operates only in some schools such as the grammar schools of England and Australia or the music and language schools of Finland since this analysis applies only to mainstream state education.

Educational Merit

4.3. The educational achievement of the pupils - assessed by the record of performance in the primary school, tests, or a school's recommendation - can influence progression to secondary education in two ways. It may be used to select pupils for different types of school or to assess readiness for secondary education with pupils being held back or put into different streams.

Academic Selection

4.4. By definition academic selection is the main method of deciding places in the nine countries with selective secondary education systems. In those countries, with the exception perhaps of Mexico, the actual offer of a school can be modified by parents choosing a particular school within the type – as used to be the case with the old 11+ examination in England.

Readiness for Secondary Education

4.5. Academic performance determines access in Belgium also, but within schools chosen by parents (a kind of streaming). Progression to the first stage of secondary education depends on obtaining a certificate of elementary education (internally assessed in the primary school) which gives access to Grade 1A of the first cycle of secondary education. Without this certificate the pupil would go into Grade 1B. The first stage leads on to the second, from age 14 to 16, where there are four types of programme – general, technical, artistic and vocational.

4.6. In Greece, Italy and Poland successful completion of primary education is necessary to move on to secondary education. In Poland, there is test at the end of primary education set externally by one of the eight regional examination boards. This does not have a selection function but informs the lower secondary school (*gimnazjum*) about the level of achievement. In Greece, pupils who receive a passing grade from their teachers in the final year of primary education are awarded the primary school leaving certificate which leads to admission to lower secondary school (*gymnasio*). In Italy, progression from primary to lower secondary (*scuola secondaria di primo grado*) depends on a positive assessment from the primary school.

Chart 4.1: Lower Secondary Admissions

Group	Country	Selection by Ability	Allocation by Authority	Parental Choice
I	England			▲
	Australia			▲
	Canada			▲
	New Zealand			▲
II	Austria	▲		Δ
	Czech Republic	▲		Δ
	Germany	▲		Δ
	Hungary	▲		Δ
	Luxembourg	▲		Δ
	Mexico	▲		
	Netherlands	▲		Δ
	Slovak Republic	▲		Δ
	Switzerland	▲		Δ
III	Belgium	Δ		▲
	Italy	Δ		▲
	Portugal			▲
	Spain			▲
IV	France		▲	Δ
	Greece	Δ	▲	
	Ireland			▲
	Japan		▲	Δ
	Korea		▲	
	Poland	Δ	▲	
	USA			▲
V	Denmark			▲
	Finland		▲	Δ
	Iceland			▲
	Norway			▲
	Sweden			▲
	Turkey		▲	

Source: EURYDICE, Descriptions of National Education Systems, http://eacea.ec.europa.eu/education/eurydice/eurybase_en.php/ plus other accounts.

Allocation by Authority

4.7. As Chart 4.1 shows, allocation rather than selection or choice is the main method of deciding lower secondary school admissions in seven countries. In four there is little flexibility, while in the other three the decisions can be ameliorated by parental preferences. In Greece and Poland parents are obliged to register their children in the nearest school. Korea assigns but, interestingly, it does so by lottery within zones in an attempt to mitigate the wide differences that had emerged. And in Turkey, where there are all-through schools from age 6-14, the school administrator writes to inform

parents/guardians at least 15 days in advance the school and the time that their child is required to attend. In France, Japan and Finland there is some leeway with parents having limited room for manoeuvre.

Parental Choice

4.8. In nearly all OECD countries there is an element of parental choice within the national educational system, but it comes in 'strong' and 'weak' forms. In 14 countries, parents are free to choose. These include the four countries with non-selective secondary schools, four Scandinavian countries with their all-through schools, the four countries with educational cycles and two of the countries with stand-alone schools. In eleven others, parents can only operate within strict limits. There are just five OECD countries where parents have little say - Greece, Korea, Mexico, Poland and Turkey - but even in these there is the option of private education.

Parents Free to Choose

4.9. A strong form of parental choice has been adopted in seven countries in the expectation that making schools accountable to parents would drive up the quality of provision. It is usually accompanied by pupil-based funding, the creation of a diversity of schools and the publication of results to enable parents to make choices. This approach is characteristic of the English speaking countries – England itself, Australia, Canada, New Zealand, Ireland and the United States – but also Sweden. In these countries there is in theory open enrolment across providers. In Australia there is open choice within states and enrolment zones have been abandoned. In New Zealand there is unregulated choice though pupils are assured of a place in a local school. In Canada there are differences between provinces, but parents are generally able to choose any school providing there are places and they are prepared to bear the transport costs. In the United States there is choice between public schools, magnet schools and privately managed charter schools. There is freedom of choice also in Belgium, Italy and Spain where it is more associated with human rights than school improvement policies.

4.10. Parents can view school choice as a mixed blessing. Ireland had entrance examinations until 1994, but now there is open access to state funded second-level schools. There are five types. The secondary, community and comprehensive schools are usually denominational, and there are vocational schools (provided by vocational educational committees) and community colleges which do not have a religious affiliation. Schools have to publish an enrolment policy and when there are more applicants than places admissions have to be in line with that policy. A parent wrote of her experiences recently[13]: "If you live in a small town or village where there's just one post-primary school and the word on the street is that it's as good as you'll get anywhere else, then lucky you….We're spoiled for choice in Dublin but it also means that you have to do your homework".

4.11. Among the Scandinavian countries Sweden is notable for pioneering the decentralization of the governance of education to the municipalities. Parents are free to choose a school, either municipal or independent, with the costs borne by the municipality (though not of transport except for the nearest school). In some municipalities all parents have actively to choose schools while in others the child is placed, but parents who wish can apply elsewhere. The right to choose does not

[13] Moonan, C. 'Swotting up on best school choice', *Irish Independent*, 17 May 2010.

guarantee admission. In Denmark families can choose any school within their municipality and this is being broadened to any school irrespective of municipal and county boundaries. In the other Scandinavian countries 'free to choose' shades into limited choice. Children are expected to attend their nearest school where places are guaranteed; parents may request admission elsewhere but the children will only be accepted if there is room. Somewhat similar conditions apply in Portugal.

Choice Limited by School Types

4.12. In those countries where different types of school cater for different ability ranges parental choice can come into play in two ways. In the Czech Republic, Hungary and the Slovak Republic parents are able to choose schools including whether or not to let their children try for the equivalent of grammar schools, to which entry is determined by competitive examinations. In Austria, Germany, Luxembourg and the Netherlands children go to different schools according to ability but this is less a selection process than parents making choices on the basis of advice from the primary schools. In Switzerland school choice has only recently been introduced. Basel residents voted for it in a referendum in 2008 and the cantons of North West Switzerland agreed to permit cross-cantonal attendance from 2014.

Choice Limited by Allocations

4.13. A weak form of parental choice operates in France, Japan, and Finland. In France children are assigned to a lower secondary school (*collège*) within their municipality, but parents can apply to the mayor for exemption and also write to the mayor of another municipality to be granted admission. When a *collège* does not offer particular subjects parents can apply to the *inspecteur d'académie* at the ministry for a derogation. Since not all schools offer Latin or Greek this can be a convenient way of gaining admission to a top-flight school. In Japan school boards have experimented with limited choice between junior high schools within defined areas. This could involve choice within: the municipality; a subdivision of the municipality; neighbouring districts; specially approved schools; or specific area programmes. But it has led to great variation in the number of enrolments and with some schools receiving no applications at all. At least one school board has now decided to abolish the school choice programme on the grounds that it undermined the city's capacity to care for all children[14] In Finland pupils are assigned to schools close to their place of residence, but parents may apply to other schools, when admission is at the discretion of that school.

Resolving Competition for Places

4.14. There is an intrinsic problem with parental choice. The choices will never exactly match the places available. Always some schools will receive more applications than they can accept and others fewer. This cannot be got round by creating more good schools. Some of these will prove more popular than others, so the competition for places will have been shifted not solved. There has to be some means of deciding who gets the places when parents are, in principle, allowed to choose the schools for their children.

4.15. In Chart 4.2 we summarize the main methods adopted by the 14 countries classified in Chart 4.1 as having a strong element of parental choice. When there are more applicants

[14] Hayase, M. (2006). *Neoliberal Governmentality and School Choice in Japan: The Role of School Principals*. MA Thesis, University of British Columbia.

than places we have to recognise that, unless there is random allocation, there has to be selection. It is not selection by ability, nor necessarily by the school, but it is decision-taking that involves choosing some over others. It can result, as in England[15], in huge differences in the social composition of schools seemingly of the same type.

Chart 4.2: Awarding Places

Group	Country	Residence	Codes[1]	Faith	First-Come	Lottery
I	England	▲	▲	▲		Δ
	Australia	▲		▲		
	Canada	▲		▲	▲	
	New Zealand	▲	▲	▲		Δ
III	Belgium	▲	▲	▲	Δ	Δ
	Italy	▲				
	Portugal	▲	▲			
	Spain	▲	▲			
IV	Ireland	▲	▲	▲		
	USA	▲				Δ
V	Denmark	▲				
	Iceland	▲				
	Norway	▲				
	Sweden	▲	▲			

1. Set centrally or agreed school enrolment schemes.

4.16. In all 14 countries, place of residence plays a prominent part in deciding between competing claims. What happens beyond that varies. Priorities are sometimes established nationally through centrally-set admissions codes or, locally, by the enrolment schemes of individual schools. Choices and admissions can also revolve around the religious affiliation of the school. First-come-first-served and lotteries have been tried in some countries.

Residence

4.17. Where a child lives can be taken into account in two main ways: by linear distance or by zone. Proximity *per se* can be the tie-breaker as in England (where aspirant parents seek to live as near to the school gates as possible) and other open access countries. Priority by an area or zone is characteristic of Scandinavian countries and others such as Portugal. Parents are free to choose outside this area but can be turned down if the school is full with local children. The way place of residence is to be taken into account can be specified in admissions codes or enrolment schemes.

Admission Codes and Enrolment Schemes

4.18. Admissions codes and enrolment schemes differ in that admissions codes are set nationally and enrolment schemes are proposed by the schools themselves. Spain and Portugal, like England, have national admissions codes. In Spain all children have the right to a school place near their home. When there are not enough places in a particular school, priority is given according to: annual family income; proximity of home or

[15] Smithers, A and Robinson, P. (2010). *Worlds Apart?* London: Sutton Trust.

workplace of one of the parents; enrolment of siblings in the same school or parents/guardians working in it; a disability of the pupil or of either parent or sibling; and holding the legal status of 'large family'. Schools and the communities may add supplementary criteria, for example, high level music, dance or sporting ability. Portugal's admissions arrangements are similarly based on catchment areas, with priority given to: pupils who in the previous year attended the school (primary and lower secondary education is organised as three cycles); pupils with special educational needs; pupils with brothers and sisters enrolled in the school; pupils whose parents/guardians live in the area of the school; and pupils whose parents or guardians work in the area of the school.

4.19. New Zealand is an example of a country with school enrolment schemes. A school can ask the ministry for permission to develop its own admissions policy (enrolment scheme) if it can demonstrate overcrowding and the scheme would protect local admission rights. Applications made out-of zone are considered according to criteria such as whether the children are siblings of current or past pupils, children of board employees or need/desire for special programmes. Random allocation is permitted.

Faith

4.20. The religious ethos of the school is built into admissions codes and enrolment schemes, but is treated here as a separate criterion in view of its importance. In many countries, including England and Australia, the church established schools before there were national educational systems. In Ireland nearly all the schools are denominational. By contrast, the public education system in the United States is religion-free and no religious worship is allowed in schools. Religion is a selection issue because faith schools frequently do better than their secular counterparts, and there is intense competition for places. Critics suggest that church-run schools should not be able to discriminate on religious grounds.

First-Come-First-Served

4.21. The difficulties in establishing a fair policy are well illustrated by Belgium. We are grateful to Estelle Cantillon[16] for this account. The two main communities in Belgium have both been looking for better ways of admitting pupils. Flemish Belgium in 2003 set a common date for registrations with places awarded on a first-come-first-served-basis. Being full was the only permitted reason for refusing entry. Wimbledon-type queues resulted. In 2006 there was modification to give priority to siblings and the socially disadvantaged by allowing them to apply early. But the discontent over the queuing time needed led, in 2008, to a reform to allow distance rather than time spent waiting to be the deciding factor. French-speaking Belgium went down a similar route with, in 2007, priority for siblings but otherwise first-come-first-served. The resulting chaos led to the minister responsible resigning. In 2008 new arrangements were introduced consisting of a mix of quotas (eg, living in borough) and priorities (eg, siblings). Lotteries were introduced as the tie-breaker.

Random Allocation

4.22. Lotteries have been gaining in popularity. They are pivotal in the way Korea assigns pupils to middle schools. And they are used as a tie-breaker in some circumstances in

[16] Cantillon, E. and Gothelf, N. (2009). *School Choice Procedures. How They Matter? Theory and Evidence from Belgium*. http://www.bristol.ac.uk/cmpo/events/2009/school-choice/cantillon.ppt

England, New Zealand and Belgium. In the United States random allocation is used by oversubscribed charter schools.

Geographical Limits on Choice

4.23. Parental choice is governed as much by geography as school quality. The headteachers in the PISA 2006 sample were asked to indicate how many other schools there were to which their pupils could have gone. Chart 4.3 shows the responses.

Chart 4.3: Other Schools to Which Pupils Could Have Gone[1, 2]

Group	Country[3]	% No Other Schools	%One Other School	% 2 or More Other Schools
I	England	7.6	8.7	**83.7**
	Australia	6.4	5.2	**88.4**
	Canada	22.7	**18.5**	58.8
	New Zealand	10.8	7.1	**82.1**
II	Austria	**35.6**	**19.2**	45.2
	Czech Republic	14.1	12.1	73.9
	Germany	17.0	14.2	68.8
	Hungary	24.4	15.9	59.7
	Luxembourg	33.3	15.7	51.0
	Mexico	15.7	16.7	67.6
	Netherlands	10.5	15.3	74.2
	Slovak Republic	8.6	6.4	**85.0**
	Switzerland	**58.4**	14.1	27.5
III	Belgium	9.4	**18.6**	71.9
	Italy	19.2	12.0	68.8
	Portugal	27.1	**24.7**	48.2
	Spain	20.2	17.7	62.1
IV	Greece	**40.3**	14.9	44.8
	Ireland	16.4	9.8	73.8
	Japan	10.4	7.6	**82.0**
	Korea	15.6	8.7	75.7
	Poland	**35.1**	**20.5**	44.4
	USA	25.9	10.5	63.6
V	Denmark	22.6	18.2	59.2
	Finland	**44.0**	15.5	40.5
	Iceland	**72.2**	5.0	22.8
	Norway	**65.9**	12.4	21.8
	Sweden	**36.8**	13.5	49.6
	Turkey	31.7	**15.6**	52.7
All	OECD Average	26.1	13.6	60.3

1. Reports of headteachers of schools of 15-year-olds taking part in the 2006 round of testing.

2. Percentages in bold 0.5 SD or more above the OECD average.

3. France did not participate.

Source: PISA 2006, volume 2, Table 5.5, page 168.

4.24. Three-fifths of the pupils in the OECD sample had, according to their headteachers, two or more other schools available to them. But a quarter had only the one. For much of Scandinavia parental choice is hardly an issue since only a single school is accessible. In contrast, it is not difficult to see why systems of parental choice should have emerged in the English-speaking world where a number of schools were within easy reach.

Résumé

4.25. Admissions to lower secondary education are decided in three main ways: academic selection, allocation by authority and parental preferences. Of the 30 OECD countries, nine admit primarily by selection, seven by allocation and 14 in response to parental choice. Where there are more applications than places, priorities are set by place of residence, admissions codes/schemes (taking into account income, residence, family links with school, religion, disabilities and family size), religious affiliation and random allocation. Belgium also tried but abandoned first-come-first-served. A quarter of the pupils had access to only one school. In Iceland, Norway and Switzerland it was over half, with choice limited by geography and culture.

5. Upper Secondary Education

5.1. The distinction between choice in lower and upper secondary education is important. In all countries lower secondary education is compulsory. All children have to be at school whether they want to be or not. Where choice is available it is between different schools. On the other hand, upper secondary education in almost two-thirds of the countries of the OECD is not compulsory. Choice, therefore, involves a prior decision: whether to continue in education or not. It is only when this has been decided do choices have to be made about what to study and where. Whether education is compulsory or not has implications for the role of government. When education is compulsory there is an obligation to cater for everyone. But when education is voluntary the obligation is to provide opportunities – which may or may not be taken up. It is open-ended and demand-led, with recruitment a test of value and quality. While entry to lower secondary education is governed by admissions processes to distribute pupils across the places available, entry to upper secondary education, especially where it is voluntary, is a choice/eligibility process. Pupils and parents make choices and institutions determine the eligibility of applicants.

5.2. Chart 5.1 is an attempt to capture lower secondary and upper secondary in numbers. It shows that, at present, upper secondary education is compulsory in only six of the 30 OECD countries, three full-time (Canada, Hungary, Netherlands) and three part-time (Belgium, Germany and Poland). In five other countries there is some overlap with compulsory education. In Italy, for example, the first two years of upper secondary schooling (from age 14) are compulsory. In Austria, Mexico, France and Ireland too there is overlap. But in 19 countries the decision to stay on is entirely voluntary. Compulsion does not equate to participation. In ten countries - Czech Republic, Finland, France, Ireland, Japan, Korea, Norway, Slovakia, Sweden and United States - over 90 per cent of the age group remained in education or training till age 17 or 18, even though not required to do so (see Chart 2.3, page 8) which must say something about the quality of the provision.

5.3. Upper secondary education in OECD is characteristically organised as a number of pathways. Most countries offer a choice of general, technical and vocational programmes, with the ‘general’ including university preparation, the ‘technical’ being preparation for further study and the ‘vocational’, preparation for direct entry to work. They may be provided in separate institutions as in Greece where there are general upper schools secondary schools, vocational upper secondary schools, and vocational training schools. Or, as in Sweden, as an array of ‘lines’ within the same institution. The United States, Canada and New Zealand are exceptions in deferring vocational training beyond secondary education. There is sometimes a common first year, as in France, where on completing ‘orientation’ a choice is made among the three general and six technological ‘bacs’. In addition, there may be other types of upper secondary schooling. In Austria there are training schools from the age of 14 for kindergarten school teachers, and from the age of 16, there are health, nursing schools and paramedical schools. In Spain there are military schools from the age of 16. In Italy, there is a choice between classical, scientific, linguistic, pedagogical and artistic upper schools, technical schools, art schools and initial vocational training. The courses are necessarily of different lengths so there is no attempt in Chart 5.1 to specify an end date for upper secondary education. As we have seen only three countries make it compulsory full-time through to the age of 18.

Chart 5.1: Upper Secondary Education

Group	Country	Years Lower Secondary	Age Entry to Upper Secondary[2]	Compulsory Education Ends	Compulsory
I	England	5	16	16	No
	Australia	4	16	15/16	No
	Canada	4	15	17	Yes
	New Zealand	5	16	16	No
II	Austria	4	14	15	Overlap
	Czech Republic	4	15	15	No
	Germany	6	16	18	Part Time
	Hungary	4	14	18	Yes
	Luxembourg	3	15	15	No
	Mexico	2	14	15	Overlap
	Netherlands	3	15	18	Yes
	Slovakia	4	16	15	No
	Switzerland	5	15/16	15/16	No
III	Belgium	2	14	18	Part time
	Italy	3	14	15	Overlap
	Portugal	3	15	14	No
	Spain	4	16	16	No
IV	France	4	15	16	Overlap
	Greece	3	15	15	No
	Ireland	3	15	16	Overlap
	Japan	3	15	15	No
	Korea	3	14	14	No
	Poland	3	16	18	Part Time
	USA	3	15	16	No
V	Denmark[4]	3	16	16	No
	Finland[4]	3	16	16	No
	Iceland[4]	3	16	16	No
	Norway	3	16	16	No
	Sweden[4]	3	16	16	No
	Turkey[4]	na	15	14	No

Sources: EURYDICE, National Summary Sheets on Education Systems in Europe; International Review of Curriculum and Assessment Frameworks Internet Archive (September 2009). *INCA Comparative Tables*. London: QCDA; OECD (2009). *Education at a Glance*, Table C1.1, page 301.

5.4. The organisation of secondary education in England does not sit easily with the OECD's International Classification (Chart 2.1, page 5). According to the OECD lower secondary education is to be regarded as the three years of secondary education following six years of primary education. Chart 5.1 shows that this is a convenient way of looking at education in the Scandinavian all-through schools (Group V) and in countries with stand-alone lower secondary schools (Group IV). In all cases lower secondary education can comfortably be designated. But the education stages of the countries in Group III - Belgium for example - do not necessarily correspond with the

OECD ideal. In countries which treat secondary education as an entity, (Groups I and II), including England, there is less need to distinguish lower secondary as a phase.

5.5. The transition to upper secondary education in England comes at the same age as in the Scandinavian countries and, as things stand, it is also corresponds with the end of compulsory education (though, of course, from 2013 the leaving age is due to be raised to 17 and from 2015 to 18). But in England this leaves lower secondary education lasting five years rather than the three in Scandinavia due to the later start to formal schooling in those countries. On the OECD classification, lower secondary education in England would be from 11-14. Yet, although the expression education 14-19 is increasingly being used, it does not map on to institutional arrangements or qualifications, especially now that the national tests for 14-year-olds have been discontinued. Lower secondary education could, therefore, be regarded as lasting from age 11 to 14, by definition, or from 11 to 16 reflecting institutional arrangements. England appears in official statistics sometimes as the one and sometimes as the other.

Pathways

5.6. Where education is voluntary rather than compulsory it is more about opportunities than requirements. Most countries provide opportunities in upper secondary education through an array of pathways. The pathways may be a continuation of those begun at a younger age, as with selective secondary systems (Group II), or commence with upper secondary itself. They can be broadly classified as academic or vocational. This recognises that these two forms of study have different organising principles. The organising principle for academic subjects is the means by which truth about the world is established and the body of knowledge so accumulated. In vocational studies, the organising principle is the occupational field to which it leads.

5.7. Chart 5.2 summarizes for 29 countries (New Zealand did not provide data) the balance between academic and vocational studies (with combined school and work settings shown as a sub-set). Overall just over half the enrolments were for academic studies and just under half for vocational studies. Across the OECD about 14 per cent of the enrolments were combinations of school and work-based learning. The selective education systems (with the exceptions of Hungary and Mexico) were particularly strong on vocational studies. In Switzerland, Germany, Austria, the Czech and Slovakia much of this was work-based, reflecting the well-developed dual-system apprenticeship programmes. In addition, three of the Scandinavian countries, Australia, Belgium and France had above average proportions on vocational programmes. Denmark's was almost entirely work-based. Most OECD countries have apprenticeship systems, but Japan, Korea, Spain and Sweden do not. In Ireland, Italy and Portugal vocational education was mainly pre-vocational.

5.8. In ten countries the proportion on academic or general courses was more than a 0.5 SD above the OECD average. Prominent among them were the countries where upper secondary education followed on from stand-alone middle schools. But also in this category were Canada and the United States where vocational training is left post school. Hungary, Mexico, Portugal, and Iceland are other countries where the majority of enrolments are for general courses. General programmes do not necessarily lead on to higher education, but they do include the specific university preparation programmes provided in a number of countries.

Chart 5.2: Enrolments in Upper Secondary[1]

Group	Country[2]	%General[3]	%Vocational[4]	(%School and Work-Based)[5]
I	England[6]	58.6	41.4[6]	not available
	Australia	39.6	**60.4**	not available
	Canada	**94.5**	5.5	0.0
II	Austria	22.7	**77.3**	(**34.3**)
	Czech Republic	24.7	**75.2**	(**34.0**)
	Germany	42.6	**57.4**	(**42.2**)
	Hungary	**76.4**	23.6	(13.2)
	Luxembourg	37.7	**62.3**	(14.0)
	Mexico	**90.6**	9.4	0.0
	Netherlands	32.4	**67.6**	(18.5)
	Slovakia	26.8	**73.2**	(**29.8**)
	Switzerland	35.2	**64.8**	(**59.0**)
III	Belgium	30.4	**69.6**	(3.4)
	Italy	40.2	**59.8**	0.0
	Portugal	**68.4**	31.6	not available
	Spain	56.6	43.4	(1.9)
IV	France	56.2	43.8	(12.1)
	Greece	**68.3**	31.7	0.0
	Ireland	**66.5**	33.5	(2.2)
	Japan	**75.7**	24.3	0.0
	Korea	**73.2**	26.8	0.0
	Poland	55.7	44.3	(6.4)
	USA	**100.0**	0.0	0.0
V	Denmark	52.3	47.7	(**47.2**)
	Finland	33.3	**66.7**	(11.5)
	Iceland	**66.2**	33.8	(15.7)
	Norway	42.5	**57.5**	(14.9)
	Sweden	42.9	**57.2**	0.0
	Turkey	63.3	36.7	0.0
	OECD Average	54.3	45.7	(13.9)

1. Figures in bold 0.5 SD or more above OECD average.

2. Reference year 2007, apart from Canada 2006. New Zealand did not provide these data.

3. Less than 25% vocational or technical.

4. Includes both vocational (vocational or technical qualifications for direct entry into labour market) and prevocational (no occupational qualification).

5. In brackets to signify subset of vocational. Less than 75% in schools, including apprenticeships held in both settings and sandwich courses.

6. Vocational for England includes FE enrolments at any age, not just 14-18.

Source: OECD (2009). *Education at a Glance*, Table C1.1, page 304.

5.9. England emerges as unexceptional in these terms, but its data for vocational education are suspect, including as they do all further education enrolments irrespective of age. While there are well-developed academic pathways leading to university, vocational education has been something of a poor relation with a confusing mix of qualifications.

Various attempts to put it on a sound footing have foundered. The latest, a series of diplomas bridging the academic and vocational, is struggling because it has run up against the different organising principles of academic and vocational learning.

Entry to Upper Secondary Education

5.10. Entry to upper secondary education is mainly a choice/eligibility process. Parents and pupils choose pathways (remember in most countries they have already taken the decision to continue in education) and the providers determine their eligibility. This can be on a record of prior achievement carried from lower to upper secondary education. Chart 5.3 shows that two-thirds of the OECD countries issue a certificate on successful completion of lower secondary education. In six countries, including England (the GCSE), alongside Italy, Ireland, Poland, Denmark and Norway, there is a national or state examination. In the other 14 the certificate is awarded mainly on internal assessment, sometimes moderated through national tests as in Portugal and Sweden. The countries without certificates or formal transcripts tend to be those with selective secondary systems where admission to different pathways began in lower secondary education (Group II). Japan and Korea are distinctive in having highly competitive examinations/assessments for entry to upper secondary. In Canada and the United States, in contrast, progression is mainly by age.

5.11. Assessments of academic ability can range from the diagnostic to the highly competitive. In Denmark if a lower secondary school is unsure whether a pupil has the capacity to benefit from pre-university education it may recommend that there be an admissions test to upper secondary. School record can also be supplemented by tests in Finland. In Italy and Iceland, the schools set their own requirements which may include tests. As well as Japan and Korea, Turkey outside of Group II has entrance exams. Elsewhere, as in Poland and Norway, admissions are governed by the points or grades obtained in the lower school certificate. In Spain there are assessments of aptitudes in the arts and sports. Thus, as well as the nine countries (Group II) with selection in lower secondary, there are 11, including England, that test or can test in the transition from lower to upper secondary.

5.12. Of the remaining ten, Belgium and France have orientation years in which the preferences and abilities of the pupils emerge. In Australia, Canada, New Zealand the United States, pupils mainly progress from lower to upper secondary by age steered on occasions into suitable courses by teachers. In Portugal, Greece and Ireland the lower secondary leaving certificate is necessary for entry. And in Sweden the final year reports moderated by a national monitoring test determine eligibility for the different pathways. By one means or another the countries of the OECD assess abilities and channel choices in directions that are thought appropriate.

Résumé

5.13. Upper secondary education differs from lower secondary education in being voluntary in 19 of the 30 OECD countries. Pupils can therefore decide whether or not to participate. In three countries attendance is compulsory to age 18 full-time, in three compulsory to age 18 part-time, and in five others there is some overlap with compulsory education. In ten of the 19 ‘voluntary’ countries there was over 90 per cent continuation to age 17 or 18. In all OECD countries there was an array of pathways in upper secondary education, and in all but the United States, Canada and New Zealand these spanned the academic, technical and vocational.

Chart 5.3: Progression from Lower Secondary

Group	Country	Lower Secondary Certificate	How Assessed	Entry to Upper Secondary
IA	England	Yes	National Examination	Exam Grades
	Australia	No[1]		Continuation
	Canada	No		Continuation
	New Zealand	Yes	Internal Assessment	Continuation
IB	Austria	No		Record + Test
	Czech Republic	No		School Requirements
	Germany	Yes	Internal Assessment	Continuation
	Hungary	No		School Requirements
	Luxembourg	Yes	Internal Assessment	Continuation
	Mexico	Yes[2]	Internal Assessment	Entrance Exam
	Netherlands	No		Continuation
	Slovakia	Yes	Internal Assessment	Entrance Exam
	Switzerland	No		Continuation
II	Belgium	Yes	Internal Assessment	Orientation
	Italy	Yes	State Examination	School Requirements
	Portugal	Yes	National Monitoring Test	Certificate
	Spain	Yes	Internal Assessment	Certificate + Tests
III	France	Yes	Internal Assessment	Orientation
	Greece	Yes	Internal Assessment	Certificate
	Ireland	Yes	National Examination	Certificate
	Japan	No		Competitive Exam
	Korea	No		Competitive Assessment
	Poland	Yes	National Examination	Certificate Points
	USA	No		Age
IV	Denmark	Yes	National Examination	Record + Tests
	Finland	Yes	Internal Assessment	Record + Tests
	Iceland	Yes	Internal Assessment	School Requirements
	Norway	Yes	National Examination	Certificate Grade
	Sweden	Yes	National Monitoring Test	Final Yr Reports
	Turkey	Yes	Internal Assessment	Entrance Exam

1. Except New South Wales.

2. Transcript.

Sources: EURYDICE, National Summary Sheets on Education Systems in Europe; International Review of Curriculum and Assessment Frameworks Internet Archive (September 2009).

5.14. Overall, just over half the enrolments were for academic studies and just under half for vocational. Countries with selective secondary education had the highest proportions on vocational courses, including apprenticeships combining education and work settings. Finland, Norway, Sweden, and Denmark were also strong on vocational education, as were Australia, Belgium and Italy. All countries have ways of channelling pupils into choices that are thought appropriate. In nine, lower secondary education is selective. A further 11 countries test or can test in the transition from lower to upper secondary. Of the remaining 10, Belgium and France differentiate through orientation

years, Sweden through final year reports, Portugal, Greece and Ireland through a lower secondary leaving certificate, and Australia, Canada, New Zealand and the United States through steering by teachers.

6. Selection Within Schools

6.1. The separation of pupils into different types of education is not confined to going to different schools. Selection within schools can take the form of asking pupils to repeat a year. Or it can be streaming or setting to bring pupils with similar abilities together in groups. Since grouping by ability is so much part of teaching and something which occurs even in mixed ability classes this aspect is not always easy to isolate and quantify. But it is possible to count how many children are required to repeat years on the basis of formal or informal assessment by the schools.

Repetition

6.2. In its 2006 round of international comparisons PISA asked the headteachers of participating schools what percentages of pupils in the year before had repeated a grade at the levels of either lower or upper secondary education (and were therefore at least a year behind their peers). Chart 6.1 shows the results. Overall approaching three per cent of pupils repeated in lower secondary and four per cent in upper secondary, but there was wide variation. England emerges as one of the only four countries - along with Japan, Korea and Norway - where no repetition at either level was reported. In the other Scandinavian countries too it was negligible. But at the other extreme in Spain and Portugal between 13 and 17 per cent had been asked to take a year again. Belgium and Italy, the other two countries in Group III, also had high levels of repetition. This may not be unconnected with the succession of cycles creating an environment for more formal teacher assessment. In addition, Luxembourg and the United States had high levels of repetition in lower secondary education and Luxembourg again and the Netherlands in upper secondary education.

6.3. PISA reported[17] that the performance of pupils who repeat a year remains below the national average. This can be no great surprise since the pupils were asked to repeat in the first place and will not have covered the same curriculum as other 15-year-olds (PISA tests by age not stage). More telling are the studies which compared repeaters with those who were allowed to progress in spite of poor performance. There appeared to be little benefit in repetition and there was also the downside that repeaters could be stigmatised and be disruptive to younger classmates.

Ability Grouping

6.4. The headteachers were also asked whether pupils in their schools were grouped by ability into different classes or within classes for all subjects, some subjects, or not at all. Since the target population was 15-year-olds, in some cases, as in Scandinavia, the schools will have been lower secondary and in others, as in Belgium, Italy and Korea, they will have been upper secondary. Chart 6.2 shows that, overall, about two-thirds of the schools reported ability grouping in at least some subjects, with about 14 per cent reporting it for all subjects. A third of schools indicated that there was no grouping by ability at all. But there was a considerable range from 0.3 per cent in England to 85.0 per cent in Greece.

6.5. Ability grouping within schools in at least some subjects was standard practice in those countries where schools do not select on entry. In England, Australia, Canada, New Zealand and Ireland there was ability grouping in at least some subjects in over 90 per cent of the schools, and the United States was not far behind on 87 per cent. In

[17] *PISA 2006 Science Competencies for Tomorrow's World*, page 222.

Scandinavia although the countries have a similar pattern of all-through schools, practices within them differ. In Denmark, Iceland and Sweden over three-quarters of the schools reported grouping by ability, but in Finland and Norway it was a half or fewer.

Chart 6.1: Percentage Repitition[1, 2]

Group	Country	%Lower Secondary	%Upper Secondary
I	England	0.0	0.0
	Australia	0.2	0.5
	Canada	4.1	4.1
	New Zealand	0.1	1.4
II	Austria	2.8	5.0
	Czech Republic	0.6	2.1
	Germany	3.9	3.8
	Hungary	1.2	3.5
	Luxembourg	**7.6**	**9.8**
	Mexico	2.2	3.0
	Netherlands	3.2	**7.2**
	Slovak Republic	0.9	1.2
	Switzerland	2.3	4.4
III	Belgium	**5.7**	**9.3**
	Italy	1.9	**8.1**
	Portugal	**12.8**	**16.9**
	Spain	**16.0**	**15.8**
IV	Greece	2.4	2.9
	Ireland	0.2	2.1
	Japan	0.0	0.0
	Korea	0.0	0.0
	Poland	2.2	2.8
	USA	**6.3**	4.3
V	Denmark	0.1	0.1
	Finland	0.3	0.0
	Iceland	0.4	0.0
	Norway	0.0	0.0
	Sweden	0.3	1.1
	Turkey	1.5	2.5
	OECD Average	2.7	3.9

1. France did not provide information.

2. Percentages in bold 0.5 SD or more above OECD average.

Source: *PISA 2006*, Volume 2 - Data, Table 5.2, page 162.

6.6. But it was not only in the schools of non-selective systems that pupils are grouped by ability. Seventy per cent or more of schools in the selective secondary systems of Hungary, Luxembourg, Mexico, the Netherlands, Slovakia and Switzerland, and the selective upper schools in Korea, also reported ability grouping. In the Netherlands

nearly half the schools reported ability grouping in all subjects. In Luxembourg and Switzerland it was above 40 per cent. These systems are highly stratified.

Chart 6.2: Ability Grouping in Schools[1, 2]

Group	Country	None	Some Subjects	All Subjects
I	England	0.3	**91.7**	8.1
	Australia	5.5	**89.6**	4.9
	Canada	8.7	**76.5**	14.8
	New Zealand	3.2	**91.0**	5.8
II	Austria	**56.0**	39.9	4.1
	Czech Republic	34.5	53.7	11.8
	Germany	**58.0**	31.4	10.5
	Hungary	30.6	**67.2**	2.2
	Luxembourg	26.8	27.0	**46.1**
	Mexico	28.1	42.7	**29.3**
	Netherlands	18.8	32.9	**48.3**
	Slovakia	27.3	57.2	15.5
	Switzerland	23.6	36.2	**40.1**
III	Belgium	**56.3**	21.6	**22.2**
	Italy	**53.1**	25.1	**21.8**
	Portugal	**47.4**	38.9	13.7
	Spain	28.6	56.2	15.2
IV	Greece	**85.0**	14.4	0.6
	Ireland	2.0	**90.6**	7.4
	Japan	**44.3**	45.9	9.8
	Korea	11.5	**81.6**	6.8
	Poland	**52.5**	44.2	3.3
	USA	12.7	**79.9**	7.4
V	Denmark	17.9	**74.9**	7.2
	Finland	**49.8**	48.1	2.1
	Iceland	19.8	**74.0**	6.2
	Norway	**58.0**	39.1	2.9
	Sweden	24.5	**70.0**	5.5
	Turkey	**59.4**	22.0	18.6
	OECD Average	32.6	53.9	13.5

1. France did not provide information.

2. Percentages in bold 0.5 SD or more above the OECD average.

Source: PISA 2006, Volume 2 - Data, Table 5.3, page 164.

6.7. Not all schools practised ability grouping. A half or more of the schools in Germany Austria, Belgium, Italy, Greece, Poland, Finland, Norway and Turkey reported having none at all. Of these, Germany and Austria have selective secondary education, Belgium, Italy and Turkey have different schools and tracks by the age of 15, and Greece, Poland, Finland and Norway are mixed ability.

Résumé

6.8. Selection in education takes place both between and within schools. In countries where the schools are non-selective (England, Australia, Canada, New Zealand, Ireland and the United States) grouping by ability within them is standard practice. Some countries are highly stratified in having both different schools and different tracks within them (Luxembourg, Netherlands and Switzerland). The key point is that given the differences in ability and motivation of pupils and the wide variety of directions they will inevitably take there has to be differentiation at some stage and age.

7. Diversity of Schools

7.1. Although in this report we have been attempting to describe national education systems, in fact in many countries there is a great diversity of schools. In part, this diversity has emerged as the educational provision has evolved, but it is also something that has been actively pursued in order to create a range of schools among which parents could choose. In looking at admissions processes we have, therefore, to consider how pupils are accepted into the different school types.

Private Schools

7.2. Parental choice operates in its purest form when they opt to pay the fees of private schools rather than accept places in government-run schools for which they have paid taxes. Chart 7.1 shows the proportions of pupils in the 2006 PISA samples in government and privately-run schools. Assuming the sampling is fair these will be close to the distribution of pupils in these schools. Some governments fund privately-run schools, either fully or partly. It is possible, therefore, to recognise three types of school: (1) government-run schools; (2) privately-run schools receiving more than half their core funding from government; and (3) independent schools receiving less than half core funding from government sources.

7.3. The great majority of pupils across the OECD in 2006 attended government-run schools. Overall it was 86 per cent against the 11 per cent in government-funded private schools and 4.0 per cent in fully independent schools. The proportion in the government-run ranged from a third in the Netherlands to almost 100.0 per cent in Turkey. Government-funded private schools were prominent in the Netherlands, Ireland, Korea and Denmark. The highest proportions in independent schools were in Japan, Korea, Mexico and Spain. They were above average too in England, Greece and New Zealand.

7.4. In countries with fully independent schools, parents have the freedom to step outside the admissions processes of mainstream education and, providing they can afford the fees, put their son or daughter forward for the school of their choice. Affordability will, therefore, limit the number of applicants, but some schools nevertheless become greatly over-subscribed. Fully independent schools are free to select by any means they wish. Pricing *per se* is rarely, if ever, one of them. In England popular independent schools have tended to select on academic ability through a common entrance examination.

Diversity

7.5. In some countries education markets are being created on the theory they will drive up quality as schools compete for parents. Funding follows choices so that, in effect, pupils become vouchers. It has been the impetus for the government-funded private schools.

United States

7.6. The United States and Sweden have been at the forefront of these developments. According to Ravitch[18]: "In the 1990s in the United States three versions of school choice emerged: voucher schools, privately managed schools and charter schools".

[18] Ravitch, D. (2010). *The Death and Life of the Great American School System*. New York: Basic Books.

Chart 7.1: Percentages of Pupils by School Type[1]

Group	Country[2]	Govt Schools[3]	Govt Dependent Private Schools[4]	Private Schools[5]
I	England	93.8	0.2	6.0
	Canada	93.0	4.3	2.7
	New Zealand	**95.5**	0.0	4.5
II	Austria	90.7	8.4	0.9
	Czech Republic	**96.2**	3.5	0.2
	Germany	**94.3**	5.5	0.2
	Hungary	84.2	13.1	2.7
	Luxembourg	85.6	14.4	0.0
	Mexico	89.7	0.0	**10.3**
	Netherlands	33.0	**67.0**	0.0
	Slovakia	92.3	7.2	0.5
	Switzerland	**95.5**	0.9	3.6
III	Italy	**96.4**	1.2	2.4
	Portugal	91.1	6.9	2.1
	Spain	65.3	**24.6**	**10.1**
IV	Greece	**94.9**	0.0	5.1
	Ireland	41.8	**54.8**	3.4
	Japan	70.1	1.0	**28.9**
	Korea	53.7	**31.5**	**14.8**
	Poland	**98.4**	1.0	0.6
	USA	92.6	0.8	6.6
V	Denmark[4]	76.1	**22.8**	1.1
	Finland[4]	**97.6**	2.4	0.0
	Iceland[4]	**98.9**	1.0	0.1
	Norway	**98.1**	1.9	0.0
	Sweden[4]	91.7	8.3	0.0
	Turkey[4]	**99.5**	0.0	0.5
	OECD Average	85.6	10.5	4.0

1. Reports from headteachers of schools in samples. Figures in bold indicate percentage is 0.5 SD or more above OECD average.

2. Australia, Belgium and France withdrew their data.

3. Schools who are controlled or managed by: (1) a public education authority or agency; or (2) a government agency directly or a governing body, most of whose members are either appointed by a public authority or elected by public franchise.

4. Schools receiving 50 per cent or more of core funding from government agencies.

5. Schools receiving less than 50 per cent of core funding from government agencies.

Sources: PISA 2006 Volume 2 – Data, Table 5.4, pages 164 and 165.

7.7. The version which has taken root is the charter schools in which an organisation obtains a charter from a state to run a publicly-funded school for a set period. They are held accountable against agreed performance targets (about one in eight has been closed through failure to do so). Charter schools may be run by for-profit businesses and in some states, California for example, public schools may opt for charter status. In 2007-08 (the latest year for which figures are available) 3,560 of the 90,760 elementary and secondary schools in the United States (3.9 per cent) were charter schools[19].

7.8. Where charter schools are over-subscribed the places are often settled by random allocation[20]. This sets up the interesting natural experiment of being able to compare the children who did and did not get in. It turns out that the children admitted to charter schools have tended to do better than those missing out in the lottery[21]. But the reasons are contested. Advocates claim it is due to the effectiveness of the schools, but it is also possible that a critical mass of motivated pupils is mutually enhancing whereas in the public school system enthusiasm for learning is diluted among less committed peers.

Sweden

7.9. Sweden decentralized school management to its municipalities in 1991 and at the same time encouraged private providers to set up alternatives to municipal schools[22]. Parents were granted the right to choose schools and municipalities required to transfer per-pupil funding to privately-run schools approved by the government on the advice of the schools inspectorate. As of December 2009 about nine per cent of compulsory-age pupils and 20 per cent of senior high school pupils attended these alternative schools[23]. The schools must follow the national curriculum. As in the United States, they can be run by for-profit organisations among which Kunskapsskolan (knowledge school) is prominent.

7.10. It is envisaged that popular schools will expand to meet demand and, therefore, over-subscription will not be a continuing problem. Where demand does temporarily exceed places, places are awarded on a first-come-first-basis.

Specialist Schools

7.11. England has attempted to create diversity in a variety of ways. The Thatcher Government introduced government-funded independent schools called city technology colleges and the Major Government enabled some government-run schools to re-badge themselves as technology schools, language schools or sports schools. It also encouraged schools to opt out of local authority control to become free-standing grant maintained schools receiving their funding directly from the Government. The Blair Government ended the grant maintained scheme, but greatly expanded the role of specialist schools eventually envisaging that all maintained schools would carry subject labels. It also took over the city technology concept which it renamed the academies programme. The recently elected Cameron Coalition Government is seeking to extend that programme as a new version of Major's grant maintained education

[19] National Center for Education Statistics, Digest 2009 Tables and Figures, Table 100.
[20] Boyle, C. (2010). *Lotteries for Education*. Exeter: Imprint Academic.
[21] Ravitch, D. (2010). *The Death and Life of the Great American School System*. New York: Basic Books.
[22] Phillips, S. Raham, H. and Wagner, K. (2004). *School Choice: Policies and Effects.* Society for the Advancement of Excellence in Education.
[23] Education in Sweden http://www.sweden.se/eng/Home/Education/Basic-education/Facts/Education-in-Sweden/.

7.12. Of these approaches to diversity, the major contribution in England in terms of the number of schools has come from specialist schools. But such has been the antipathy to academic selection that none can assess the ability[24] of applicants for the subject the schools purport to specialise in. The specialist schools were granted extra money to specialise, but some have wanted to use this to improve in subjects in which they were initially weak. So we have the odd situation that language and music schools do better in science than the science schools themselves[25], which is all very confusing for parents.

7.13. In contrast, a number of countries do have specialist schools that are genuinely specialist in that they recruit on talent for the subject. Among OECD countries they are generally upper schools, and there are science schools in the United States, Japan, Korea and Turkey. Entry can be highly competitive, so that within systems we have characterised as non-selective there can be highly selective sub-groups. The Bronx High School of Science in New York (see Chart 7.2) has been the inspiration of many.

Chart 7.2: Bronx High School of Science, New York

Entry by competitive examination. Number of students on roll in 2007: 2,670 in grades 9-12. Approx 700 students admitted annually. Open to New York City residents. Acceptance based on score attained in SHSAT. Public-funded day school. Diverse student body representing almost every ethnic group in New York, with even split between males and females. Over 60 extra-curricular clubs. Many community partnerships, including Columbia University, NASA, Mt Sinai Medical Centre, Cisco Systems Inc. Six Nobel laureates among its alumni.

7.14. There are about one hundred schools in the United States specialising in science, maths and technology. Out of the 50 states, 30 have so far established such schools. Between them they provide for some 47,000 pupils, but this has to be seen against a background of nearly 20,000 public high schools and 15 million pupils in grades 9-12, and 3 million in grade 12 alone. Unlike the ordinary public high schools, the specialist schools have a selective intake. In New York, for example, eighth and ninth graders residing in New York City can take the Specialised High School Admissions Test (SHSAT), which is used to determine admission to the eight specialist schools. About one in five of the applicants (for example 6,100 out of 29,000 in 2008) are successful.

7.15. School diversity in England has run into the dilemma of who gets the places. Specialist schools have foundered because without being able to select on talent they have not really been able to specialise. When city technology colleges and academies have become popular they too have not been able to select academically. A variety of admission processes have been tried. One that is gaining ground is banding - administering a test not to select the most able, but as a basis for accepting applicants across the range of those coming forward. Lotteries have been tried but discontinued though they are used as a tie-breaker in settling places within bands. Other schools

[24] Sports colleges, performing and visual arts, modern foreign languages can select up to 10 per cent of their intake on aptitude, but most do not. At one time this also applied to design and technology. Sciences and maths schools, among others, are not permitted to do so since these subjects are regarded as involving abilities.

[25] Smithers, A. and Robinson, P. (2009). *Specialist Schools*. Buckingham: The Carmichael Press.

apply the national admissions code. This can lead to academic selection being replaced by social selection[26].

Grammar Schools

7.16. Within non-selective systems vestiges of academic selection have survived. As a result 164 of the 3,092 secondary schools in 2008 were grammar schools selecting their intakes. In addition, another 44 comprehensives retained or gained the right to partial selection by ability or aptitude. In Australia the government-funded independent and Catholic schools have been proving so attractive that the state of Victoria has been fighting back by opening some new grammar schools – on the grounds they are very popular with parents[27].

Résumé

7.17. Sub-groups of schools within mainstream education systems illustrate a variety of approaches to admissions. Where diversity has been encouraged as a basis for parental choice applications are rarely likely to coincide exactly with the places available. In the United States random allocation is a favoured method. In Sweden, on the grounds that for-profit providers are likely to expand provision to meet unmet demand, it is assumed the problem will not arise and any competing claims can be settled by first-come-first-served. Academic selection has survived in England and new grammar schools are being opened in Australia. The leading independent schools in England, free to admit on any basis they want, use entrance tests. Academies in England have tended to gravitate towards banding, that is quotas across the ability range. We assess the impact of the different OECD national systems on education performance and social segregation in the next chapter. But, as we have seen here, the mainstream characterisation may conceal the many nuances within a country.

[26] Smithers, A. and Robinson, P. (2010). *Worlds Apart*. London: The Sutton Trust.
[27] Personal communication, Catholic Education Office, Melbourne.

8. Impacts and Outcomes

8.1. Across the OECD education systems are organised in many different ways with a variety of admission arrangements. It is interesting to ask, therefore, what are the consequences of differentiating early or late, between or within schools, or allowing parents to choose schools over some authority assigning the places. Frustratingly, it is hard to get unambiguous answers. In the case of whole systems so many things other than the grouping of children are involved among them: the importance attached to education, how much money is put into it, the quality of teachers, employment opportunities, and the extent and type of immigration. There are also issues about how success is to be judged. Is a good education system one that identifies and develops talent to the fullest even if outcomes are unequal and resources are applied unevenly, or is it primarily one that seeks to promote equality and a cohesive society? These ends may not be entirely compatible.

8.2. It is also not easy to judge the success of school types. It can usually be shown that particular types - charter schools in the United States, Kunskapsskolan in Sweden, academies in England - do better than mainstream schools. But it is not clear whether this improvement in individual schools means an improvement in the system as a whole or whether it is mainly due to the redistribution of pupils with the more able and motivated clustering in those schools. The failure of the early success of specialist schools in England to scale up to the system as a whole suggests that pupil redistribution occurred.

Performance

8.3. The best source of data for comparing education systems is the OECD's three-yearly PISA surveys. In analysing the 2006 surveys PISA carried out broad correlations between a number of structural features of the education systems and performance in science. Chart 8.1 shows that only two associations were statistically significant both to do with how spread out the results were. Essentially they showed the more spread out the scores, the higher the mean performance, probably because the system was getting the best out of the potentially top performers. This finding is something of a blow for the OECD which has been extolling the virtues of high performance low variance systems[28].

8.4. None of the other features correlated with performance in the science tests. Not the number of distinct school types or educational programmes; nor the first age of selection; nor the proportion of repeaters; nor the variance between schools. There were hints of links with social background and whether there were external examinations, but these were a long way off significance. Does this mean then that there is no connection between the organisation of the education system and how well pupils do? Or is it just a failure to demonstrate it? We should not be surprised at the lack of even tenuous links to emerge in the OECD analysis. The variables were very broad brush, the science test is a literacy test with a mix of components and many things intervene between the organisation of the education system and the results. For example, the proportion and kinds of new entrants to the country has a big impact. Across the OECD indigenous pupils scored on average 506 on the science measure compared with 453 for first generation immigrants and 466 for second generation immigrants. In the analysis they are all bundled up together. Similarly, the results are an amalgam of the scores of

[28] OECD (2004). *Learning for Tomorrow's World. First Results from PISA 2003*, page 197.

government and independent schools. Across the OECD government-run schools scored on average 496, government-funded independent schools, 515, and fully independent schools, 544.

Chart 8.1: Correlations with Mean Performance on the Science Scale[1]

Feature	Correlation Coefficient	Probability
Number of school types or distinct educational programmes available to 15-year-olds	-0.15	0.45
Proportion of 15-year-olds enrolled in programmes that give access to vocational studies at the next programme level or direct access to the labour market	0.17	0.40
First age of selection in the education system	0.23	0.23
Proportion of repeaters in lower secondary education	-0.20	0.28
Proportion of repeaters in upper secondary education	-0.22	0.24
Variance of student performance on the science scale	**0.47**	**0.01**
Total variance expressed as a percentage of the average variance in student performance across OECD countries	**0.46**	**0.01**
Variance between schools expressed as a percentage of the average variance in student performance across OECD countries	-0.03	0.88
Strength of the relationship between student performance and the PISA index of economic, social and cultural status	-0.30	0.10
Existence of standards-based external examinations	0.29	0.12

1. Values shown in bold are those statistically significant at the 5 per cent level (P<0.05).

Source: PISA 2006, Volume 1 - Analyses, Figure 5.2, page 220.

8.5. Perhaps then it is optimistic to expect anything at all from the data, but it is possible to drill deeper. In this report we have brought the education systems of the OECD countries together in five groups, one of which (II) we have characterised as selective since there is differentiation between schools by ability in lower secondary education. This interpretation is borne out by the reports of the headteachers in the survey on school admissions (Chart 3.3, page 15). In addition two other countries - Japan and Korea - reported admissions to be mainly on academic record reflecting the highly competitive entry to upper secondary education. Since the PISA survey was of performance among 15-year-olds it is reasonable to add in these two countries as selective systems since there would have been a backwash in lower secondary education. In two countries Mexico and Turkey many 15-year-olds were not in education so we have left these aside in this comparison.

8.6. On these assumptions we have been able to divide OECD countries into ten countries with selective education systems (Austria, Czech Republic, Germany, Hungary, Japan, Korea, Luxembourg, Netherlands, Slovakia, Switzerland) and 18 with non-selective systems (Groups I, III, IV, V minus Turkey). In Chart 8.2 we compare performance of the two groups on the science scale overall and the dimensions of which it is composed. On all parts the selective systems were ahead, on some more than others. The difference was highest for 'knowledge in the physical sciences' where the selective systems on average scored 518 against 500 for the non-selective systems. There was almost no difference on 'identifying scientific issues'. Overall the selective systems

were ahead by 511 to 503. This is in spite of the selective systems including one low performer (Luxembourg) and the non-selective systems one very high performer (Finland). If these are excluded the difference for physical science knowledge becomes 522 against 496.

Chart 8.2: Selective and Non-Selective Systems[1]

Scale	Selective	Non Selective
Physical Systems	518	500
Living Systems	512	506
Earth and Space Systems	511	502
Knowledge About Science	508	505
Using Scientific Evidence	512	503
Explaining Phenomena Scientifically	513	503
Identifying Scientific Issues	505	504
PISA Overall Score	511	503
PISA Percentage High Performers[2]	10.1%	9.3%
TIMSS 2007 Grade 8 Science Score[3]	546	512

1. The Selective group are the 10 countries in Chart 6 in which the headteachers reported that academic record and recommendation from feeder school were a major factor in school admissions. Non selective systems are the 18 countries in which academic ability was not taken into account. Mexico and Turkey have been excluded because less than 90 per cent of 15 year olds in education.

2. 633.3 points and above.

3. 4 selective systems and 6 non-selective systems also took part in TIMSS 2007

Sources: PISA 2006, volume II, Analyses, Data, Tables 2.1c, 2.2a, 2.2c, 2.3c, 2.4c, 2.7, 2.8, 2.9, 2.10, pages 27-52; TIMSS 2007 Mathematics and Science Achievement at the 8th Grade Summary Sheet.

8.7. Chart 8.2 also shows that, in line with PISA's finding that the countries with a larger spread of scores tended to get the better mean scores, the selective systems having a somewhat higher proportion of top performers. Ten of the countries also participated in the 2007 Trends in International Mathematics and Science Study (TIMSS) of science performance among eighth graders (14-year-olds). Four were selective (Czech Republic, Hungary, Japan and Korea) and six non-selective (England, Australia, Italy, United States, Norway and Sweden). Here the difference in favour of the selective systems was greater 546 to 512. The bigger difference could reflect the particular countries involved, but it could also have been due to the nature of the tests. The TIMSS science scale is more directly related to curricula and about testing knowledge, so it is closer to the knowledge components of PISA on which the differences were greater.

8.8. Too much importance should not be read into what are after all small differences. But the findings do at least show that we should not get carried away with Finland. And they do challenge what has been PISA's narrative from the outset: that non-selective systems do better. Non-selective systems may be desirable on other grounds – for example, social cohesion and some interpretations of equality - but in terms of getting the best out of pupils in the sciences at least a case can be made for selective education.

Social Outcomes

8.9. PISA has also collected information on how pupils vary between and within schools and how much of this variation is attributable to social background. Chart 8.3 sets out the data for our five groups.

Chart 8.3: Variance Between and Within Schools[1]

Group	Country	Variance[2]			Variance Explained by Social Background[3]	
		Between Schools	Within Schools	Total	Between Schools	Within Schools
I	England	23.5	**97.8**	**124.4**	8.6	**6.1**
	Australia	19.8	**91.1**	**110.6**	7.8	4.3
	Canada	17.9	**79.3**	97.5	4.3	3.2
	New Zealand	20.0	**106.0**	**125.2**	**10.6**	**10.1**
II	Austria	**60.7**	50.7	106.5	7.9	0.6
	Czech Republic	**62.4**	55.9	**108.0**	**12.7**	1.7
	Germany	**66.2**	50.8	**110.4**	**11.6**	1.4
	Hungary	**60.5**	38.5	86.1	**9.4**	0.2
	Luxembourg	30.5	72.7	104.3	**12.4**	**6.0**
	Mexico	25.5	38.2	72.3	4.2	0.3
	Netherlands	**59.6**	40.0	101.2	6.8	0.7
	Slovakia	40.9	55.6	96.4	**11.7**	2.6
	Switzerland	37.5	66.7	**109.6**	8.0	4.8
III	Belgium	**57.0**	53.0	**109.1**	**11.7**	2.0
	Italy	**52.6**	51.8	100.8	4.8	0.4
	Portugal	27.8	58.5	87.2	8.8	3.6
	Spain	12.7	74.2	90.8	5.0	**5.3**
IV	Greece	**48.5**	55.1	93.9	**11.3**	1.7
	Ireland	16.9	**82.6**	98.9	7.4	4.9
	Japan	**53.0**	59.4	**109.4**	2.9	0.1
	Korea	31.8	59.3	90.2	3.8	0.4
	Poland	12.2	**78.9**	89.7	5.5	**8.6**
	USA	29.1	**94.0**	**124.7**	**12.7**	**7.7**
V	Denmark	14.8	**82.0**	95.6	6.0	**8.1**
	Finland	4.7	76.7	81.4	1.2	**5.5**
	Iceland	9.3	**95.4**	103.2	0.1	**6.4**
	Norway	9.9	**88.8**	99.1	2.8	**5.2**
	Sweden	11.5	**85.8**	96.3	4.4	**6.2**
	Turkey	40.8	35.8	77.2	5.9	0.7
	OECD Average	33.0	68.1	100.0	7.2	3.8

1. Bold figures signify 0.5 SD or more above OECD average.

2. Variance expressed as a percentage of the average variance in student performance across 0ECD countries.

3. Social background measured as PISA Index of economic, social and cultural status.

Source: PISA 2006, Volume 2 - Data, Table 4.1a, page 96.

7.18. Not surprisingly, it is the selective systems (Group II) that have the greater variation in performance between schools, and the non-selective secondary systems (Group I) and

the all-through schools of Scandinavia (Group V) that have the greater variation within schools. They are not alone however. The United States and Ireland also have high variance within schools and Belgium, Italy, Greece, Japan and Turkey between them. England, New Zealand and the United States have high levels of variation overall while the school populations of Finland, Hungary, Mexico and Turkey are much more homogenous. In the case of the latter two this could be because not everyone is in school and those attending could be from similar backgrounds.

8.10. Chart 8.3 also shows how much of the variance between and within schools can be attributed to social background. Given the consistent finding that educational performance and socio-economic status are closely linked it is not surprising that a pattern emerges across the different education systems. The Scandinavian countries (Group V) are the most distinctive with a high proportion of the variation in performance within schools, but relatively little between schools attributable to social background. The reverse obtains in some but not all of the selective systems (Group II) But ability is not the only reason for social differences between schools. The United States, Belgium, Greece and New Zealand, all have relatively high proportions of the variance between schools attributable to PISA's economic, social and cultural index even though they do not select by ability.

Parental Choice

8.11. As well as the impacts of the structure of educational systems on performance and the distribution of pupils it is important to ask is the theory that parental choice leads to better outcomes borne out. Woessmann (2009) makes the bold claim that choice is 'a tide that lifts all boats'[29]. He and his colleagues arrive at this conclusion from analysis of the PISA 2003 round of tests. They took the proportion of pupils in private schools as their main measure of choice and competition and found that pupils in countries with more private schools tended to do better. The effect was enhanced if the private schools were government funded. Woessmann *et al* also claim to have demonstrated a choice and competition effect among state schools. They found that in urban areas where choice of school was possible pupils who said they were attending a school because it was better tended to obtain higher maths scores than pupils who said they were attending a school because it was local.

8.12. The raw 2006 PISA science results support Woessmann's claim that pupils in private schools do better. In Chart 8.4 independent schools defined as government-funded autonomous schools and fee-paying independent schools are compared with schools that are government-run. Overall there is a 25 point difference in favour of the independent schools. The PISA analysts themselves are not comfortable with this finding and believe that it is due mainly to the social composition of the schools. When they allow for differences in the background of the intakes, the difference reduces to eight points. Further when they build in an adjustment for the context created by socio-economic status they can turn the difference into a 12 point advantage to government-run schools. But socio-economic status is so closely associated with ability that to measure one is to measure the other. Removing socio-economic factors also takes out ability differences. An alternative explanation of PISA's results, therefore, is that the government-run/private divide is attributable to the abilities of the intakes.

[29] Woessmann, L., Luedemann, E., Schuetz,G and West, M.R. (2009). *School Accountability, Autonomy and Choice around the World.* Cheltenham: Edward Elgar.

Chart 8.4: Science Scores of Independent and Government Schools

Group	Country[1]	% Independent Schools[2]	Ind Scores minus Govt[3,4]	Adjusted for SES Pupils[5]	Adjusted for SES Pupils & Schools[6]
I	England	6.2	**86**	**51**	16
	Canada	7.0	**44**	**26**	10
	New Zealand	4.5	**77**	**39**	10
II	Austria	9.3	-1	-8	-19
	Czech Republic	3.7	-23	-30	-41
	Germany	5.7	40	**20**	-12
	Hungary	15.8	34	12	-15
	Luxembourg	14.4	-25	-20	-13
	Mexico	10.3	**53**	17	-21
	Netherlands	**67.0**	3	4	7
	Slovakia	7.7	15	-2	-18
	Switzerland	4.5	-2	-26	-63
III	Italy	3.6	-18	-24	-38
	Portugal	9.0	24	16	9
	Spain	**34.7**	38	16	5
IV	Greece	5.1	**76**	**30**	-39
	Ireland	**58.2**	34	**20**	7
	Japan	**29.9**	-13	-26	-58
	Korea	**46.3**	-4	-2	1
	USA	7.4	**63**	**28**	0
V	Denmark[4]	23.9	17	8	1
	Sweden[4]	8.3	30	17	9
	OECD Average	4.1	25	8	-12

1. Countries omitted if fewer than 3 per cent in independent schools or data withdrawn by the government.

2. PISA counted both the government-dependent schools and private schools as independent in these calculations.

3. Independent schools scores minus those of government schools.

4. Figures in bold 0.5 SD or more above OECD average.

5. Pupils' family background taken into account through Index of Economic Social and Cultural Status.

6. Adjusted for economic, social and cultural status of schools.

Sources: PISA 2006, Vol 2 – Data, Table 5.4, pages 166.

8.13. The differences also relate to selection in the state system. What stands out in Chart 8.4 is that the biggest differences in favour of independent schools occur when the state system is non-selective (Group I). In contrast, when the raw scores are adjusted for the social background of the pupils and the school, nearly all the selective systems (Group II) show a difference in favour of state schools. It appears that the performance gap is narrowed when there are selective government-run schools[30].

[30] In England the proportion of pupils going to independent schools declined to less than 5 per cent in the heyday of grammar schools. Even now parents will put their children in for grammar school entrance exams and pay for them to go to an independent school if they are unsuccessful.

Résumé

8.14. Analysis of the PISA 2006 science results fails to support the long-standing claim from the PISA that non-selective systems do better[31]. There are even indications that the science scores are higher in selective systems. The TIMSS 2007 results also show differences in favour of selective systems. Selective systems show the largest variation in social composition between schools and non-selective systems within schools. Within school variation is higher in the non-selective comprehensive systems of the English-speaking world than the all-through schools of Scandinavia suggesting that social selection is occurring. Private schools do better than government-run schools. This has been variously interpreted as arising from the beneficial effects of parental choice, the role of socio-economic factors, and ability differences.

[31] PISA itself admits as much in *Science Competences for the Modern World. Volume 1 – Analysis*, page 222, 'The OECD countries with more stratified education systems tend to perform less well, but this tendency is small and *not statistically significant'* (our italics). This is even after including Japan and Korea with the non-stratified systems.

9. Shaping the Education System

9.1. Our major themes have been school structures and pupil admissions. One affects the other. Structures may determine the admission procedure, so that if there are schools for the very able, there has to be way of selecting on educational merit. But also the admissions procedures can influence the shape of the system. If schools, for example, inadvertently select on social characteristics, schools bearing the same label will come to differ markedly from each other. In considering structures and admissions, it is important to distinguish entry to lower secondary education which is compulsory from entry to upper secondary education which in many countries is voluntary.

Admissions to Lower Secondary Education

9.2. Across the OECD there are at least a dozen ways of deciding who gets to go to what school, ranging from unfettered parental choice to pupils being assigned to particular schools by a relevant authority. These are listed in Chart 9.1 together with examples and a brief indication of the advantages and drawbacks. Parental choice can be unrestricted, limited to residence zones, or to particular types of school. The other side of the coin of parental choice is that where there are more applicants than places decisions have to be taken about who gets in. Schools, in effect, select. They may be governed by a national admissions code, adopt an approved enrolment scheme, or they may be free to decide by whatever means. Schools may work together to smooth out any imbalances. One Roman Catholic school may be a lot more popular than another, for example, but the parents be persuadable on religious grounds to accept a place at the less desirable one. Academic selection both between and within schools is widely practised. Ability testing is not always used to identify the highest performers; it can be used as a basis for quotas across the ability range. There are examples of lotteries and first-come-first-served being employed as tie-breakers. Sometimes it has been assumed that competition between parents for places could be got round by creating more good schools. Oversubscription does not become an issue if parents, as in some countries, will accept being assigned to a school, since provision can be closely matched to the places needed. Nowhere seems to resolve the competition for places by pricing, the essence of markets, so the application of a market philosophy to school admissions can only be partial.

Chart 9.1: Potential Methods of School Admissions

Method	Examples	Advantages	Drawbacks
Parental Choice: parents free to express preferences	Maintained schools in England	Parents in driving seat	Choices may not correspond to places so there has to be selection by schools
Restrictions on Choice: parent free to choose within limits	Denmark, Norway, Sweden, Portugal	A place in a local school is assured, but parents can apply elsewhere if there is room.	Difficult to draw school zones especially in cities
Admissions Code: sets out national criteria including proximity, siblings, faith, disabilities etc	England, Portugal, Spain	Sets out national rules	Loopholes have to be closed complicating the code; appeals bureaucracy

Enrolment Scheme: authorisation of individual school's admissions scheme	New Zealand, Ireland	Schools can prioritise according to local circumstances	Schools will grow apart with the gap between the best and the worst likely to increase
Schools Free to Admit how they Choose	Independent schools	Underlines school autonomy	As for enrolment schemes, plus some schools would choose to introduce academic selection
Similar Schools in Consortia	Catholic schools in Australia	Places provided in a similar school if first choice cannot be met	Schools have to be genuinely similar eg bound by a shared ethos
Academic Selection: admission by test and/or academic record	Selective education systems as in Germany, Netherlands; upper secondary education in most countries; specialist schools as in USA, Japan, Korea; independent schools	Pupils admitted on educational merit irrespective of home income	Those not selected can become disaffected
Banding: pupils tested but places distributed across ability levels	Some academies in England	Intake from across the ability range	For popular schools competition more intense in upper bands so parents may tell children to do badly in the admissions test
Random Allocation	Lower secondary education in Korea; charter schools in USA	By definition fair	Parents may object to losing control
First-Come-First Served	Belgium; 'free schools' in Sweden	Applies the principle of the queue	Can lead to Wimbledon-tennis-type queues
Pupils Assigned to Schools: parents may be able to apply for derogation	France; Turkey	Cost effective because it is possible to plan accurately for places and takes away the angst of choosing a school.	Parents who have expecting to choose are unlikely to want to be told what to do
More Good Schools	'Free schools' in Sweden	Over-subscription sorted by opening more good schools	Not easy to open a good school; may merely shift over-subscription
Price	None, not even independent schools	Essence of markets	Able children from low income homes shut out

9.3. In England a mix of admission arrangements is used. Schools mainly have to comply with a national admissions code which as it has attempted to plug perceived loopholes has grown more and more elaborate. Some schools are in charge of their own admissions; others receive applications via local authorities. The 164 grammar schools select on ability and 44 comprehensive schools have retained or gained the right to select part of their intakes on ability or aptitude. Curiously, the specialist schools are

not able to select on ability unless they are already grammar schools. The new academies are experimenting with lotteries and banding. Securing entry to a popular school has become a major logistical exercise for parents. The canny ones study the admission code and seek to move as close to the desired school as possible, demonstrate membership of a church if it is a religious school, or claim particular needs. Once they have got one child into the desired school they can relax because brothers and sisters would be admitted on the siblings rule.

9.4. If a government wanted to simplify the arrangements and cut through all this game playing what should it do? The answer depends on what it wants to achieve and how it views the composition of schools. Assuming it wants the system to run on parental choices, we can see four main options: enrolment schemes, restricting choices, random allocation and academic selection**.**

Enrolment Schemes

9.5. In our view the admissions code has become so complicated because it is an attempt to cover all bases on a national scale. There would appear to be good arguments for allowing each school to arrive at an enrolment scheme tailored to local circumstances which would be approved by some relevant authority. This would be in keeping with the Academies Act 2010 which paves the way for 'free schools' and an extended academies programme and with the Government's desire to promote school autonomy. Acceptable criteria could be defined narrowly or considerable freedom allowed. Schools could even be permitted to select on ability if they wished. This would get the Government off the hook over grammar schools. It would also be a way of making specialist schools a reality.

9.6. There could be problems of acceptability to the electorate, but these could be got round by pitching the framework in which schools had to operate at the right level. More fundamentally, schools would be likely to grow further apart. Good schools would become even better, and less popular schools would be likely to struggle even more. But the very great advantage is that, consistent with the Government's philosophy, it would greatly reduce the bureaucracy of central control.

Restricting Choices

9.7. The Scandinavian countries are able to take much of the pain out of parental choice by the use of school zones. Parents who live within the zone are guaranteed a place; they are free to apply elsewhere but will only gain admission if there is room after priority has been given to local children. Oversubscription in England stems in part from the Greenwich judgement which ruled it unlawful to restrict entry to local authorities[32]. Limiting choices does have some appeal in that it assures places. But it would not be easy to apply in England due to the difficulties in drawing enrolment zones, especially in London and other cities. Living in the zones of good schools would put an even greater premium on house prices and lead to more social segregation. In a heterogeneous country like England it would, in effect, become school selection through house prices.

[32] House of Commons Education and Skills Committee (2004). Secondary Education: School Admissions. Fourth report of Session 2003-04, Volume 1, page 11, footnote 13.

Random Allocation

9.8. If, on the other hand, the Government wanted schools to become more similar in their intakes, then the simplest and fairest way of achieving that would be by random allocation. Parents would be free to choose a school, but if there were more applicants than places, who got them would be decided by random allocation. This has been employed successfully in lower secondary schools in Korea and charter schools in the United States. But it is not without its problems. Electorally, it might be difficult to win acceptance for it among those parents who know how to manipulate the present arrangements and are confident of getting their children into the preferred school. Random allocation would take this power away from them. If there is a good school A alongside a poorer one B then as things stand canny parents know how to get their children into school A. However, under random allocation they could end up in school B. This would narrow the gap, but it would also upset a significant number of the voters needed to get into office[33]. Technically, too, there are problems, but these could be ironed out. What for example happens if a parent has three choices and misses out on the lot? The child could end up in the least desired of all local schools.

Academic Selection

9.9. Such is the emotion attached to selection that it is almost never considered, yet it has to occur sometime during education. In most countries it occurs mainly on entry to upper secondary education. But nine countries differentiate in lower secondary education. In Australia, the Victorian state government is opening new grammar schools as a way of competing with the independent schools. If social mobility is about ensuring that able children from low income homes do not miss out, then there is a case for testing to establish who are those able children. John Major in his massive electoral defeat of 1997 was proposing a grammar school in every town, but the policy was swept away with his government. The expansion of the grammar schools, however, remains a strand in Conservative thinking. This could be satisfied by freeing up schools to decide their own admissions criteria through approved enrolment schemes.

Entry to Upper Secondary Education

9.10. There is striking consistency in the upper secondary education of OECD countries. With few exceptions it consists of an array of pathways embracing pre-university studies, technical studies and preparation for the various fields of employment. Entry to the particular pathway is decided by performance in lower secondary education, with or without an external examination, and is therefore selective. The different pathways are of different lengths so that in only three countries – Hungary, the Netherlands and some provinces of Canada - is it compulsory to stay on full time to age 18. In three others there is the requirement to remain in education or training at least part-time. But in 12 more countries over 90 per cent of pupils freely choose to stay on.

9.11. Upper secondary education in England lacks both the clear shape and widespread appeal of upper secondary education in other OECD countries. There has been much talk of education 14-18, but *de facto* upper secondary education begins at age 16 after GCSE. Unlike other countries this leaves the various routes squeezed into two years and while there is a well-developed ladder into university no British government has successfully introduced equivalent technical and vocational qualifications to complete the necessary array. Education 16-18 is sometimes provided in schools and sometimes in sixth form

[33] As was seen in Brighton. 'School lottery system divides Brighton and Hove', *The Argus*, 12 May 2009.

and tertiary colleges which were originally schools but now form part of the further education sector in which they are subject to different conditions. Some upper secondary provision does start at age 14. The new vocational diplomas are available from that age and the new technical schools being promoted by the former Secretary of State, Kenneth Baker, and supported by the Government, begin at 14.

9.12. In considering the structure of the education system in England, the Government should give priority to establishing a clear shape for upper secondary education. It should, among other things, decide:

- whether it sees it as beginning at age 14 or age 16;
- whether it wants education to be compulsory to age 18;
- what it sees as the future role of the GCSE – essentially the current school leaving examination – if education and training to age 18 becomes compulsory;
- whether there is a case for sixth form colleges rejoining the schools sector.

9.13. On our interpretation, the lessons from the OECD are:

- there needs to be a comprehensive array of equivalent pathways leading to university, to technical training and to employment;
- the pathways would be intrinsically of different lengths so it is counterproductive to squeeze them into the strait jacket of a common leaving age;
- entry to those pathways requires authentic information on capabilities;
- there needs to be a clear overarching structure for the pathways.

9.14. If the Government wished it could make education 14-18 a reality by moving and adapting GCSE as the national examination for 14-year-olds. This would then become the natural starting point for an array of awards taking young people in different directions. If these were sufficiently attractive, young people would want to stay on for as long as the course took and there would be no need for all the sticks necessary to impose staying on to age 18. Education 14-18 could take place in different types of school, further education colleges and the workplace. Within a differentiated system there would be the opportunity to make sense of the specialist schools programme by allowing some to genuinely specialise by selecting on talent for the subject, as is the case in the United States, Korea, Japan and Turkey.

9.15. An alternative scenario would be to improve 16-18 by adding to A-levels employer-designed awards for technical training and work-related skills which meant something and led somewhere. But that would still leave lower secondary education over-long and upper secondary education short by OECD standards and do nothing to clarify education 14-16.

Conclusion

9.16. There should be a better shape to upper secondary education. In essence there should be a comprehensive array of pathways chosen on the basis of what a pupil can do, what they like doing and what they want to do. It could begin as now at 16. But the

Government should look to making education 14-18 a reality by adapting the GCSE to become a national examination at age 14 to provide objective information about capabilities. Upper secondary education would be differentiated, with entry by a choice/enrolment process. Allowing young people to decide whether or not they wanted to stay on would be an important test of the quality of what was on offer.

9.17. On admissions, the Government should ask itself: how does it want pupils to be distributed across the system?

- If it is happy for pupils to separate on social lines as now, then it could take much of the pain out of school admissions by assuring children of a place at their local school.
- If it wants school intakes to become more like each other, it should introduce random allocation among applicants.
- If wants children to be grouped on educational merit, it should allow more selection by ability.

9.18. But it would not be necessary for the Government to take these decisions at a national level if it were to allow schools to set their own criteria. It could follow the example of New Zealand where schools individually agree enrolment schemes, or it could go the whole hog and allow state schools the same freedoms as independent schools. Where there was local demand the schools might include some element of academic selection, but this would be for them, not something that was centrally imposed.