



School type and inequality

Rita Nikolai, Anne West

Angaben zur Veröffentlichung / Publication details:

Nikolai, Rita, and Anne West. 2013. "School type and inequality." In *Contemporary debates in the sociology of education*, edited by R. Brooks, M. McCormack, and K. Bhopal, 57–75. London: Palgrave Macmillan. https://doi.org/10.1057/9781137269881_4.



The state of the s

School Type and Inequality

Rita Nikolai and Anne West

Introduction

Educational outcomes are strongly associated with family background, with children from higher socio-economic backgrounds being more likely to be academically successful than those from lower socio-economic backgrounds (Breen and Jonsson, 2005; OECD, 2012; Pfeffer, 2008). However, since the Second World War, in the majority of developed states, attention has been focused on increasing educational opportunities between different socio-economic groups; girls and boys; those from different migrant, ethnic or racial groups; and those with and without special educational needs.

Nevertheless, the question as to whether educational reforms have reduced educational inequality remains controversial. Thus, Shavit and Blossfeld (1993) found that in 11 out of 13 industrialised countries, inequalities in educational attainment between people from different socio-economic backgrounds had been remarkably stable since the early twentieth century. Depending on the data sets used and the methods adopted, some studies support this 'persistent inequality' thesis (Shavit et al., 2007; Pfeffer, 2008). However, Breen et al. (2009) found a decline in class and gender inequalities in educational attainment and called for a revision of this thesis. Despite these differences, there is agreement that countries differ widely in the extent to which parental background influences children's educational attainment.

Cross-national variation in the extent of influence of parental background on attainment has been attributed to institutional features of different school systems (Kerckhoff, 1995; Pfeffer, 2008). However, the mechanisms by which these features exacerbate or reduce educational inequality remains unclear. This chapter seeks to contribute to research on school systems and educational inequality in two ways. First, we investigate how different forms of school tracking, explicit and implicit (Maaz et al., 2008), influence educational inequality. We focus on two countries, Germany and the UK. In both countries, following the Second World War, selective systems of secondary

education were introduced with explicit school-level tracking and different school types for children of different abilities: Gymnasium, Realschule and Hauptschule in Germany and grammar, technical and secondary modern in the UK.

In Germany, an almost fully selective system has been retained; explicit school-level tracking thus remains. In the UK, a complex system has evolved, with a comprehensive system in Scotland and Wales, a partially comprehensive system in England and a selective system in Northern Ireland. In the UK, there is no system-wide explicit school-level tracking but, as we shall see, there is what can be termed implicit school-level tracking.

Second, we explore different types of inequality: school access, school processes and educational outcomes. The role played by socio-economic background is particularly significant in relation to educational achievement (e.g., DfES, 2007) and this dimension is our main focus in this chapter. There are, of course, also inequalities associated with gender, race, ethnicity, migrant status and special educational needs, but due to space limitations we focus, in the main, on socio-economic background.

Our analysis is underpinned by Boudon's (1974) theoretical model of educational transitions and utilises recent empirical research along with data from the Programme for International Student Assessment (PISA) and national statistics. In terms of equality of access, we analyse the socio-demographic characteristics of pupils in different school types. In relation to equality of school processes, we differentiate between programmes available in different school types, and in relation to educational outcomes, we focus on pupils' achievement levels in tests and examinations during or at the end of compulsory secondary education.

The following section outlines previous research concerned with the institutional structure of school systems and educational inequality. This is followed by case studies of school systems and inequality in Germany and the UK and a comparison between the two countries. The final section concludes with a discussion of the relationship between school type and inequalities and how the institutional framework is associated with these inequalities.

Institutional structure of school systems and educational inequality

A wide range of theoretical explanations has been used to explore the relationship between social background and educational inequality. A common feature of much of the research is the assumption that social inequalities in educational opportunities are the result of socialisation and educational decisions taken at various stages (Becker, 2003; Breen and Golthorpe, 1997; Breen and Jonsson, 2000; Erikson and Jonsson, 1996; Müller and Karle, 1993). Social origin is more strongly associated with educational attainment

at younger ages implying that 'comprehensive school reform in which the earliest decision point is postponed reduces inequality of educational opportunity' (Breen and Jonsson, 2005, p. 228). Educational inequalities tend to emerge or to become amplified at points of transition. Moreover, early education decisions tend to predict educational pathways and later educational achievement.

How can social inequalities in access to education and educational success be explained? In seeking answers to this question, the distinction made by Boudon (1974) between primary and secondary effects of origin is relevant (see Figure 4.1).

Primary effects of social origin describe class-specific differences in relation to children's performance that are affected by parental education levels, resources and learning opportunities within the family. In short, children from higher socio-economic backgrounds are likely to perform at higher levels in school as a result of the favourable economic, social and cultural conditions in the parental home. Secondary effects are related to the disparities that may arise when families from different backgrounds make educational choices (see Maaz et al., 2008). According to sociological expectancy-value theories (Becker, 2003) parents consider the costs of education, investment and opportunity in accordance with their social origin. For those from higher socio-economic groups, the estimated costs of higher levels of

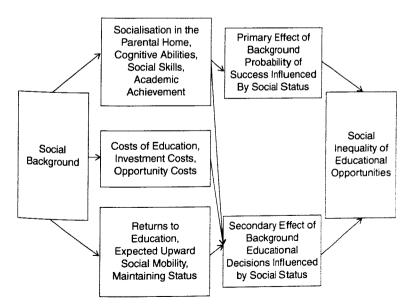


Figure 4.1 Mechanism affecting educational decisions (from Boudon, 1974) Source: Adapted from Maaz et al. (2008), p. 101.

education are lower, the probability of success is higher, the expected benefit of education is greater and the costs of loss of status are higher than for those from lower social groups (Becker, 2003; Boudon, 1974; Breen and Golthorpe, 1997; Erikson and Jonsson, 1996).

For Breen and Goldthorpe (1997, p. 292) 'educational decisions are driven by a desire of families to ensure that their children do not experience downward mobility'. In a similar vein Glaesser and Cooper (2011, p. 572) have argued that 'parents will consider not only the child's ability and institutional arrangements, but also their own experience and aspirations when taking decisions regarding their child's educational career'.

The use of rational choice theory has however been challenged by some sociologists in favour of approaches structured with reference to Bourdieu's concepts of economic, cultural and social capital (e.g., Gewirtz et al., 1995). Both approaches have been subjected to critique (see Hatcher, 1998). Thus, it is not the case that all parents within a particular socio-economic group make similar choices (cf., David et al., 1994; Hatcher, 1998) suggesting that a more nuanced approach is needed. Nevertheless, there is empirical evidence suggesting that, in general, parents from different social classes express different preferences in circumstances where there is, in theory, an element of choice (as in England; see Flatley et al., 2001).

Decisions about a child's educational career are dependent on the institutional context, and different school systems may attenuate or intensify the influence of social background (Kerckhoff, 1995). When making educational decisions – to the extent that choices are allowed – parents are faced with the institutional set-up of a school system which is an integral part of their 'opportunity structure' (Pfeffer, 2008, p. 546). Regulations and restrictions influence the framework in which parents operate and may affect equality of access.

A significant factor for the reproduction of educational inequalities is the degree of stratification (or differentiation) of educational opportunities (Allmendinger, 1989; Hopper, 1968). Stratification is generally understood as the extent to which 'educational opportunities are differentiated between and within educational levels' (Pfeffer, 2008, p. 546). It primarily refers to the timing and rigidity of pupil selection at the secondary level: unlike other institutional features of education systems, the selection process has consequences for other levels of education.

To understand how primary and secondary effects of social origin influence educational inequality we differentiate between two alternative forms of school-level tracking, explicit and implicit (see Maaz et al., 2008). Tracking policies in school systems vary. We focus here on school-level tracking (not e.g. ability grouping within schools). With explicit school-level tracking, pupils are assigned to different school types on the basis of their achievement in primary school. For instance, in a hierarchically tiered school system as exists in Germany, tracking of pupils into academic and non-academic tracks takes place at the age of ten. The tracks have different teaching approaches, the

teacher training programmes differ, and they lead to different destinations for pupils on completion. Implicit school-level tracking, on the other hand, can occur on the basis of factors such as area of residence (Maaz et al., 2008). It can also arise in the context of systems with a significant proportion of private schools, especially if they charge high tuition fees, or in a system where parents are able to make preferences for particular types of schools (e.g. those with more advantaged intakes) in systems that are predominantly comprehensive.

With regard to these different forms of tracking, how might we understand the primary and secondary effects of social origin? The following sections focus on Germany and the UK. Each examines the school systems and inequalities in terms of school access, school processes and educational outcomes.

Germany

In comparative social stratification research, Germany is considered a prototype of a stratified school system and is also characterised by early academic selection (Schneider and Thieben, 2011). Pupils are generally selected at the age of ten on the basis of teachers' recommendations to different types of school or tracks. Different qualifications are associated with different tracks. The academic track (Gymnasium) prepares pupils for the university-entrance qualification (Abitur). There are two other types of school that prepare pupils for vocational training: the Hauptschule (for the lowest ranking pupils) and the Realschule (for middle ranking pupils). Typically, there is little permeability between these school types. A small proportion of pupils attend the comprehensive Gesamtschule, catering for all ability levels (Schneider and Thieben, 2011).

Inequality of access

Over the past half century the higher tracks of lower secondary education (Gymnasium and Realschule) have expanded considerably, leading to substantial changes in the distribution of pupils in Germany's secondary school system. Thus, between 1955 and 1995, the proportion of pupils in the Hauptschule fell by nearly 50 percentage points (from 74 to 25 per cent). In the same period, the proportion of pupils attending the Gymnasium increased by 15 percentage points (from 16 to 31 per cent) and the proportion attending the Realschule increased by 18 percentage points (from 9 to 27 per cent) (BMBF, 2010; StBA, 2011). The Gesamtschule was introduced in the 1970s in some Laender; this is a comprehensive secondary school which prepares pupils for the leaving certificates of the other three main school types within one institutional setting. In 2010, 10 per cent of pupils attended the Gesamtschule (BMBF, 2010; StBA, 2011).

After decades of stability, structural change followed German reunification in the early 1990s: the federal states of the former German Democratic Republic adopted the basic logic of the tracking system, but not the West German tripartite model. Saxony, Saxony-Anhalt and Thuringia, for example, introduced two-tiered models consisting of an academic and a combined vocational track (Schularten mit mehreren Bildungsgängen). Further structural change has taken place in a number of West German Laender (e.g. Hamburg, Berlin, Bremen, Saarland), which are implementing reforms to abolish the Hauptschule. This amounts to the adoption of a two-tiered model consisting of an academic and an integrated vocational track.

Given the structural changes that have taken place, the chance of attending the Gymnasium or the Realschule has risen since the 1950s. However, since 1995, the distribution of pupils between the school types has remained stable (see BMBF, 2010; StBA, 2011). Given these structural changes it is reasonable to argue that educational inequalities in terms of access have reduced. Research studies analysing participation by social class confirm that this is the case (Klein et al., 2009; Müller and Karle, 1993; Schimpl-Neimanns, 2000), but considerable structural differences remain.

Table 4.1 shows the extent of social disparities with respect to different school types within the German secondary education system.

There is marked variation in terms of the participation in different school types by pupils from different social classes (Erikson, Goldthorpe and Portocarero's (EPG) social class groups). This is particularly marked in the case of the Gymnasium with 55 per cent of pupils from families of the upper service class attending this type of school and only 15 per cent from families of unskilled workers and farm labourers. The situation is reversed in the Hauptschule. Children with parents in EPG class VII are most likely to attend the Hauptschule and Realschule (30 per cent and 33 per cent, respectively).

The empirical sociological and economic literature strongly suggests that the transition from primary school to different types of secondary school is a key area at which social inequalities in the German education system emerge (Maaz et al., 2008; Maaz and Nagy, 2009; Neugebauer, 2010; Gresch 2012). At the end of primary school, teachers make a recommendation as to which type of secondary school pupils should attend. Depending on the Land, the primary school recommendation is more or less binding on parents: in some Laender parents are not entitled to choose a track other than that recommended whilst in others the track selected by the teachers may be changed following a meeting with parents (Gresch, 2012).

However, the influence of parents' socio-economic status remains, as teachers take parents' educational aspirations into account when formulating their school recommendations. And even in Laender without binding school recommendations, parents who have graduated from a Gymnasium tend to opt for their child to attend a Gymnasium rather than another type of secondary school. Moreover, parents who attended the Hauptschule or who left school without qualifications tend not to send their child to the Gymnasium, even if teachers recommend the academic track (Ditton and Krüsken, 2006; Maaz and Nagy, 2009). In short, the transition from primary to secondary school is not primarily a function of pupils' attainment in

Table 4.1 Percentage of pupils in different school types using Erikson, Goldthorpe and Portocarero's class categorisation (EPG classes), PISA 2009

EPG classes	Hauptschule	Realschule	Gymnasium	Integrierte Gesamtschule	Othersa
Higher-grade service class (I)	9	26	55	7	2
Lower-grade Service class (II)	12	29	43	11	5
Routine non- manual (III)	17	35	31	8	8
Self-employed (IV)	22	30	32	8	7
Manual supervisors/ lower grade technicians and skilled workers (V, VI)	25	35	20	9	11
Unskilled workers and farm labourers (VII)	30	33	15	9	13
Total	19	31	33	9	8

^a 'Others' includes special schools for pupils with special educational needs/disabilities and vocational schools

Source: Klieme et al. (2010), p. 248.

primary school, but of families' social background as this influences teachers' recommendations and parents' educational decisions. In short, secondary effects are the most significant source of educational inequality in the German school system: Neugebauer (2010), using nationwide panel data, found that secondary effects account for 59 per cent of social background differences in transition rates to the Gymnasium. Thus, the school system, together with family influences, structures the education decision via school recommendations

Inequality of processes and educational outcomes

The hierarchically tiered school system in Germany has had a significant impact on the learning environments in different school types (Maaz et al., 2008; Solga and Wagner, 2007) and as a result the German teacher training system is highly stratified (Blömeke, 2006). The specific teacher training programmes have in turn led to particular didactic traditions and specific curricula in different school tracks.

In addition to these institutional effects, compositional effects are also important. In the Hauptschule, the lowest educational track, there is a high concentration of pupils from educationally disadvantaged families.

those repeating years, those with low achievement levels and those from dysfunctional families (Klieme et al., 2010).² There is also an above average number of pupils with migrant backgrounds and with parents who have not completed tertiary education (see Solga and Wagner, 2007). Pupils in the Hauptschule are therefore at a disadvantage compared with those in the Realschule and Gymnasium in terms of the pupil mix. In short, different school types offer different learning programmes and different learning environments.

The different learning environments in the tiered German system are also associated with different levels of competence. Figure 4.2 shows the reading proficiency levels by school type from the 2009 PISA. Overall, the proportion of pupils performing below level 2 is 18.5 per cent, whereas the proportion of top-level performers in reading literacy accounts for only 7.6 per cent (competence level 5 and 6). However, there is considerable variation between the different secondary school types: the Hauptschule includes an above-average proportion of poorly performing pupils (around 50 per cent), whereas in the Gymnasium nearly a fifth of pupils perform at levels 5 or 6 (compared with less than 3 per cent in all other school types).

As shown in Table 4.1, a disproportionate number of children from the lower social classes attend the Hauptschule, where the reading competence levels are particularly low. Given that children from migrant backgrounds are also more likely to be from families that rank as lower social classes, children with a migrant background face particular disadvantages. They are likely to have poor language skills and are then confronted with a homogeneous social mix in the Hauptschule, offering a suboptimal learning environment (Stanat, 2006).

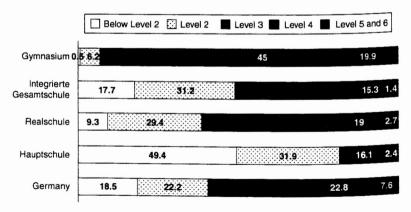


Figure 4.2 Percentage of pupils at different levels of competence in reading by school type, PISA 2009

Source: Klieme et al. (2010), p. 58.

UK

The four countries comprising the UK, England, Wales, Scotland and Northern Ireland have different education systems, a result of both their historical legacies and devolution (Adams and Schmuecker, 2006). The variation in the structure of the secondary school system dates back to the shift from selective to comprehensive schooling in the 1960s and 1970s. In Scotland and Wales, this change was system-wide and all publicly funded schools became comprehensive. In England, the change was not system-wide, and some grammar schools remain, whilst in Northern Ireland a selective system has been largely retained. There are also differences in terms of who is responsible for the provision of education: a significant minority of publicly funded schools are provided by the churches in England; and Scotland and Northern Ireland have significant numbers of Roman Catholic schools (Croxford, 2011).

In England, education reforms in the 1980s resulted in the introduction of quasi-markets, with parental choice of school, school diversity, greater school autonomy, funding following pupils and publication of examination 'league tables' being significant features. In Scotland and Wales parents also have a right to express preferences for a school of their choice, but catchment areas have been retained with local pupils being prioritised (Croxford, 2011; West et al., 2010).

In all four countries, external examinations towards the end of compulsory schooling and at the end of upper secondary education exist, and are published in the form of 'league tables' in England. These qualifications, awarded at appropriate grades, are generally required for admission to university.

Inequality of access

Access to different types of schools varies across the UK. In all countries, a small proportion of pupils attend independent fee-charging schools, which not only charge fees thus restricting access, but are also, in the main, academically selective. In the publicly funded sector, there are no academically selective (grammar) schools in Scotland or Wales, whilst in Northern Ireland nearly a third of schools are grammar schools with the remainder taking 'unselected' pupils (Croxford, 2011).

England, the largest country in the UK, also has the most complex school system. Overall, 93 per cent of the pupils of compulsory school age attend publicly funded schools with 7 per cent attending independent, fee-charging schools. The publicly funded secondary school system comprises academically selective and comprehensive schools. These can be further differentiated in terms of their administration into schools whose admissions are the prime responsibility of the local authority; foundation schools, whose admissions are the school's responsibility; voluntary-aided schools, most of which are church schools and whose admissions are also the school's responsibility;

and academies which are run by private, non-profit making companies, but are predominantly or entirely publicly funded;³ they, too, are responsible for their own admissions (West and Bailey, 2013).

Around 5 per cent of secondary schools are grammar schools, which require pupils to pass a test called the 'eleven-plus' in their last year of primary education and 5 per cent are secondary modern schools which take those not selected in areas where there are grammar schools. The remainder are nominally comprehensive. In terms of equality of access, grammar schools have a far lower proportion of pupils known to be eligible for free school meals, an indicator of poverty, than do comprehensive schools: only 2 per cent of pupils in grammar schools are eligible for free school meals compared with 15 per cent in comprehensive schools (DCSF, 2008).

Whilst overt academic selection does occur to a limited extent, there are also other forms of selection. First, a significant minority of schools have a religious character and these prioritise children of a particular faith (in the main Christian) or denomination (predominantly Roman Catholic or Church of England). Second, particular admissions criteria or practices can result in pupils being segmented; for example, a small proportion of schools select pupils on the basis of aptitude/ability in a subject area (West et al., 2011). Secondary schools thus have varied and complex admissions arrangements.⁴

Voluntary-aided schools with a religious character tend to have a lower proportion of children known to be eligible for free school meals (an indicator of poverty) than other schools (DCSF, 2008). Research focusing on selectivity in secondary schools with a religious character in London found that these schools tend to cater predominantly to pupils from particular religions and/ or denominations and ethnic groups, thus fostering segregation. In addition, they educate, primarily, pupils who are from more affluent backgrounds and with higher levels of prior attainment than pupils in non-religious schools (Allen and West, 2009). The likely reasons for secondary schools in England with a religious character admitting pupils of a higher social background and ability than their secular counterparts are complex: in one study, parents reporting a religious affiliation were more likely to be better educated, have a higher occupational class and a higher household income. Higher-income religious families were also more likely to have a child at a faith school than lower-income religious families (Allen and West, 2011). Church schools are likely to be sought for a variety of reasons: parents may want their child to be educated in a school with a religious ethos, they may apply because of the school's good examination results, or they may apply because the schools educate children 'like theirs'. There is also evidence in some areas of white families wanting their children to be educated in church schools that have fewer children from particular ethnic/religious groups (see Walford, 2008).

In terms of expressed choices, in England, since the education reforms of the 1980s, parents make preferences for schools of their choice. Flatley et al. (2001) found that where the mother was in a manual social class, parents

were less likely to cite academic factors as amongst the reasons for wanting a place at their favourite school. Noden et al. (1998) in a smaller study found that parents of children from working-class families were less likely to apply to, and their children less likely to go on to attend, higher performing secondary schools. This may arise from self-selection by parents/carers (e.g., choosing a school for 'people like us'), differences in resources to pay for transport, and differences between the capacities of different parents/carers to negotiate successfully school admissions administrative systems, as well as schools' admissions criteria and practices.

Equality of access is thus hindered by institutional rules. These rules, together with other factors, including parents' preferences, awareness of the school system and ability to navigate the admissions process also affect school composition.

Inequality of school processes and educational outcomes

Publicly funded secondary schools in the UK follow different curricula depending on the country and to some extent the type of school, but in all countries, the secondary curriculum is dominated by the public examination system with examinations being taken at or around the end of compulsory education and at the end of upper secondary education. We focus here on the achievements of pupils in England, which has a mix of school types, enabling inequalities in educational outcomes to be observed.

There are clear differences in terms of the achievement between schools of different types in England. Pupils typically take General Certificate of Secondary Education (GCSE) examinations in separate subjects just prior to the end of compulsory education (age 16). Pupils who obtain five or more high grade GCSE passes (grades A* to C) are normally able to progress to study General Certificate of Education Advanced (GCE A) levels (in a smaller number of subjects). GCE A levels, normally taken at the age of 18, are generally required for admission to higher education institutions.

In terms of educational outcomes, in 2011 virtually all pupils in grammar schools obtained five or more GCSE passes at grades A* to C (or equivalent) including English and mathematics, as did over eight out of ten pupils in independent, fee-charging schools. Nearly six out of ten pupils at comprehensive schools and half of those at modern schools achieved this level (see Table 4.2).

The data reported in Table 4.2 conceal some important differences. First, there are vocational qualifications deemed to be equivalent to GCSEs and GCE A levels. Thus, at the end of compulsory education, pupils may study for vocational qualifications that are counted for the purposes of schools' examination results (and league tables) as being equivalent to GCSEs. The precise nature of these examinations has varied over time; however, in one research study, more pupils were found to have taken vocational examinations in the

most deprived schools than in more advantaged schools. Whilst it is possible that this reflects different preferences of parents and pupils, the highest ability pupils were also entered for these examinations, suggesting that this explanation is unlikely as parents might have been expected to choose academic courses for their children. Rather, schools appeared to encouraging the uptake of vocational courses, which might have been related to 'league table' positioning (Sutton Trust, 2009), so adding support to the view that secondary transition effects are particularly important in reinforcing educational inequalities.

Second, that not all comprehensive schools have similar compositions and 'social selection' is evident in the highest performing, nominally comprehensive schools. The overall proportion of pupils eligible for free school meals at the 200 highest performing comprehensives in 2005 was 6 per cent, compared with 12 per cent in the postcode sectors of the schools, and 14 per cent in secondary schools nationally (Sutton Trust, 2006). Significantly, nominally comprehensive schools, responsible for administering their own admissions, were more likely to feature in the 'top 200' than those which were not. These schools accounted for 31 per cent of state secondary schools, but 70 per cent of the top 200; they were found to be unrepresentative of their local areas, with fewer pupils being eligible for free school meals (an indicator of poverty). Schools with a religious character accounted for a disproportionately high number of the 'top 200' comprehensives.

Germany and the UK

In the previous sections, we have provided case studies of Germany and the UK which focus on the school systems in each country and inequalities with reference to access, school processes and outcomes. Due to the different systems and different data sources, we were not able to make

Table 4.2 Achievements of candidates by school type in England 2010/11

School type (N)	% of pupils aged 15–16 achieving 5 or more GCSE passes grades A*–C or equivalent including English and mathematics	% of pupils aged 16–18 achieving AAB or more passes at GCE/Applied GCE A levels	
Comprehensive	57.8	14.8	
Grammar	98.7	40.9	
Modern	50.8	5.4	
Independent (fee charging)	82.8	46.0	

Source: DfE (2012a, 2012b).

direct comparisons between the two countries. However, data from the PISA survey, which assesses pupils' achievement at the age of 15 in reading, science and mathematics (OECD, 2010a) are available for Germany and the UK.

These reveal that pupils in both countries perform at broadly similar levels. It is also possible to explore the total variance that is attributed to between school and within school differences in achievement (Table 4.3). Both indicators can be interpreted as a measure of academic inclusion (OECD 2010b). In school systems with substantial variation in performance between schools, but less variation among pupils within schools, pupils tend to be grouped in schools in which most pupils perform at similar levels. This could be due to how pupils are assigned different curricula in the form of tracking, or to the choices made by families, or according to where pupils live. Thus, in Germany the proportion of the total variance that is attributed to between-school differences is higher than the OECD average, but the within-school variance is lower. In Germany the explicit school tracking results in considerable differences in achievement across the different school types. In contrast, in the UK the above-average total variation is driven by large performance differences within schools.

Table 4.3 also presents data for the variance in reading literacy explained by socio-economic background within and between schools. This indicator relates to the social composition of schools. Across OECD countries, 55 per cent of the between-school variance in performance is explained by socio-economic background. In Germany this figure is 67 per cent whilst in the UK it is 77 per cent. This finding is underlined by analyses of PISA data indicating that the UK has high levels of segregation in terms of poor and migrant families being clustered in the same schools (OECD, 2012: 99).

Thus, social inequalities emerge in school systems with both explicit and implicit school-level tracking.

Table 4.3 Variance in reading literacy and socio-economic status between and within schools, 2009

	Germany	United Kingdom	OECD average
Reading literacy			
Within schools	44.9	77.2	64.5
Between schools	68.0	32.0	41.7
Socioeconomic background			
Within schools	0.1	6.0	4.3
Between schools	67.2	77.1	55.1

Source: OECD (2010b), pp. 185-187.

Conclusion

This chapter set out to explore the relationship between inequalities and school type. Adopting Boudon's (1974) distinction between the primary and secondary effects of social background, we have analysed social selection in the German and English school systems.

It is clear that the school systems in both Germany and the UK vary and are associated with a range of institutionally bound inequalities. In both countries secondary effects are significant sources of educational inequality. However, the sorting strategies differ at the institutional level. Thus, in Germany there is explicit school-level tracking, involving different school types, characterised by specific curricula, teaching methods, teacher training and different levels of educational attainment. Children are selected for academic or vocational secondary education at the age of ten years, with those from higher socio-economic backgrounds being more likely than those from lower social classes to enrol in the academic track.

In England, there is no overt academic selection for the majority of publicly funded schools, but there is implicit school-level tracking. Pupils tend to attend schools that are in the local vicinity, with the result that in some localities schools are more disadvantaged than others, and in some, more advantaged than others. There is also selection of different types: for example, selecting pupils on the basis of their religion or selecting a proportion on the basis of their aptitude/ability in a subject area. There is also a significant proportion of independent schools, generally charging high fees.

Interestingly, the extent of educational inequality is not dissimilar between the UK and Germany, even bearing in mind the different institutional arrangements. In short, both explicit and implicit school tracking affect pupils' educational trajectories.

In both countries the composition of the pupil population is important. In England the composition of schools is determined by a variety of different factors, including school admissions policies and parents' preferences and attitudes. In Germany pupils from higher social classes are over-represented in the academic track, which is associated with parents' own prior experiences, preferences and attitudes.

We have thus demonstrated that institutional and school composition effects contribute to the association between socio-economic background and the achievement of pupils (Baumert et al., 2009). Given the evidence relating socio-economic background to achievement, it is important to understand how this interacts with policies that are pursued.

In England, the introduction of a quasi-market with parents being able to express preferences for schools of their choice, schools being funded on the basis of the number of pupils enrolled, and 'high stakes' being attached to public examination results has led to increasing pressure for schools to obtain higher examination results. Significantly, for those schools that have

autonomy over admissions there are possibilities for various selective practices to be adopted, albeit within the framework of legislation and associated guidance (West et al., 2011; Allen et al., 2012). For schools with high numbers of pupils from more disadvantaged backgrounds, more vocational courses may be offered which can limit the opportunities available for educational progression.

In Germany, various reforms in recent years have lead to different structural arrangements of the school systems. The newly established two-tiered school system, consisting of an academic and a combined vocational track, is becoming increasingly popular. By 2012, 11 of the 16 Laender had abolished the Hauptschule, replacing it with a two-tier school model. In certain Laender (e.g. Hamburg, Bremen and Berlin) the combined vocational track also gives pupils the possibility of obtaining the *Abitur*, the key qualification needed for admission to universities. It remains to be seen to what extent, if any, this new school form influences the association between socio-economic background and pupils' achievement levels.

In conclusion, our findings underline the fact that institutional rules influence educational inequality. Transitions to secondary school are dependent not only on pupils' socio-economic background (primary effects) but also on decisions relating to transitions that are affected by parental background (secondary effects); these in turn are affected by the specific institutional arrangements in a given context. Institutional arrangements are thus of fundamental importance.

The precise implications for policy will vary according to the systems in place. There is evidence to suggest that pre-primary education can mitigate the primary effects of social background for children from lower socio-economic groups (see Heckman, 2006). Secondary effects are more difficult to influence. However, the institutional arrangements matter: thus tracking – explicit school-based or implicit school-based – is likely to increase rather than decrease educational inequalities. The interaction between secondary effects and policies implemented thus needs to be considered in order to provide further insights into the possible consequences of institutional reforms and how such reforms might be optimised.

Notes

- 1. We use the concept of educational inequality instead of educational equality. According to Coleman (1975), the term 'educational inequality' is misleading as it implies that equal educational opportunity is an achievable policy goal, which it is not: reductions in inequality are all that can reasonably be expected (see also West and Nikolai, 2013).
- Pupils in the Gymnasium and the Realschule who have failed the same grade twice or who have failed two consecutive grades must leave the school and are obliged to attend a lower school track, ultimately the Hauptschule.

- 3. Major changes have taken place in terms of the administration and governance of schools since 2010, with a high proportion of secondary schools converting to become publicly funded academies, outside the control of local authorities, which have a contract (funding agreement) with the Secretary of State for Education (DfE, 2012c; West and Bailey, 2013).
- 4. Amongst comprehensive schools, the most commonly used admissions criteria involve prioritising children in public care and pupils with high level special educational needs, distance between the home and school and siblings attending the school (West et al., 2011).

References

- Adams, J. and Schmuecker, K. (2006) Devolution in practice 2006 (London: IPPR).
- Allen, R. and West, A. (2009) 'Religious schools in London: school admissions, religious composition and selectivity', Oxford Review of Education, 35(4), 471–494.
- Allen, R., Coldron, J. and West, A. (2012) 'The effect of changes in published secondary school admissions on pupil composition', *Journal of Education Policy*, 27(3), 349–366.
- Allen, R. and West, A. (2011) 'Why do faith secondary schools have advantaged intakes? The relative importance of neighbourhood characteristics, social background and religious identification amongst parents', *British Educational Research Journal*, 37(4), 691–712.
- Allmendinger, J. (1989) 'Educational systems and labor market outcomes', European Sociological Review, 5(3), 231–250.
- Baumert, J., Maaz, K., Stanat, P. and Watermann, R. (2009) 'Schulkomposition oder Institution was zählt? Schulstrukturen und die Entstehung schulformspezifischer Entwicklungsverläufe', Die Deutsche Schule, 101(1), 33–46.
- Becker, R. (2003) 'Educational expansion and persistent inequalities of education: utilizing the subjective expected utility theory to explain the increasing participation rates in upper secondary school in the Federal Republic of Germany', European Sociological Review, 19(1), 1–24.
- Bundesministerium für Bildung und Forschung (BMBF) (2010) 19. Sozialerhebung (Bonn: BMBF).
- Blömeke, S. (2006) 'Globalization and educational reform in German teacher education', *International Journal of Educational Research*, 45(4–5), 315–324.
- Boudon, R. (1974) Education, opportunity and social inequality. Changing prospects in Western society (New York: Wiley).
- Breen, R. and Goldthorpe, J.H. (1997) 'Explaining educational differentials. Towards a formal rational action theory', *Rationality and Society*, 9(3), 275–305.
- Breen, R. and Jonsson, J.O. (2000) 'Analyzing educational careers: a multinomial transition model', *American Sociological Revue*, 65(5), 754–772.
- Breen, R. and Jonsson, J.O. (2005) 'Inequality of opportunity in comparative perspective: recent research on educational attainment and social mobility', *Annual Review of Sociology*, 31, 223–243.
- Breen, R., Luijxk, R., Müller, W. and Pollak, R. (2009) 'Nonpersistent inequality in educational attainment: evidence from eight European countries', *American Journal of Sociology*, 114(5), 1475–1521.
- Coleman, J.S. (1975) 'What is meant by "An equal educational opportunity"?', Oxford Review of Education, 1(1), 27-29.
- Croxford, L. (2011) School systems across the UK (London: RISE).

- David, M., West, A. and Ribbens, J. (1994) *Mother's intuition? Choosing secondary schools* (London: The Falmer Press).
- Department for Children, Schools and Families (DCSF) (2008) *The composition of schools in England* (London: DCSF).
- Department for Education (DfE) (2012a) GCSE and equivalent results in England 2010/11 (Revised) SFR 02/2012, http://media.education.gov.uk/assets/files/pdf/s/sfr%2002–2012.pdf, date accessed 28 August 2012.
- Department for Education (DfE) (2012b) GCE/Applied GCE A/AS levels and equivalent examination results in England 2010/11 (Revised) SFR 01/2012, http://www.education.gov.uk/rsgateway/DB/SFR/s001055/sfr01–2012.pdf, date accessed 28 August 2012.
- Department for Education (DfE) (2012c) What's different about academies? http://www.education.gov.uk/schools/leadership/typesofschools/academies/b00205692/whatisanacademy, date accessed 26 October 2012.
- Department for Education and Skills (DfES) (2007) Gender and education: the evidence on pupils in England. London: DfES, http://www.education.gov.uk/rsgateway/DB/RRP/u015238/index.shtml, date accessed 20 August 2012.
- Ditton, H. and Krüsken, J. (2006) 'Der Übergang von der Grundschule in die Sekundarstufe', Zeitschrift für Erziehungswissenschaft, 9(3), 348–372.
- Erikson, R. and Jonsson, J.O. (1996) 'Explaining class inequality in education: the Swedish test case', in R. Erikson and J.O. Jonsson (eds) *Can education be equalized?* (Boulder, CO: Westview Press).
- Flatley, J., Conolly, H., Higgins, V. and Williams, J. (2001) Parents' experiences of the process of choosing a secondary school (London: DfES).
- Gewirtz, S., Ball, S. and Bowe, R. (1995) Markets, choice and equity in education (Buckingham: Open University Press).
- Glaesser, J. and Cooper, B. (2011) 'Selectivity and flexibility in the German secondary school system: a configurational analysis of recent data from the german socioeconomic panel', European Sociological Review, 27(5), 570–585.
- Gresch, C. (2012) Der Übergang in die Sekundarstufe I. Leistungsbeurteilung, Bildungsaspiration und rechtlicher Kontext bei Kindern mit Migrationshintergrund (Wiesbaden: Springer VS).
- Hatcher, R. (1998) 'Class differentiation: rational choices?', British Journal of Sociology of Education, 19(1), 5–24.
- Heckman, J. (2006) 'Skill formation and the economics of investing in disadvantaged children', *Science*, 312(5782), 1900–1902.
- Hopper, E.I. (1968) 'A typology for the classification of educational systems', *Sociology*, 2(1), 29–46.
- Kerckhoff, A.C. (1995) 'Institutional arrangements and stratification processes in industrial societies', Annual Review of Sociology, 15, 323–347.
- Klein, M., Schindler, S., Pollack, R. and Müller, W. (2009) 'Soziale Disparitäten in der Sekundarstufe und ihre langfristige Entwicklung', Zeitschriftfür Erziehungswissenschaft, Special Issue No. 12, 47–73.
- Klieme, E., Artelt, C., Hartig, J., Jude, J., Köller, O., Prenzel, M., Schneider, W. and Stanat, P. (2010) (eds) *Pisa 2009. Bilanz nach einem Jahrzehnt* (Münster et al.: Waxmann).
- Maaz, K., Trautwein, U., Lüdtke, O. and Baumert, J. (2008) 'Educational transitions and differential learning environments: how explicit between-school tracking contributes to social inequality in educational outcomes', Child Development Perspectives, 2(2), 99–106.
- Maaz, K. and Nagy, G. (2009) 'Der Übergang von der Grundschule in die weiterführenden Schulen des Sekundarschulsystems: Definition, Spezifikation und Quantifizierung

- primärer und sekundärer Herkunftseffekte', Zeitschrift für Erziehungswissenschaft, Special Issue No. 12, 153–182.
- Müller, W. and Karle, W. (1993) 'Social selection in educational systems in Europe', European Sociological Review, 9(1), 1–22.
- Neugebauer, M. (2010) 'Bildungsungleichheit und Grundschulempfehlung beim Übergang auf das Gymnasium: Eine Dekomposition primärer und sekundärer Herkunftseffekte', Zeitschrift für Soziologie, 39(3), 202–214.
- Noden, P., West, A., David, M. and Edge, A. (1998) 'Choices and destinations at transfer to secondary schools in London', *Journal of Education Policy*, 13(2), 221–236.
- OECD (2010a) PISA 2009 results: learning trends (Volume V) (Paris: OECD).
- OECD (2010b) PISA 2009 results: overcoming social background equity in learning opportunities and outcomes (Volume II) (Paris: OECD).
- OECD (2012) Education at a glance (Paris: OECD).
- Pfeffer, F. (2008) 'Persistent inequality in educational attainment and its institutional context', European Sociological Review, 24(5), 543–565.
- Schimpl-Neimanns, B. (2000) 'Soziale Herkunft und Bildungsbeteiligung', Kölner Zeitschrift für Soziologie und Sozialpsychologie, 52(4), 636–669.
- Schneider, S.L. and Thieben, N. (2011) 'A healthy sorting machine? Social inequality in the transition to upper secondary education in Germany', Oxford Review of Education, 37(2), 139–166.
- Shavit, Y. and Blossfeld, H.P. (1993) (eds) Persistent inequality: changing educational attainment in thirteen countries (Boulder: Westview Press).
- Shavit, Y., Yaish, M. and Bar-Haim, E. (2007) 'The persistence of persistent inequality', in S. Scherer, R. Pollak, G. Otte and M. Gangl (eds) From origin to destination. Trends and mechanisms in social stratification research (Berlin: Campus).
- Solga, H. and Wagner, S. (2007) 'Die Zurückgelassenen die soziale Verarmung der Lernumwelt von Hauptschülerinnen und Hauptschülern' in R. Becker and W. Lauterbach (eds) *Bildung als Privileg* (Wiesbaden: VS Verlag).
- Stanat, P. (2006) 'Schulleistungen von Jugendlichen mit Migrationshintergrund: Die Rolle der Zusammensetzung der Schülerschaft' in J. Baumert, P. Stanat and R. Watermann (eds) Herkunftsbedingte Disparitäten im Bildungswesen: Differenzielle Bildungsprozesse und Probleme der Verteilungsgerechtigkeit (Wiesbaden: VS Verlag).
- Statistisches Bundesamt (StBA) (2011) Bildung und Kultur. Allgemeinbildende Schulen. Schuljahr 2010/2011, Fachserie 11 (Wiesbaden: StBA).
- Sutton Trust (2006) The social composition of top comprehensive schools: rates of eligibility for free school meals at the 200 highest performing comprehensive schools (London: The Sutton Trust).
- Sutton Trust (2009) Attainment gaps between the most deprived and advantaged schools: a summary and discussion of research by the Education Research Group at the LSE (London: The Sutton Trust).
- Walford, G. (2008) 'Faith-based schools in England after ten years of Tony Blair', Oxford Review of Education, 34(6), 689–699.
- West, A., Allmendinger, J., Nikolai, R. and Barham, E. (2010) 'Policy decentralisation and educational achievement in Germany and the UK', *Environment and Planning C: Government and Policy*, 20(3), 450–468.
- West, A. and Bailey, E. (2013) 'The development of the academies programme: "privatising" school-based education in England 1986–2013', *British Journal of Educational Studies* (forthcoming).
- West, A., Barham, E. and Hind, A. (2011) 'Secondary school admissions: impact of legislation on policy and practice', Oxford Review of Education, 37(1), 1–20.

West, A. and Nikolai, R. (2013) 'Welfare regimes and education regimes: equality of opportunity and expenditure in the EU (and US)', *Journal of Social Policy* (forthcoming).

Suggestions for further reading

Ahier, J., Cosin, B. and Hales, M. (1996) *Diversity and change: education, policy and selection* (London: Routledge).

Archer, M.S. (1979) Social origins of educational systems (London: Sage).

Arum, R., Beattie, I. and Ford, K. (2011) The structure of schooling. Readings in the sociology of education (second edition) (London: Sage).