INTERIM REPORTS

Research Survey 9/1

THE STRUCTURE OF PRIMARY EDUCATION: ENGLAND AND OTHER COUNTRIES

Anna Riggall and Caroline Sharp National Foundation for Educational Research

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PRIMARY REVIEW INTERIM REPORTS

THE STRUCTURE OF PRIMARY EDUCATION: ENGLAND AND OTHER COUNTRIES

Primary Review Research Survey 9/1

Anna Riggall and Caroline Sharp

This is one of a series of 32 interim reports from the Primary Review, an independent enquiry into the condition and future of primary education in England. The Review was launched in October 2006 and will publish its final report in late 2008.

The Primary Review, supported by Esmée Fairbairn Foundation, is based at the University of Cambridge Faculty of Education and directed by Robin Alexander.

A briefing which summarises key issues from this report has also been published. The report and briefing are available electronically at the Primary Review website: www.primaryreview.org.uk. The website also contains Information about other reports in this series and about the Primary Review as a whole. (Note that minor amendments may be made to the electronic version of reports after the hard copies have been printed).

We want this report to contribute to the debate about English primary education, so we would welcome readers' comments on anything it contains. Please write to: evidence@primaryreview.org.uk.

The report forms part of the Review's research survey strand, which consists of thirty specially-commissioned surveys of published research and other evidence relating to the Review's ten themes. The themes and reports are listed in Appendices 3 and 5.

The theme: this survey relates to Primary Review theme 9: Structures and Phases.

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THE STRUCTURE OF PRIMARY EDUCATION: ENGLAND AND OTHER COUNTRIES

1. Introduction

This research survey aims to investigate the structure and phasing of the English primary education system. It considers issues of change in the years following the Plowden Report (DES 1967) and draws comparisons between England and other countries. It sets out to address the following questions:

- What is the structure of the English primary education system?¹ How has this changed since 1967? How well do the structures work? What are the salient characteristics, strengths and weaknesses of the various institutions and settings in which primary education takes place?
- What is the evidence concerning the roles and relationships between pre-school and primary provision in England and other UK countries?²
- What is the structure of primary education in other countries? What is the evidence of effectiveness of different structures?
- What is the evidence on the impact of different primary phase structures and of different starting ages on learning and teaching? When should formal schooling start?
- What is the evidence that primary school structures influence results obtained in international comparative studies?

This survey defines primary education as the first phase of compulsory education, comparable with Key Stages 1 and 2 of the system in England (ages four/five to 11). Preschool education is defined as the period between birth and entry to formal schooling, although this review focused attention on the period immediately prior to school (ages three and four in England). Structure is defined as that which is decided for the schools by central or local government. It does not cover aspects of structure that lie mainly within the school's own control (such as management structures, timetabling or allocation of resources).

The survey comprised a review of relevant literature. It drew mainly on two types of information (descriptions of structures and research studies) and included different forms of literature (published articles, reports and conference papers). The parameters of the survey were as follows:

- Information from/including England between January 1967 the date of publication of the Plowden Report (DES 1967) and December 2006.
- Information from other countries providing that it was readily available and written in English. The other countries included in the review were Scotland, the Netherlands, Sweden, Germany and New Zealand (further details concerning selection criteria for these countries is given in Appendix 1).

Details of the search strategy are given in Appendix 2. Decisions as to the relevance of literature have been based on the following criteria:

This question excludes consideration of internal primary school organisational structure because this was the subject of a separate research survey.

This excludes consideration of transition issues because this was the subject of a separate research survey.

- Whether it conformed to search parameters
- Whether it was pertinent to the research questions
- Its quality (any seriously flawed research has been excluded).

2. What is the structure of the English primary education system?

This section seeks to describe the structure of primary education in England at the present time. In so doing it covers:

- who has control of and responsibility for the structure of primary education
- different primary school types
- key stages in primary school education
- the structure of the National Curriculum
- assessment in pre-school and primary years
- length, structure and control of the school year
- the structure of inspection in primary education.

2.1 Who controls the structure of primary education in England?

The control of education in England lies with the national government and central Department for Children, Schools and Families (DCSF). However, education in England is largely decentralised and many responsibilities lie with the Local Authorities (LAs), churches, voluntary bodies, governing bodies of schools and headteachers (O'Donnell *et al.* 2007).

The 150 English LAs take responsibility for area-wide aspects of educational provision. There are different types of local government structures: single-tier and two-tier configurations:

Single-tier local government exists where a locality – usually a town, city or other urban area, is served by a single authority, which is responsible for all local service provision (...) and two-tier local government exists where, rather than all local services being provided by the local council, there is a division of responsibilities between a district (local) council, and a county council, which will cover a number of districts.

(Labour Party 2007)

The duties of LAs in relation to the structure of education cover the appointment and support of governors; being the employer of teaching and non-teaching staff (although they may not have this right in respect of church, voluntary or foundation schools); coordinating school admissions processes; setting dates for the school year; and providing education, behavioural and finance plans for maintained schools. Governors and headteachers are responsible for what goes on within the school. For example, they decide on the use of the school premises (including extended school services); delegation of school budgets; performance target setting in relation to National Curriculum assessments, public examinations and unauthorised absence; pupil discipline and providing the LA with information about the school (Department for Education and Employment (DfEE) 2001).

In addition to overseeing primary education in maintained schools, LAs are required to provide a free, part-time place in some form of pre-school for every three- or four-year-old whose parents request it. This can be done through nurseries attached to primary schools or, outside the maintained sector, by parent groups, voluntary, private or independent bodies (for example private nurseries, nurseries attached to independent schools and pre-school playgroups). According to a recent Eurydice report (2006), most provision for children aged

three to five years in England is in state-maintained nursery schools, classes in primary schools, and in voluntary and private settings.

2.2 Primary school types in England

The legal framework in England divides primary schools into three categories:

- Community schools, which are established and fully funded by LAs (and are often referred to as 'maintained' schools).
- Voluntary schools, which were originally established by voluntary or religious bodies (mainly churches). These bodies still retain some control over the management of these schools although the schools are now largely funded by LAs.
- Foundation schools, which are also funded by LAs but owned by school governing bodies or charitable foundations.

Primary schooling in England accommodates children aged from five to 11 years. Children must start full-time school the school term after they become five, although most children actually start school at age four (Eurydice 2006). There are a number of different school types that cover the age ranges relevant to this literature survey.

They are:

- infant schools (typically age four to seven)
- first schools (typically age eight to 12 or nine to 13)
- junior schools (typically age seven to 11)
- middle schools (typically age eight to 12)³
- primary schools with pre-schools or nurseries⁴ (typically age three to 11)
- primary schools without pre-schools or nurseries (typically age five to 11).

There are some other primary school types, including special schools that cater only for children with special educational needs and can be community, voluntary or foundation schools. Outside the mainstream primary school system there are Independent schools where parents pay for places.

2.3 The National Curriculum and 'Key Stages' in pre-school and primary education

The Education Reform Act of 1988 (GB Statutes 1988) set out a National Curriculum for every maintained school. This was made up of specified subjects and included the following:

- a set of attainment targets which specify the knowledge, skills and understanding which
 pupils of different abilities and maturities are expected to have reached by the end of
 each key stage
- the types of matters, skills and processes which are to be taught to pupils of different abilities and maturities during each key stage
- assessment for pupils at or near the end of each key stage for the purpose of ascertaining what they have achieved in relation to the attainment targets for that stage. (Section 2)

Middle schools may be deemed primary or secondary, depending on the number of pupils under and over the age of 11.

Pre-school education can also be provided in other 'settings', such as independent nurseries, day care and play groups. These typically take children from three months to school age (although this varies according to the provision in individual settings).

The National Curriculum divides education up into 'key stages' of learning. In the primary years these are 'the Foundation Stage', 'Key Stage 1' and 'Key Stage 2'.

The Foundation Stage came into being as a distinct phase of education in 2000 and became part of the National Curriculum in 2002, 14 years after the National Curriculum for primary and secondary schools was introduced. It set out six key areas of learning: personal, social and emotional development; communication, language and literacy; mathematical development; knowledge and understanding of the world; physical development and creative development (QCA 2007). The Foundation Stage is delivered in pre-school settings for children aged from three to five years old. This means that nurseries and reception classes in primary schools deliver the Foundation Stage curriculum, as do other pre-school settings such as playgroups, day nurseries and nursery centres (O'Donnell *et al.* 2007).

Key Stage 1 covers Year 1 and Year 2 of primary schools (ages five to seven) and Key Stage 2 covers Years 3 to 6 (ages seven to eleven). Compulsory National Curriculum subjects are the same for Key Stages 1 and 2. The 'core' subjects of English, Maths and Science are given relatively greater amounts of curriculum time. The other (Foundation) subjects that make up the curriculum are: Design and Technology, Information and Communication Technology (ICT), History, Geography, Art and Design, Music and Physical Education (DfES 2007a).

2.4 Assessment in the primary school years

As mentioned above, the Education Reform Act of 1988 set out a National Curriculum for all maintained schools to follow. A system of national assessment was designed to help ascertain how well pupils were performing. These assessments take place by means of the Foundation Stage Profile which is completed at the end of the Reception Year⁵, and through National Curriculum tests in core subjects at the end of Key Stage 1 and 2, at age seven and 11 respectively.

2.5 Length and structure of the school year

In England, the school year comprises a minimum of 190 teaching days. The school year generally runs from September to July and schools are open five full days per week. Typically the year is divided into three terms, each with a half-term break. Term dates are determined by LAs or governing bodies (Eurydice 2006).

From 2004/5 there was a movement towards introducing a 'standard school year' in which the school year was divided into six terms of a more even length. In practice, the standard year represented a fairly subtle change to the existing school year pattern. The Local Government Association (LGA)'s website states that the objective of the standard school year is to:

Provide a model which allows for local flexibility, especially at the beginnings and ends to school terms, so as not to interrupt the integrity of smoother curriculum delivery, learning and assessment, and that teachers and parents with children at school in neighbouring authorities are not inconvenienced by differing term and holiday dates.

(LGA 2007a)

'In principle decisions' to adopt the proposed standard school year were registered by 45 LAs and 17 London Boroughs at the time of writing (LGA 2007b).

Following the introduction of the Foundation Stage in 2000, the Foundation Stage Profile was initiated in 2002/3 (QCA 2007).

A review conducted by Eames *et al.* (2005) considered the issue of school year patterns in more detail but found very little evidence that could answer questions about the impact of alternative school year patterns.

2.6 Inspection of primary education

Schools are inspected on a three-year cycle and inspections are carried out by the Office for Standards in Education (Ofsted). Schools are required to complete a Self Evaluation Form (SEF), and inspectors use this along with the school's Performance and Assessment (PANDA) report and any previous inspection reports to help inform their inspection. Inspection reports include the following:

- description of the school
- overall effectiveness of the school
- achievement & standards
- quality of provision in terms of teaching & learning, curriculum & other activities and care, guidance & support
- leadership & management
- the extent to which schools enable learners to be healthy
- the extent to which providers ensure that they stay safe
- how well learners enjoy their education
- the extent to which learners make a positive contribution
- how well learners develop workplace and other skills that will contribute to their future economic wellbeing (Ofsted 2007).

3. How has the structure of primary education in England changed since 1967?

Since the Plowden report (DES 1967), a number of forces have influenced the structure of primary education in England. One of the major agents of structural change was the Education Reform Act of 1988 (GB Statutes 1988).

3.1 The influence of the 1988 Education Reform Act

The 1988 Education Reform Act introduced changes designed to encourage schools to behave competitively to attract pupils and strive to demonstrate their ability to improve standards through published league tables. As Gillard (2005) argues, the emphasis on parental rights to choose between schools was designed to stimulate a *market* to ensure quality by forcing failing schools to lose pupils and ultimately to close. In 1992, the introduction of a national system of school inspection was also introduced (GB Statutes 1992).

It has been argued that the 1988 Act emphasised structural divisions between different stages of pre-school and primary education. For example, Alexander (1995) suggests that divisions between infant, junior and adolescent education were deepened by the 1988 Education Act's creation of key stages. The division of separate key stages created a lack of continuity and flow in learning (starting in pre-primary and stretching into post-primary education). This served to compartmentalise early years, primary and adolescent curricula and practitioners. Alexander contrasts the organisation of education in England with that of other countries, asking whether primary structures that allow learning to flow more freely through infant,

junior and adolescent stages (also known as 'all-through' schools) are of greater benefit to learners.

Bennett (1995) argues that the National Curriculum has become increasingly dominant in defining when progression takes place and what continuity is, but there remain tensions between the requirements of schools and readiness for meeting these requirements on the part of the child.

3.2 Changes in age of starting school

In England, the statutory school starting age (the term after a child's fifth birthday) is low in relation to that of other countries, most of which set six as the official starting age (Woodhead 1989; West and Varlaam 1990; Ball 1994; Sharp 2002). In practice, most English children start school at four, because of the growing practice of admitting children to school at the beginning of the year in which they become five.

The term after a child's fifth birthday was established as the official school starting age in the 1870 Education Act. This decision was not taken on the basis of any developmental or educational criteria (see Woodhead 1989). Some MPs clearly favoured six as the school starting age. The main arguments in favour of setting the school starting age as early as five were related to child protection (from exploitation at home and unhealthy conditions in the streets). There was also a political imperative to appease employers because setting an early starting age enabled a relatively early school leaving age to be established, so that children could enter the workforce.

There was no legislation prohibiting children under five from attending schools, with the consequence that large numbers of under-fives were admitted to primary schools. Concerns about the welfare of children under five in schools (ranging from babies to four-year-olds) led to an official enquiry in 1908 (see Bilton 1993; Woodhead 1989).

By the time of the Plowden Report in 1967, the predominant pattern of entry to school was termly admission at statutory age (that is, there were three intakes each year for children to start school at the beginning of the term after they attained the age of five).

An effective lowering of the school entry age has taken place since 1967. The trend was identified in 1983, when the NFER surveyed all English and Welsh Local Education Authorities (LEAs, now LAs) (Cleave *et al.* 1985). At that time, there was a mixture of entry policies in evidence, including annual entry (one intake at the beginning of the year), biannual entry (two entry points, usually in the autumn and spring terms) and termly entry (three entry points a year). A majority of LAs admitted children to school before statutory school age, although fifteen LAs had a policy of admission at statutory school age in all or some of their schools. Many schools taking children under statutory school age formed separate 'reception' classes containing children aged between four and five years (although some children started in 'mixed age' classes, which included children of more than one year-group).

In 1986, a parliamentary select committee recommended the practice of annual entry to school before statutory school age:

There should be no change in the statutory age of entry into school. However, we consider that local education authorities should, if they do not already do so, and under suitable conditions, move towards allowing entry into the maintained education system at the beginning of the school year in which the child becomes five.

(GB Parliament, HoC ESAC 1986, para. 5: 44)

The 'suitable conditions' referred to by the committee were that infant classes should provide a similar environment, staffing and curriculum to nursery classes.

The following year, another NFER survey confirmed the trend for lowering the age of entry to school, with ten LAs reporting recent changes in favour of earlier entry (Sharp 1987). Concerns were increasingly expressed that four-year-olds in reception classes were not experiencing 'nursery conditions'. These concerns were reflected in a Select Committee enquiry report of 1989, which proposed that: 'No further steps should be taken towards introducing four-year-olds into inappropriate primary school settings' (GB Parliament, HoC ESAC 1988, para. 7: 13).

Nevertheless, the trend was further accelerated during the 1990s following the introduction of the 1988 Education Reform Act. By 2002, 99 percent of four-year-olds were attending some kind of educational provision, with 59 percent of four-year-olds in infant classes⁶ (DfES 2002).

There are a number of reasons for the trend towards lowering of age of entry to primary schools which began in the 1980s (see Sharp 1987; Daniels *et al.* 1995). Pre-school places were insufficient to meet parental demand, which was rising due to an increasing female participation in the workforce. The 1988 Education Reform Act allowed schools greater control over their own budgets, which were largely based on the number of children on roll. This coincided with a reduction in the population of children starting school, giving schools both the incentive and capacity to take younger children. There was little inducement to create nursery classes because nursery education was governed by regulations stipulating the adult-child ratio (of 1:13) and staff qualifications required, making it a more complicated and expensive option. But these regulations did not apply to school reception classes, even though they catered for four-year-olds. Therefore, it was in schools' interests to lower the age of school entry by creating reception classes (but not nursery classes). Pressure built up on LAs to allow primary schools to accept four-year-olds. One of the immediate consequences of the increasing trend towards early entry to school was a removal of four-year-olds from pre-school settings, leading to concerns for the viability of nurseries and playgroups.

3.3 Changes in the size of English primary schools

One of the elements of school structure of potential interest to this survey is the size of primary schools. The Plowden Report (DES 1967) contained information about the number of primary schools of different sizes in 1965. Table 1 below reproduces this information, placing alongside it the most recent figures available (derived from the Annual Schools Census which took place in January 2004).

Table 1 shows that in 1965 there were almost 21,000 primary schools attended by just over four million pupils. These schools had an average (mean) size of 193 pupils. Forty years later, there has been a decrease of just over 3,000 primary schools although the population has decreased by just 31,224 pupils. The average school size has increased from 193 to 224 pupils during this period.

The table shows that there has been a clear decline in the number of very small schools (those with under 100 pupils) and an increase in the number of larger schools (in all categories over 101 pupils, apart from a decline in the number of schools with 301 – 400 pupils).

Further scrutiny of the figures for the primary school population over the 40-year period (see DfEE 1998 and DfES 2004) shows a pattern of variation around the four million mark. The primary school population reached its highest point of 4,839,478 in 1973, although the

Given that these statistics are collected in January, they represent an under-estimate of the number of children who were four years old when they started school, as many would have started in the previous September.

number of schools did not peak until 1977. The lowest population figure was recorded in 1985 when there were 3,542,076 pupils in primary schools. The number of primary schools has declined every year since 1977.

Table 1: Number of Primary Schools in England

School size categories	January 1965	January 2004	Change
Up to 100	6,272	2,692	-3,580
101 – 200	5,153	5,566	+413
201 – 300	5,208	5,305	+97
301 – 400	2,703	2,615	-88
401 – 600	1,360	1,445	+85
601 – 800	87	132	+45
801 – 1000	6	7	+1
Total schools	20,789	17,762	-3,027
Total pupils (full-time)	4,003,934	3,972,690	-31,244

(Sources: Plowden Report (DES 1967) Table 8 p.114; DfES (2004) Table 20 p.45)

The most likely explanation for the increase in school size is the formation of primary schools through the amalgamation of infant and junior schools (and first and middle schools in some areas). This has taken place for a variety of reasons, not least the need to rationalise school places in areas of declining population. The 1988 Education Reform Act also impacted on school expenditure and brought about greater alignment between school organisational structures and the National Curriculum key stages (see Wallace and Pocklington 2002).

These trends are further explored in the next section.

3.4 Changes in the types of primary schools

The Plowden Report (DES 1967) recommended separate first and middle schools as the most suitable organisation of primary education; although it suggested combined (that is, combined first and middle) schools may be necessary in rural areas and some voluntary schools. Interestingly, the period since the Plowden Report appears to have seen a reduction in both first and middle schools.

Information provided by the DfES covering a ten year period from 1997 to 2006 gives more details about the number of schools broken down by type (for example infant, first, primary) (DfES 2007c). During this period, the number of primary schools (that is, those taking children aged from four to 11) rose from 11,704 to 12,781. All other types of primary schools reduced in number. The greatest reduction took place in the number of combined first and middle schools, which reduced from 250 to 84 during this period. Separate middle schools declined from 206 to 95, and first schools from 1657 to 1180. The number of infant and junior schools also reduced during this period (infant schools from 2376 to 1752 and junior schools from 2199 to 1612).

3.5 The Local Authority's changing role

This section focuses on structural issues related to the role of the local authority. Blyth (1991) argues that the 1988 Education Reform Act has had a number of consequences for the role of the LA in primary education, including:

- the introduction of grant maintained schools and funding systems whereby schools received more money for more pupils
- greater focus on management in primary schools
- increased responsibility for financial affairs at the school level
- greater political and financial pressures at the LA level
- greater powers granted to governing bodies
- greater involvement in the management of schools from teachers, governors and parents.

In What is the LEA for? Whitbourn et al. (2004) explain that the part played by the LA in the public education service is 'complex and varied'. They characterise the changes experienced by local authorities in the period between 1984 and 2004 as: 'A period of ambivalence, challenge and reductionism ... followed by a new agenda which has set in hand a process of reformulation and clarification.' Local Education Authorities have since undergone a period of restructuring, whereby individual departments dealing with children's issues have been brought together to form Local Authority Children's Services. This took place following the Children's Act 2004 (England and Wales Statutes 2004). This move has not, however, substantively affected local authorities' responsibilities for the structure of primary education.

3.6 The formation of federations and collaborations

The Education Act of 2002 (England and Wales Statutes 2002) allowed groups of schools to establish federations or collaborations whereby they share some aspects of leadership and governance.

The distinction between these two new arrangements lies in the degree of formalisation. A federation involves specific arrangements for shared governance, as DfES (2007b) explains: 'The term federation describes a formal agreement by which up to five schools share a single governing body Each school retains its separate legal identity in respect of its budget, admissions and performance tables Each school is also subject to a separate inspection by Ofsted.'

A collaboration is based on the principle of allowing governing bodies and joint committees freedom to determine their own arrangements. They may carry out their functions jointly and delegate any of their functions to a joint committee with decision-making powers (except for the decision to appoint a head teacher).

Federations and collaborations can involve a mixture of primary and secondary schools. Most of the federations cited in the EMIE publication, *Schools in Collaboration: Federations, Collegiates and Partnerships* (Arnold 2006) are at secondary level. However the report includes the following examples involving primary schools:

- Dumfries and Galloway 'vertical' partnership between a secondary and its feeder primaries
- Totnes Federation involving a primary, special and a community college (with specialist status for the performing arts)

- Glasgow Learning Communities which comprise secondary, associated primary and prefive establishments
- Cheshire primary, secondary and special school clusters
- Canterbury Federation, Kent a 'hard' federation between a community primary and a foundation secondary.

3.7 Changes in the provision of early childhood education and care

One of the main structural changes to take place since the Plowden Report is a shift in the balance between education and care in the provision of group settings for children in the early years (from birth to age five).

There have been substantial recent changes in the structure of the curriculum and assessment in the early stages of education and care. The changes have been designed to ensure that all pre-school settings provide education rather than care and that delivery is equal and consistent across the country.

Since the Plowden Report, the debate has taken into consideration the variety of providers of pre-school settings and the balance of care versus education. Pugh (1990) summarised some of the main issues of concern in this field. She states that ensuring quality and equality in provision of services whilst sharing provision between central and local government, the private sector and parents has proved a major challenge. Pugh highlights the diversity in aims, value systems, hours of opening, admissions policies, level of fees, staff qualifications, staff pay and conditions of service that exist in such a wide variety of settings. In relation to the care versus education debate, Pugh questions the intention to emphasise the provision of education, given the lack of suitably-qualified staff.

4. What is the evidence concerning the roles and relationships between pre-school and primary provision?

In terms of the structure of primary education, there is little evidence upon which to base any assessment of the roles and relationships between pre-school and primary education. However, it is clear that changes in the structure of pre-school education in particular, have placed greater importance on issues relating to transition and continuity between pre-school and primary education. Some research on transition has touched on aspects of structure such as the Foundation Stage Profile (see Sanders *et al.* 2005) but many studies focus specifically on transition practices and are therefore outside the remit of this study⁷.

Nevertheless, there has been some speculation as to the impact of the roles and relationships of pre- and post-primary education structures on the curriculum. For example, Beattie (1997) has questioned whether the structure of education could be viewed as a hindrance or liberator of the primary curriculum. He argued that the structure of the school system may determine the general characteristics of the curriculum. In other words, the relationship between pre- and post-compulsory levels of schooling affects the nature of what the primary and secondary school teach. He suggests that the young starting age for primary education in England has led to a focus on the needs of younger children within primary schools. He contrasts this with the situation in Germany, where high levels of selectivity in secondary schools and the brevity of primary education (only four years) restrict the curriculum in primary schooling.

⁷ Transition is the focus of a separate research survey.

5. What is the structure of primary education in five other countries?

Basic summaries about the education structures in the five selected countries are taken from the INCA database (O'Donnell *et al.* 2007). Further details are provided from additional literature sources, where available.

5.1 Control over the structure of education, curriculum and assessment in other countries

This section describes which bodies and individual post-holders have responsibility for the structure of education within each of the selected countries, including curriculum, assessment and the organisation of the school year. The countries included for comparative purposes were Scotland, Germany, the Netherlands, Sweden and New Zealand (see Appendix 1 for further information about the selection of comparator countries).

The First Minister for **Scotland** is responsible for the overall supervision and development of the education service with day-to-day responsibility delegated to the Minster for Education and Young People and the Minister for Enterprise and Lifelong Learning. The actual provision of education is the responsibility of the 32 unitary councils, known as the Scottish Local Authorities. The Scottish curriculum is guided by advice from the Scottish Executive Education Department (SEED) and Learning and Teaching Scotland (LTS). Assessment is carried out mainly through teacher assessment. There are no formal, compulsory national tests at primary level, although there are some assessment tools that teachers can use to support their professional judgement.

The Scottish school year starts in mid-August and runs to June with the dates of (usually three) terms being decided by the local authority. Schools must be open for a minimum of 190 days.

The education structure in **Germany** is largely determined by the federal structure whereby much educational legislation and administration is devolved to the 16 federal states (Länder). School districts have a large degree of autonomy and are responsible for the recruitment of staff and precise curricular content. There is no formal national curriculum or system of assessment in primary education. Germany uses a system of continuous teacher assessment as the main method of evaluating student progress.

The school year is divided into three terms starting in August and ending in July. Exact dates are decided by the federal states: there are 75 days of holiday plus about ten public and religious days (leaving about 176 days of schooling per year). Although half-day (morning only) schooling is traditional in Germany, there are moves to introduce more all-day schools in some areas.

In the **Netherlands** the education system is regulated by central laws and decentralised administration and management of schools. Central education policy, laid down by the Ministry of Education, Culture and Science governs teachers' qualifications, funding and spending, examinations and inspections.

The overall curriculum in the Netherlands is determined by the Ministry of Education. Assessment is teacher-based in primary schools but there are national minimum attainment targets which students must meet. Progression in primary school is not automatic, but schools try to avoid pupils repeating years. There is a non-compulsory (but highly popular) primary school leaving test. The school year runs from August to July and must comprise a minimum of 200 instructional days.

Responsibility for the education system in **Sweden** lies with the National Ministry of Education and Science. Two independent agencies (the National Agency for Education and the National Agency for School Improvement) have been responsible for inspection,

evaluation and monitoring and supporting schools to achieve the national goals for education⁸. At the local level, municipalities make decisions on the running of schools, staffing and resources.

Sweden has a National Curriculum; assessment at the primary level is based on a combination of teacher evaluation and voluntary national tests. In Sweden, the school year generally runs from the end of August to early June and comprises a minimum of 178 days. The year is divided into two terms (dates vary between districts).

In **New Zealand** the Government is ultimately responsible for the structure of education. The Ministry of Education provides policy advice to government and develops the curriculum, allocates resources and monitors effectiveness. There is no local government involvement in education in New Zealand; school governing boards have a degree of autonomy and control over the organisation and running of the school.

In accordance with the New Zealand Curriculum Framework, schools must cover the seven essential learning areas and eight groups of essential skills during the ten years of statutory learning. The learning areas cover languages, maths, science, technology, social sciences, the arts, and health and well being. Skills include communication, numeracy, information, problem solving, self management and competitive skills, social skills, physical, and work and study skills. Schools use a continuous, school-based assessment system. Many primary children are assessed on entry to school at age five. A randomly selected sample of three percent of children in Year 4 (aged eight to nine years) is involved in an annual assessment of all curriculum areas. This is known as the National Education Monitoring Project.

In New Zealand, the school year runs from late January through to December and is organised into four terms broken by two-week long holidays and a six-week summer break (during December and January). The primary school year comprises 394 half days.

5.2 Primary school ages and phases in selected countries

Table 2 Pre-school and primary age groups in selected countries

Country	Pre-school age groups	Primary age groups	Average pupils per school
England	3-4/5	4/5-11	224
Scotland	3-4/5	4/5-12	128
Germany	3-6	6-10/12	185
Netherlands	0-4/5	4/5-12	222
Sweden	0-6/7	6/7-15/16	217
New Zealand	3-5/6	5/6-12/13	188

Sources: O'Donnell et al. (2007); Eurydice (2006)

Table 2 shows the age groups for pre-school and primary education and the average primary school size in the five selected countries, with equivalent information for England provided for comparison.

At the time of writing, the responsibilities of these two agencies were under review.

In **England**, as noted earlier, pre-school focuses mainly on children aged three to five, whereas primary schooling focuses on children aged five to eleven. Most children start school at four. The average size of primary schools in England was the largest among the selected countries at 224 children.

In **Scotland**, compulsory education starts at age five, although many children start school at four because schools have a single intake at the beginning of the school year. Local authorities set a cut-off date (normally 1st March) defining the cohort of children eligible to start school at the start of the following school year (normally in August). This means that children do not usually start school below the age of four years and six months. Primary education in Scotland continues to age twelve. The average primary school size in Scotland is the smallest among the six countries, at 128 pupils.

In **Germany**, compulsory education starts at age six and primary schooling is only four years in length (in all but two federal states, where it is six years). Entry into compulsory schooling is based on the child having reached an appropriate level of development. In cases where the child is not deemed ready, he or she is required to attend preparatory classes known as Vorklassen or Vorschulklassen.

In the **Netherlands**, schooling is compulsory from age five, but virtually all children start school at four. Primary schools cater for children aged four to twelve. The compulsory age of starting school was changed from six to five years in 1985. The average size of primary schools in the Netherlands was second largest among the countries studied.

In **Sweden**, schooling is compulsory for nine years from age seven (although it is possible for children to start school at age six or eight). Most children attend all-through compulsory schools (Grundskola) which cover primary and lower secondary levels of education (O'Donnell *et al.* 2007). Sweden had a relatively large average school size among the selected countries, though it should be noted that these schools include children of secondary school age.

The decision to allow some discretion to Swedish parents to decide if their six-year-olds were ready for school was taken in the early 1990s. According to Pramling (1992), this raised a number of concerns, including that primary teachers were not well prepared to teach six-year-olds, the curriculum would be too structured and teacher-dominated, that children would be introduced too early to formal skills (reading, writing and maths) and that pre-schools would have their oldest children removed, resulting in too high a proportion of toddlers. Alvestad and Samuelsson (1999) explain the purpose of Sweden's pre school curriculum, which was implemented in 1988: 'The purpose of the curriculum is to provide preschool educational opportunities based on the fundamental components of care, foster care, learning and education.'

In **New Zealand**, schooling becomes compulsory at age six but pupils can enrol in primary school from the age of five. Children do not start at the beginning of the school term – nearly all New Zealand children start school on their fifth birthday. A standard primary school caters for children aged five or six to twelve or thirteen. There are, however, some all-through schools which cater for children aged five or six right through to seventeen/eighteen.

6. The impact of different school structures on learning and teaching

It is difficult to comment on the impact of school structures because most of the available literature comprises descriptive accounts of the current structure of primary education and not research which has considered their relevance and appropriateness. It is evident that the

structure of primary education has evolved over time and is largely taken for granted. The literature found in this survey did not identify evidence of any particular strengths or weaknesses related to the structural elements, although there are recurring questions posed about the appropriateness of the English primary school environment and curriculum for very young children.

This section considers two aspects of school structure which have been subject to research: age of starting school and school size. It ends with a consideration of evidence from international comparative studies in relation to attainment and these two aspects of school structure.

6.1 The impact of age of starting school

Two main educational arguments have been put forward in favour of the growing practice in England of children starting school at four. First, there is a body of research evidence demonstrating a correlation between being the youngest in the year-group (so called 'summer born') and doing less well than autumn- and spring-borns at school (see Sharp and Benefield 1995). One of the reasons suggested for this is that summer-borns may be disadvantaged in a termly or biannual entry system by spending less time at school than their older classmates.

Second, it has been suggested that it is an advantage for children to learn basic skills (such as reading, writing and counting) at an early age. For example, in 1999, the Chief Inspector of Schools argued that the inclusion of reading, writing and numeracy in the early years curriculum would help to overcome educational disadvantage experienced by children from poorer backgrounds (Ofsted 1999).

Research studies using sophisticated statistical analysis to consider the influence of length of schooling on pupils' school attainment have largely discounted differences in length of schooling as a major cause of underachievement among summer-born children (Sharp and Hutchison 1997; Tymms *et al.* 1997; Daniels *et al.* 2000). Tymms *et al.* (1997) studied the achievement of children at the end of the reception year and again in Year 2. Comparisons were made between summer-borns who had started school at the beginning of the autumnterm (annual entry) and those who entered school later in the year. The first assessment results (at the end of the reception year) showed evidence of poorer attainment among summer-borns who had started school after September, but by Year 2 their performance was similar to that of summer-borns who had started school one or two terms earlier. Two other large-scale research studies (Sharp and Hutchison 1997; Daniels *et al.* 2000) ruled out length of schooling as a causal factor for season of birth effects (concluding instead that being among the youngest when assessed, being the youngest in the year group and starting school at a young age were likely explanations for the observed differences in attainment levels of children born at different times of year).

There is no available evidence to show whether children from disadvantaged backgrounds are helped to achieve by an earlier school starting age. On the other hand, there has been a continuing concern about the quality and appropriateness of provision for four-year-olds in reception classes. It has been suggested that starting school at such a young age may be stressful for children (see Sharp 1988; Clark 1989; Woodhead 1989; Sharp and Hutchison, 1997). There has also been much comment about the conditions and curriculum in reception classes, predicated on the theory that young children are best served by a 'nursery' environment, offering play-based learning, choice and independence.

Several qualitative research studies have shown that young children's opportunities to learn through play are curtailed in reception classes due to insufficient staff, lack of early years training, physical constraints (small classrooms, lack of facilities for outside play); lack of

equipment (especially sand and water and large play equipment) and adherence to primary school timetables (see Barrett 1986; Sharp 1988; Sharp and Turner 1987; West *et al.* 1990; Cleave and Brown 1991; Bennett 1992). Many of these studies took place at the time of rapid increase in schools admitting four-year-olds to infant classes.

In 1993, Ofsted published a report based on a survey of primary schools focusing on the quality of education for four-year-olds in primary classes (Ofsted 1993). The report called for greater attention to be paid to the needs of four-year-olds in primary classrooms. Its recommendations included: improving staff development; increasing opportunities for teachers and other staff to work and plan together; deploying staff with National Nursery Examination Board (NNEB) qualifications to work with younger children in primary classes; increasing parental involvement; developing clear admissions policies at LA level; and improving the curriculum. The report concluded that having four-year-olds in primary classes was not in itself detrimental to good practice but was a challenge that required a better response from LAs and schools.

The introduction of the Foundation Stage in 2000 was intended to bring a parity of educational experience for three- and four-year-olds, irrespective of the type of educational 'setting'. Research into the quality of provision for four-year-olds in reception classes has, however, continued to raise some questions about provision for four-year-olds. For example, Adams *et al.* (2004) found evidence of pressure on reception class teachers from teachers in Key Stage 1 to prioritise the acquisition of academic skills (especially reading, writing and numeracy).

As well as a focus on four- and five-year-olds, there has been an interest in educational provision for six-year-olds, given that this is a common age for children to start formal schooling in many countries. In 2003, a comparative study considered the educational provision for six-year-olds in England, Denmark and Finland (Ofsted 2003). The comparison countries were chosen for study because the results of the first Programme for International Student Assessment (PISA) indicated different levels of attainment among 15-year-olds in their ability to apply their skills in reading, maths and science to real-life situations. England performed well, but Finland performed best of all 31 participating countries. Denmark was ranked some way below the other two countries. Whereas England and Denmark showed a wide variation between high and low scoring students, Finland had a relatively narrow range in scores. In both Finland and Denmark, children started school at the beginning of the year in which they became seven.

The study found that, compared with the other two countries, the English curriculum was more centralised and closely defined. Teachers in England were less secure about the nature and purpose of the curriculum in year 1. Much more was expected of English six-year-olds in terms of reading, writing and mathematics; less attention was paid to the development of pupils as people. English teachers made greater use of closed questions in whole-class teaching, with relatively little emphasis on speculation or extended interaction. English classrooms were comparatively cramped. Parents in England held diverse views about the kind of education their children should receive, and some expressed concerns about an abrupt change in curriculum following the reception year.

6.2 The impact of school size on attainment

There is relatively little research evidence on the impact of school size on learning and teaching. One fairly recent study which considered the performance of pupils in schools with different characteristics (Spielhofer *et al.* 2002) found no evidence of a relationship between primary school size and pupil progress in Key Stage assessments, although this may have been influenced by the relatively small number of primary schools included in the analysis.

In New Zealand, Harker (2005) conducted a similar study, examining the relationship between school size and pupil attainment. The author points out that most New Zealand primary schools would be considered 'small to medium' by international standards. The study found no evidence of a significant relationship between school size and academic attainment in primary schools.

Two other qualitative research studies have considered aspects of (large) primary school size and school amalgamation in England. Southworth and Weindling (2002) researched the views of school leaders on the benefits and limitations of large primary schools (those with over 400 pupils). They found that headteachers of large primary schools held mostly positive views of the impact of large schools on teaching and learning. Wallace and Pocklington (2002) studied the process of school amalgamation in two local authorities, documenting the complexity of the process for local authority and school staff and identifying the main change management processes and themes involved.

6.3 What is the evidence that primary school structures influence results obtained in international comparative studies?

This section is concerned with evidence on the extent to which primary school structures influence results obtained in large-scale international comparative studies of attainment in different subject areas.

The International Association for the Evaluation for Educational Achievement (IEA) measured reading standards in 32 educational systems (Elley 1992). The study assessed the reading standards of pupils aged nine and fourteen. At the time, children in most of the systems started school at age six, a few at five, and some (mainly those in Scandinavian countries) did not start school until the age of seven. The report included an analysis of the relationship between age of starting school and reading performance. Against expectations, this showed that the top ten scoring countries had a later starting age (the mean school starting age of these countries was 6.3, compared with a mean of 5.9 in the ten lowest scoring countries). But the top-achieving countries were also the most economically advantaged. When the researchers carried out a further analysis controlling for each country's level of 'development', the trend for older starting ages to be associated with better results was reversed. However, the author points out that the differences were small and that children in 'later starting' countries had largely caught up by the time they reached the age of nine.

The Programme for International Student Assessment (PISA) launched by the Organisation for Economic Co-operation and Development (OECD) in 1997 assesses the reading, mathematical and scientific literacy of fifteen-year-olds in all OECD and several other countries. Each PISA study focuses on a different area: PISA 2000 focused on literacy; PISA 2003 looked at mathematics; and PISA 2006 focused on science.

The PISA online database (OECD 2007) includes data for all of the countries featured in this study (bar Scotland for which there are no separate details). It shows that some countries perform better than others, but it is difficult to identify the underlying causes of this. None of the six areas covered by the OECD study (quality of learning outcomes, equity and distribution, learner characteristics, school resources or school policies and practices) can be categorised as elements of school structure as defined in this literature survey. Therefore the information from PISA cannot help answer the question set out above.

The Progress in International Reading Literacy Study (PIRLS) is a comparative study of the reading achievement of ten-year-olds that takes place every five years (the most recent published results are from the 2001 study). Over 140,000 pupils in 35 countries (including those focused on in this survey) participated in this study.

A report of the 2001 study data by Mullis *et al.* (2003) considered two issues relevant to the structure of primary education in a chapter on school curriculum and organisation for teaching reading: the number of years children spend in pre-primary education; and the age at which children start school. The report concludes that:

Students in the PIRLS countries mostly began primary education when they were six or seven years old (...) although in England, New Zealand and Scotland almost all students began when they were five or younger. There is no clear relationship between age of entry to primary schooling and fourth-grade reading achievement. Among the top-performing countries on the PIRLS reading assessment, for example, the students in the Netherlands started primary school when they were six and those in England when they were five.

(Mullins et al. 2003: 129)

The report went on to state that the more important issue from the schools' perspective was whether children were ready to learn in a formal environment.

A third international comparative assessment, Trends in International Mathematics and Science Study (TIMSS) is dedicated to improving teaching and learning in mathematics and science for students around the world. Carried out every four years at the fourth and eighth grades, TIMSS provides data about trends in mathematics and science achievement over time. Again, like PISA, the study is not concerned with the impact of structures on achievement.

However, one of the issues addressed in a report of TIMSS data by Martin *et al.* (2000) was the effect of school size on achievement (where schools were categorised as 'large' if bigger than the national average in that country). The report states: 'There seems to be a general tendency for greater percentages of students in high-achieving schools to be in the larger schools in each country.' (p. 47).

The discussion so far has focused on the evidence of impact of school structures on assessment results in international comparative studies. However, it has also been suggested that primary school structures have themselves been influenced by results obtained in such studies. For example, Deckert-Peaceman (2005) referred to 'PISA-shock' in Germany following poor performance in the TIMSS and PISA studies. The author argues that this had a great impact and caused the German government to implement a number of countermeasures. Several of these concerned the structure of education, for example a move to all-day schooling (rather than half-day schooling) and the introduction of a flexible progression structure for pupils in the first two years of primary schooling (enabling pupils to progress through these years either quicker or slower than usual and introducing an earlier starting age for compulsory schooling). It is too early to tell if such measures will influence Germany's performance in future years.

There is little evidence to suggest that primary school structures influence the results obtained in international comparative achievement tests because the PISA, PIRLS and TIMSS studies do not routinely investigate this issue. The two studies to investigate school starting age (Elley 1992; Mullis *et al.* 2003) found no strong evidence to support a causal relationship between school starting age and attainment levels.

7. Summary and conclusions

This research survey aimed to investigate the structure of the English primary education system as a whole and its within-phase permutations. It included evidence on the roles and relationships of pre-school and primary provision and on starting ages for formal schooling.

This survey described key features of the English primary education system, including its ages, phases, curriculum and assessment.

7.1 Changes in primary school structures since 1967

There have been a number of key changes to the education system since the publication of the Plowden Report in 1967. These include:

- The introduction of a National Curriculum, national assessment and a national system of school inspection;
- Local financial management of schools;
- The introduction of different kinds of schools, including Foundation schools (funded by LAs but owned by school governing bodies or charitable foundations); and group arrangements such as federations and collaborations;
- An entitlement to free part-time pre-school education for three- and four-year-olds;
- An adjustment to the pattern of the school year, with a trend towards adopting a 'standard' school year;
- A reduction in the school starting age (from five to four years) and a move from three
 entry points per year towards a system whereby all children in the age-group start school
 at the beginning of the school year (annual entry to school in the year before statutory
 school age);
- A reduction in the size of the primary school population by just over 31,000 pupils between 1965 and 2004; and
- A reduction of just over 3,000 in the number primary schools between 1965 and 2004, with a disproportionate reduction in the number of small schools. The average size of primary schools during this period has increased from 193 to 224 pupils.

Many of these changes have their origins in the Education Reform Act of 1988, although some resulted from separate pieces of legislation or a combination of economic and social forces.

7.2 Structural characteristics of primary schools in other countries

A consideration of the structures of primary education in six countries (England, Scotland, Germany, the Netherlands, Sweden and New Zealand) revealed considerable variations in the organisation of primary education. The following characteristics were apparent.

- There were differences in the extent to which decision-making about educational structures is delegated from central government to national agencies, local areas, or schools themselves.
- The length of the school year across the six countries ranges from 176 days in Germany to 200 in the Netherlands. (The school year in England comprises 190 days.)
- There are considerable differences in school starting ages (ranging from four to seven years old). Most systems make decisions on school entry based solely on chronological age, although Sweden allows parents to request an early starting age for their child and Germany requires children to be 'ready' for formal schooling.
- Although most countries take children into school at the beginning of the school year, children in New Zealand start school on their fifth birthday.
- Most of the six countries have lowered the age of entry to school in recent years.

- Pre-school provision is commonly available for children from the age of three, although Sweden and the Netherlands make pre-school education available for children under one.
- In most countries, primary schooling lasts for seven or eight years, although Germany has only four years of primary school and Sweden's schools encompass both primary and secondary ages. In four of the six countries, children transfer to secondary school at age 13.
- The average primary school size ranges from 128 in Scotland to 224 in England.

7.3 The impact of structures on teaching and learning

There was very limited evidence available to comment on the effectiveness or impact of different primary school structures. International comparative studies have not routinely considered the influence of primary school structures on assessment results. There is little evidence to support common-sense assumptions that spending longer in primary schools (due to a lower age of starting school, longer period of primary schooling and/or a longer school year) results in higher attainment. However, it has been suggested that changes to primary school structures have been introduced in response to the findings of these 'high stakes' studies.

Two aspects of school structure have attracted more evaluative consideration in England and elsewhere: school size and starting age. The available evidence suggests that neither of these has a strong impact on children's attainment or progress at school.

There are however, some continuing questions raised by research into the appropriateness of the curriculum, pedagogy and environment offered to four-year-olds in English primary school reception classes.

7.4 Concluding remarks

This study has brought together evidence on the structures and phasing of primary education. There have been a number of structural changes in the years since the publication of the Plowden Report (DES 1967), many of which took place as a result of the Education Reform Act of 1988 (GB Statutes 1988). There has been an increased standardisation of primary school curriculum, assessment and inspection arrangements across the country. There has been an increased participation in educational provision among younger children. Pre-school provision for three-year-olds has become an entitlement and more four-year-olds are attending primary schools. The number of small primary schools has decreased markedly during this period.

A comparison of structural features in other countries shows considerable variation in such features as age of starting school, length of the school year, average size of school and length of primary schooling. This diversity may be of potential interest to those wishing to consider alternatives to the prevailing structures in primary education in England.

While it has been relatively straightforward to collate information about elements of primary school structure, it is much more difficult to find evidence to evaluate their impact and effectiveness. One issue that has received greater attention from researchers is the impact of school starting age on attainment. The assumption that an early school starting age is beneficial for children's later attainment is not well supported in the research and there are concerns about the appropriateness of provision for four-year-olds in schools.

The general lack of evidence on impact does nothing to reduce the relevance of structural issues for children, parents, teachers and decision-makers. Further research may help to illuminate some of these issues. It is, however, inherently challenging to identify the

influence of specific structural arrangements when considering the many different factors that influence learning and teaching in primary schools.

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SELECTION OF COMPARISON COUNTRIES

In scoping this work, careful consideration was given to the inclusion of countries other than England. The selection criteria for the five countries (in addition to England) were as follows:

- Inclusion in the Eurydice and INCA databases, which not only gives access to quality-assured information, but also means that the team has the opportunity to check interpretations of data on structures and approaches with a named contact in each country
- Inclusion in international comparative studies of educational performance (for example PISA, PIRLS, TIMSS).
 Such studies are highly influential and their results raise questions about the effects of educational structures and processes.
- Countries with particular characteristics of potential interest to the review (for example different approaches to pre-school/primary school structures and school starting ages).

The proposed sample and the reasons for selection are given in Table 3.

Table 3: Countries included in this study UK countries

England	Is included in PISA, PIRLS, TIMSS
Scotland	Is included in PISA, PIRLS, TIMSS.
	Children may start school aged four years six months.

European countries (non-UK)

Netherlands	Is included in PISA, PIRLS, TIMSS. The Netherlands is facing issues of cultural diversity and migration, similar to England and, although children must start school at age five, most start at four.
Sweden	Is included in PISA, PIRLS, TIMSS. Sweden has a comparatively late school starting age (seven years) and parents can negotiate a later school starting age if necessary.
Germany	Is included in PISA, PIRLS, TIMSS. Germany has school preparatory classes and school readiness checks. Selection for secondary school takes place when children are ten years old.

Rest of the world

New Zealand	Is included in PISA, PIRLS, TIMSS.
	Compulsory school starting age is six years, although most start at five. There is a body of literature on education in New
	Zealand.

SEARCH STRATEGY

A range of different educational and sociological databases were searched. Search strategies for all databases were developed by using terms from the relevant thesauri (where these were available), in combination with free text searching. The same search strategies were adhered to as far as possible for all the databases.

The key words used in the searches, together with a brief description of each of the databases searched, are outlined below. Throughout, * has been used to indicate truncation of terms, and (ft) to denote free-text search terms. All searches date from 2004 onwards.

A2.1 Applied Social Sciences Index and Abstracts (ASSIA)

ASSIA is an index of articles from over 600 international English language social science journals. The database provides unique coverage of special educational and developmental aspects of children.

#1	Primary education (ft)
#2	Primary schools (ft)
#3	#1 or #2
#4	Early childhood education
#5	Preschool education (ft)
#6	#4 or #5
#7	Structure*
#8	#7 and #3
#9	#7 and #6 (not #3)
#10	Learning
#11	Teaching
#12	#10 or #11
#13	#12 and (#3 or #6)

A2.2 Australian Education Index (AEI)

AEI is produced by the Australian Council for Educational Research. It is an index to materials at all levels of education and related fields. Source documents include journal articles, monographs, research reports, theses, conference papers, legislation, parliamentary debates and newspaper articles.

#28 #23 or #24 or #25 or #26 or #27 #29 #28 and #18 #30 School organisation
#30 School organisation #31 School systems

#32	Structure* (ft)
#33	#30 or #31 or #32
#34	#33 and #18
#35	Role of education
#36	#35 and #18

A2.3 British Education Index (BEI)

BEI provides bibliographic references to 350 British and selected European English-language periodicals in the field of education and training, plus developing coverage of national report and conference literature.

#1	Primary education
#2	School entrance age
#3	Early childhood education
#4	Nursery school education
#5	Preschool education
#6	Reception classes
#7	Infant school education
#8	Nursery schools
#9	Foundation stage (ft)
#10	Compulsory education
#11	#3 or #4 or #5 or #6 or #7 or #8 or #9
#12	England
#13	Scotland
#14	The Netherlands
#15	Sweden
#16	Germany
#17	New Zealand
#18	#12 or #13 or #14 or #15 or #16 or #17
#19	#1 and #18
#20	(#2 and #18) not #1
#21	(#10 and #18) not (#1 or #2)
#22	(#11 and #18) not (#1 or #2)
#23	Learning processes
#24	Teaching processes
#25	Teaching methods
#26	Pedagogy (ft)
#27	Teaching strategies (ft)
#28	#23 or #24 or #25 or #26 or #27
#29	#28 and #18
#30	School organisation
#31	School systems
#32	Structure* (ft)
#33	#30 or #31 or #32
#34	#33 and #18
#35	Role of education
#36	#35 and #18

A2.4 British Education Internet Resource Catalogue

The Catalogue provides descriptions and hyperlinks for evaluated internet resources within an indexed database. The collection aims to list and describe significant information resources and services specifically relevant to the study, practice and administration of education at a professional level.

#1	Primary education
#2	School entrance age
#3	Early childhood education
#4	Nursery school education
#5	Preschool education
#6	Reception classes
#7	Infant school education
#8	Foundation Stage
#9	Compulsory education
#10	Learning processes
#11	Teaching processes or Teaching methods
#12	School organisation or School systems
#13	Role of education

A2.5 ChildData

ChildData is produced by the National Children's Bureau. It encompasses four information databases: bibliographic information on books, reports and journal articles (including some full text access); directory information on more than 3,000 UK and international organisations concerned with children; Children in the News, an index to press coverage of children's issues since early 1996; and an indexed guide to conferences and events.

#1 Starting school

A2.6 Current Educational Research in the United Kingdom (CERUK)

CERUK, which is sponsored by the National Foundation for Educational Research and the Department for Education and Skills and supported by the Eppi-Centre, covers current and recently completed research in education and related fields.

#1	Primary education
#2	School entrance age
#3	Early childhood education
#4	Nursery school education
#5	Preschool education
#6	Reception classes
#7	Infant school education
#8	Foundation Stage
#9	Compulsory education
#10	#3 or #4 or #5 or #6 or #7 or #8
#11	England
#12	Scotland
#13	The Netherlands
#14	Sweden
#15	Germany
#16	New Zealand
#17	#11 or #12 or #13 or #14 or #15 or #16
#18	#1 and #17
#19	(#2 and #17) not #1
#20	(#9 and #17) not (#1 or #2)
#21	(#10 and #17) not (#1 or #2)
#22	Learning processes and #17
#23	School organisation and #17

A2.7 The Educational Resources Information Center (ERIC)

ERIC is sponsored by the United States Department of Education and is the largest education database in the world. It indexes over 725 periodicals and currently contains more than 7,000,000 records. Coverage includes research documents, journal articles, technical reports, program descriptions and evaluations and curricula material.

#1	Primary education
#2	Early childhood education
#3	Preschool education
#4	Elementary education
#5	#2 or #3 or #4
#6	England
#7	Scotland
#8	The Netherlands
#9	Sweden
#10	Germany
#11	New Zealand
#12	#6 or #7 or #8 or #9 or #10 or #11
#13	#1 and #12
#14	(#2 and #12) not #1
#15	Plowden (ft)
#16	School entrance age
#17	School readiness not (#1 or #2)
#18	#17 and #12
#19	Learning process
#20	Teaching process
#21	(#19 or #20) and #12
#22	School organisation
#23	School systems

#24	Structure* (ft)
#25	#22 or #23 or #24
#26	#25 and #12

#27 Role of education and #13

A2.8 PsycInfo

This is an international database containing citations and summaries of journal articles, book chapters, book and technical reports, as well as citations to dissertations in the field of psychology and psychological aspects of related disciplines, such as medicine, sociology and education.

#1	Primary education (Ti, AB)
#2	Early childhood education (Ti, AB)
#3	Preschool education (Ti, AB)
#4	Nursery school education (ft)
#5	Infant school education (ft)
#6	Reception classes
#7	Foundation Stage
#8	#1 or #2 or #3 or #4 or #5 or #6 or #7
#9	School starting age or School entrance age
#10	England
#11	Scotland
#12	The Netherlands
#13	Sweden
#14	Germany
#15	New Zealand
#16	#10 or #11 or #12 or #13 or #14 or #15
#17	#8 and #16
#18	#9 and #16
#19	School systems (Ti, AB) and #16
#20	School organisation and #16
#21	Role of education (Ti, AB) and #16

THE PRIMARY REVIEW PERSPECTIVES, THEMES AND SUB THEMES

The Primary Review's enquiries are framed by three broad perspectives, the third of which, primary education, breaks down into ten themes and 23 sub-themes. Each of the latter then generates a number of questions. The full framework of review perspectives, themes and questions is at www.primaryreview.org.uk

The Review Perspectives

D4	01.11.1		1 11 11	
P1	Children	ana	chilar	าดดต

P2 Culture, society and the global context

P3 Primary education

The Review Themes and Sub-themes

T1 Purposes and values

T1a Values, beliefs and principles

T1b Aims

T2 Learning and teaching

T2a Children's development and learning

T2b Teaching

T3 Curriculum and assessment

T3a Curriculum T3b Assessment

T4 Quality and standards

T4a Standards

T4b Quality assurance and inspection

T5 Diversity and inclusion

T5a Culture, gender, race, faithT5b Special educational needs

T6 Settings and professionals

T6a Buildings and resources

T6b Teacher supply, training, deployment & development

T6c Other professionals

T6d School organisation, management & leadership

T6e School culture and ethos

T7 Parenting, caring and educating

T7a Parents and carers T7b Home and school

T8 Beyond the school

T8a Children's lives beyond the schoolT8b Schools and other agencies

T9 Structures and phases

T9a Within-school structures, stages, classes & groups T9b System-level structures, phases & transitions

T10 Funding and governance

T10a Funding T10b Governance

THE EVIDENTIAL BASIS OF THE PRIMARY REVIEW

The Review has four evidential strands. These seek to balance opinion seeking with empirical data; non-interactive expressions of opinion with face-to-face discussion; official data with independent research; and material from England with that from other parts of the UK and from international sources. This enquiry, unlike some of its predecessors, looks outwards from primary schools to the wider society, and makes full though judicious use of international data and ideas from other countries.

Submissions

Following the convention in enquiries of this kind, submissions have been invited from all who wish to contribute. By June 2007, nearly 550 submissions had been received and more were arriving daily. The submissions range from brief single-issue expressions of opinion to substantial documents covering several or all of the themes and comprising both detailed evidence and recommendations for the future. A report on the submissions will be published in late 2007.

Soundings

This strand has two parts. The *Community Soundings* are a series of nine regionally based one to two day events, each comprising a sequence of meetings with representatives from schools and the communities they serve. The Community Soundings took place between January and March 2007, and entailed 87 witness sessions with groups of pupils, parents, governors, teachers, teaching assistants and heads, and with educational and community representatives from the areas in which the soundings took place. In all, there were over 700 witnesses. The *National Soundings* are a programme of more formal meetings with national organisations both inside and outside education. National Soundings A are for representatives of non-statutory national organisations, and they focus on educational policy. National Soundings B are for outstanding school practitioners; they focus on school and classroom practice. National Soundings C are variably-structured meetings with statutory and other bodies. National Soundings A and B will take place between January and March 2008. National Soundings C are outlined at 'other meetings' below.

Surveys

30 surveys of published research relating to the Review's ten themes have been commissioned from 70 academic consultants in universities in Britain and other countries. The surveys relate closely to the ten Review themes and the complete list appears in Appendix 3. Taken together, they will provide the most comprehensive review of research relating to primary education yet undertaken. They are being published in thematic groups from October 2007 onwards.

Searches

With the co-operation of DfES/DCSF, QCA, Ofsted, TDA and OECD, the Review is re-assessing a range of official data bearing on the primary phase. This will provide the necessary demographic, financial and statistical background to the Review and an important resource for its later consideration of policy options.

Other meetings (now designated National Soundings C)

In addition to the formal evidence-gathering procedures, the Review team meets members of various national bodies for the exchange of information and ideas: government and opposition representatives; officials at DfES/DCSF, QCA, Ofsted, TDA, GTC, NCSL and IRU; representatives of the teaching unions; and umbrella groups representing organisations involved in early years, primary education and teacher education. The first of three sessions with the House of Commons Education and Skills Committee took place in March 2007. Following the replacement of DfES by two separate departments, DCSF and DIUS, it is anticipated that there will be further meetings with this committee's successor.

THE PRIMARY REVIEW INTERIM REPORTS

The interim reports, which are being released in stages from October 2007, include the 30 research surveys commissioned from external consultants together with reports on the Review's two main consultation exercises: the community soundings (87 witness sessions with teachers, heads, parents, children and a wide range of community representatives, held in different parts of the country during 2007) and the submissions received from large numbers of organisations and individuals in response to the invitation issued when the Review was launched in October 2006.

The list below starts with the community soundings and submissions reports written by the Review team. Then follow the 30 research surveys commissioned from the Review's consultants. They are arranged by Review theme, not by the order of their publication. Report titles may be subject to minor amendment.

Once published, each interim report, together with a briefing summarising its findings, may be downloaded from the Review website, www.primaryreview.org.uk.

REPORTS ON PUBLIC CONSULTATIONS

- 1. Community soundings: the Primary Review regional witness sessions (Robin Alexander and Linda Hargreaves)
- 2. Submissions received by the Primary Review

PURPOSES AND VALUES

- 3. Aims as policy in English primary education. Research survey 1/1 (John White)
- 4. Aims and values in primary education: England and other countries. Research survey 1/2 (Maha Shuayb and Sharon O'Donnell)
- 5. Aims for primary education: the changing national context. Research survey 1/3 (Stephen Machin and Sandra McNally)
- 6. Aims for primary education: changing global contexts. Research survey 1/4 (Hugh Lauder, John Lowe and Rita Chawla-Duggan)

LEARNING AND TEACHING

- 7. Children's cognitive development and learning. Research survey 2/1a (Usha Goswami and Peter Bryant)
- 8. Children's social development, peer interaction and classroom. Research survey 2/1b (Christine Howe and Neil Mercer)
- 9. Teaching in primary schools. Research survey 2/2 (Robin Alexander and Maurice Galton)
- 10. Learning and teaching in primary schools: the curriculum dimension. Research survey 2/3 (Bob McCormick and Bob Moon)
- 11. Learning and teaching in primary schools: evidence from TLRP. Research survey 2/4 (Mary James and Andrew Pollard)

CURRICULUM AND ASSESSMENT

- 12. Primary curriculum and assessment: England and other countries. Research survey 3/1 (Kathy Hall and Kamil Øzerk)
- 13. The trajectory and impact of national curriculum and assessment reform. Research survey 3/2 (Harry Torrance, Dominic Wyse, Elaine McCreery and Russell Jones)
- 14. Primary curriculum futures. Research survey 3/3 (James Conroy, Moira Hulme and Ian Menter)
- 15. Assessment alternatives for primary education. Research survey 3/4 (Wynne Harlen)

QUALITY AND STANDARDS

- 16. Standards and quality in English primary schools over time: the national evidence. Research survey 4/1 (Peter Tymms and Christine Merrell)
- 17. Standards in English primary education: the international evidence. Research survey 4/2 (Chris Whetton, Graham Ruddock and Liz Twist)
- 18. Quality assurance in English primary education. Research survey 4/3 (Peter Cunningham and Philip Raymont)

DIVERSITY AND INCLUSION

- 19. Children in primary education: demography, culture, diversity and inclusion. Research survey 5/1 (Mel Ainscow, Jean Conteh, Alan Dyson and Frances Gallanaugh)
- 20. Learning needs and difficulties among children of primary school age: definition, identification, provision and issues. Research survey 5/2 (Harry Daniels and Jill Porter)
- 21. Children and their primary schools: pupils' voices. Research survey 5/3 (Carol Robinson and Michael Fielding)

SETTINGS AND PROFESSIONALS

- 22. Primary education: the physical environment. Research survey 6/1 (Karl Wall, Julie Dockrell and Nick Peacey)
- 23. Primary education: the professional environment. Research survey 6/2 (lan Stronach, Andy Pickard and Elizabeth Jones)
- 24. Teachers and other professionals: training, induction and development. Research survey 6/3 (Olwen McNamara, Rosemary Webb and Mark Brundrett)
- 25. Teachers and other professionals: workforce management and reform. Research survey 6/4 (Hilary Burgess)

PARENTING, CARING AND EDUCATING

26. Parenting, caring and educating. Research survey 7/1 (Yolande Muschamp, Felicity Wikeley, Tess Ridge and Maria Balarin)

BEYOND THE SCHOOL

- 27. Children's lives outside school and their educational impact. Research survey 8/1 (Berry Mayall)
- 28. Primary schools and other agencies. Research survey 8/2 (Ian Barron, Rachel Holmes, Maggie MacLure and Katherine Runswick-Cole)

STRUCTURES AND PHASES

- 29. The structure of primary education: England and other countries. Research survey 9/1 (Anna Riggall and Caroline Sharp)
- 30. Organising learning and teaching in primary schools: structure, grouping and transition. Research survey 9/2 (Peter Blatchford, Judith Ireson, Susan Hallam, Peter Kutnick and Andrea Creech)

FUNDING AND GOVERNANCE

- 31. The financing of primary education. Research survey 10/1 (Philip Noden and Anne West)
- 32. The governance, administration and control of primary education. Research survey 10/2 (Maria Balarin and Hugh Lauder).



The Primary Review is a wide-ranging independent enquiry into the condition and future of primary education in England. It is supported by Esmée Fairbairn Foundation, based at the University of Cambridge and directed by Robin Alexander.

The Review was launched in October 2006 and aims to publish its final report in autumn 2008.

FURTHER INFORMATION

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