



Office for Standards
in Education

The education of six year olds in England, Denmark and Finland

An international comparative study

HMI 1660



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Introduction and international context

1 This report compares and contrasts the educational experiences of six year olds and the provision that is made for them in a small sample of settings in England, Denmark and Finland, in order to contribute to the national debate about early education in England. Two particular aspects of that debate have informed the timing and focus of this study.

2 First, the recent announcement of a Primary National Strategy for England has prompted fresh debate about the primary curriculum and the extent to which teachers should be able to determine what they teach and how they teach it. The Danish and Finnish education systems provide us with the opportunity to examine devolved and de-regulated approaches to the curriculum and pupils' assessment which are more akin to those which existed in England before the introduction of the National Curriculum. Both countries have virtually no national testing or performance targets and their teachers have a high degree of autonomy in planning the curriculum.

3 Second, the effect of different starting ages on pupils' achievement, during and at the end of compulsory education, is also the subject of lively discussion in England. The discussion has intensified following the publication of a number of international studies comparing the attainment of pupils in different countries. In England, children are required to attend school in the term after their fifth birthday. By contrast, Finland and Denmark and a small number of other countries delay compulsory education until the beginning of the academic year in which children reach seven. This report does not comment directly on the effect of the different starting ages, nor does it provide definitive explanations for the differences in the performance of children in the three countries which have emerged from international surveys. It does, however, shed light on some of the circumstances that give rise to those differences.

4 Among the various international surveys carried out in recent years one, which included pupils in the three countries visited for this study, is worthy of particular attention. The results of the first Programme for International Student Assessment, PISA, 2000 provided evidence of the performance of pupils in England, Denmark and Finland, among others.¹ Whereas previous surveys, such as the Third International Mathematics and Science Survey (TIMSS), have focused on pupils' knowledge and understanding of mathematics and science, PISA assessed 15 year olds' capability to use their knowledge and skills in reading, mathematics and science in order to meet real-life challenges.² Pupils in England performed better in all three areas of achievement than those in most of the other 31 participating countries, but the Finnish students outperformed those in all the countries that took part. Denmark was ranked some way below both England and Finland. Among the countries with high average scores, Finland had the smallest variation in students' scores in reading literacy, considerably narrower than the range of scores in England and Denmark, which was relatively wide.

¹ Programme for International Student Assessment, OECD, 2000.

² Third International Mathematics and Science Survey, <http://timss.bc.edu/>

5 Explaining such differences is complex. A Finnish analysis undertaken for OECD argues that 'there is no single explanation for the successful performance of Finnish students in PISA' and goes on to highlight a number of apparent correlates of their success.³ These include exceptionally high levels of student interest and engagement in reading outside school, a unified schooling system based on the principle of equity and which minimises low achievement, and a curriculum which stresses basic literacy skills but which is also flexible and in the design of which teachers play a central part. In offering its own insights into such matters, this study has taken into account the difficulty of disentangling the relative effect of a range of non-educational influences on the attainment of pupils: social, cultural, economic and familial factors. This difficulty was confirmed by a review of international surveys of educational achievement, commissioned by Ofsted in 1996 from David Reynolds and Shaun Farrell.⁴

6 As well as the later start to compulsory education and greater curriculum autonomy for schools and teachers, Denmark and Finland share other similarities. In both countries there is a stronger emphasis in the education of six year olds on personal and social education, learning to learn and preparation for school. There is also close agreement between home and school about the purposes of pre-school education. In spite of these similarities in the Danish and Finnish systems, however, they produce different results in terms of achievement by the age of 15, according to the PISA study. This illustrates the difficulty of isolating the effect of any of the factors which have an influence on standards in education in other countries and highlights the danger of attempting to implant them anywhere else in the belief that it will lead to something better.

7 These difficulties notwithstanding, the debate about the extent to which differences in early education may have influenced the outcomes of international comparative surveys such as PISA is an important one. This report is intended to contribute to that debate through analysis and questions for discussion. For example, the Danish and Finnish pre-school teachers placed less emphasis on reading and writing than the Year 1 teachers in England; yet, by the time they are 15, Finnish pupils are outperforming their English counterparts in the PISA tests by a considerable margin in reading literacy and by smaller margins in mathematical and scientific literacy. How much does the Finnish approach to pre-school education influence the subsequent progress that children make in compulsory education? How much influence do the regularity of the Finnish sound/spelling system and the strong national culture of reading have on children's progress in reading? Is it possible that the greater emphasis in Finnish early education on social, moral and physical development, mutual support and positive attitudes produces not only well-adjusted, sociable, altruistic and civically minded adults but also more highly motivated and successful readers? The point is not entirely speculative, since the English inspection evidence since 1978, the year of the issue of the findings from the HMI National Primary Survey, consistently shows primary children achieving the highest standards of literacy and numeracy in the context of a broad and balanced curriculum.⁵

³ Lyytinen HK, 'Why are Finnish students doing so well in PISA?', Paris: OECD, 2002.

⁴ Reynolds D and Farrell S *Worlds apart? A review of international surveys of educational achievement involving England*, HMSO, 1996.

⁵ *Primary education in England*, HMSO, 1978.

8 It was against this background that the study set out to answer the following key questions.

- How do the pre-school settings in which the majority of six year olds in Finland and Denmark are cared for and educated compare with the Year 1 classes of their counterparts in England in terms of the learning environment and teaching and learning?
- What are the similarities and differences in the expectations of parents, teachers and national and local governments in the three countries by the time children reach the age of six?
- How do these expectations, and the values that underpin them, influence the curriculum and pedagogy in the three countries?
- What are the differences in the curriculum that is provided for six year olds?
- How do the settings meet pupils' individual needs?
- How are teachers involved in curriculum development and how does this influence their professional autonomy and job satisfaction?
- What differences are there in the way teachers assess and record children's progress, and how do they use this information?
- What are the roles of teaching assistants in the three countries and how do they make a difference to children's learning and teachers' workload?

9 The study involved a team of seven of Her Majesty's Inspectors (HMI), the early years adviser for the local education authority (LEA) where the English six-year-old classes were studied, and Professor Robin Alexander of the University of Cambridge, an education consultant with extensive experience of international research in primary education and membership of various national advisory bodies and enquiries. Professor Alexander made a substantial contribution to the design and implementation of the study and to this report. Education advisers in Denmark and Finland were also involved in the study during the visits in their own countries and translators were employed to accompany members of the team in the classrooms. The interview and observation procedures were piloted during the autumn term 2002 and were subsequently refined. The fieldwork itself was carried out during March 2003 (see annex B for details of the school sample and the study's methodology).

10 Although the samples of schools in the three countries are small – twelve in England, seven in Denmark and eight in Finland – they provide enough illustrative material for insights to be gained into the educational values of the three countries and the ways in which these influence their approaches to the education of six-year-old children. This report describes the findings from the visits and raises questions for discussion about what England might learn from Denmark and Finland.

Main findings

- The curriculum is much more centralised and closely defined in England than in the other two countries. In both Denmark and Finland, schools work within a more permissive curriculum framework in which professional autonomy and self-regulation are highly prized. The result is that approaches to planning and teaching are much more varied in Denmark and Finland than in England.
- Many of the teachers in the English schools were less secure than their Finnish or Danish counterparts about the nature and purpose of the curriculum in Year 1. Several of them felt they were caught between the expectations of the Foundation Stage on the one hand and the impact of the National Curriculum testing system in Year 2 on the other. The teachers in Finland and Denmark, confident in their role to prepare children for compulsory schooling, had no such difficulties.
- Much more importance is attached in Finland and Denmark to the way six year olds develop as people, rather than what they should know and be able to do. Although literacy and numeracy and other areas of learning are important in the Danish and Finnish programmes, personal and social development, learning to learn, developing self-control, and preparation for school are given a higher priority.
- Much more is expected of English six year olds in reading, writing and mathematics, although the greater degree of professional autonomy in Denmark and Finland made for considerable variation in this regard and some literacy/numeracy teaching in Finland was as challenging as that in England. In these areas of learning, however, the achievement of six year olds in the English schools visited was generally in advance of their counterparts in Denmark and Finland, although the evidence base was not a large or necessarily representative one.
- By comparison with those in Denmark and Finland, the English primary classrooms were well resourced but cramped, and excessively complex layouts sometimes added to their relative inflexibility. In Finland, the quality of design, furniture and equipment was exceptional, as was the amount of space.
- Class sizes for six year olds in England were comparable with those in Denmark, but considerably larger than in Finland. More challenging in their teaching implications than class size, however, were the classes in the small and medium-sized English schools where the six year olds were mixed with other year groups, especially when these crossed the Foundation/Key Stage 1 boundary.
- Learning tasks in the lessons for six year olds in England had a greater emphasis on knowledge and skill than those in Denmark and Finland, where acquiring positive attitudes to learning and awareness of the feelings and needs of other people had much greater prominence. The Danish and Finnish teachers also made much greater use of oral and collaborative tasks and activities.
- While in the English classrooms children's work was sometimes differentiated by perceived ability and task, differentiation in the other two countries was largely by outcome only. The emphasis instead, especially in Denmark, was on inclusion, co-operation and bringing children along together.

- Whole-class teaching in England was dominated by closed questions, brief answers and relatively little extended interaction. In Denmark and Finland, whole-class interaction was less tightly structured and more open and speculative. The English children were less confident speaking in whole-class settings, while in Denmark especially the strongly collective ethos encouraged rather than inhibited their contributions.
- There was no equivalent of baseline assessment or Foundation Stage profiling in Denmark or Finland, where the emphasis was on close consultation with parents, often involving the children themselves.
- Assessment for learning in the classrooms of all three countries was too often limited by teachers' concern that day-to-day feedback to pupils should, at all costs, be positive. The most effective teachers were those who maintained an encouraging ambience, but used classroom dialogue to engage constructively with pupils' thinking and ideas.
- Parents in all three countries, of course, wanted their children to be happy in school and relate well to others, but there was greater agreement in Finland and Denmark about the kind of education their six year olds should receive. There were more diverse views among the parents in England and more concerns about the Year 1 curriculum that some regarded as too abrupt a change after the Foundation Stage curriculum of the Reception year (Year R).

Settings and the teachers

Settings

11 The six-year-old children were being educated in very different settings in the three countries. In the English settings, the six year olds were all in school. The only differences were in the size and type of school – infant, first or primary schools – and the age range of the children in the classes with six year olds. In four of the twelve English schools, the classes comprised only children who would have their sixth birthday during that school year. In half the schools, there was a mixed-year class of six and seven year olds, and in the rest, a mixed-year class of five and six year olds. The number of children in the classes varied between ten in a mixed-year class in a small school and thirty in a mixed-year class in a school with just over 200 on roll. The average size of the classes was 22.6, similar to the Danish classes, but almost twice as large as the classes in Finland.

12 In Finland, in all but two of the settings visited, the six year olds were in pre-school classes in kindergartens. In the remainder, they were in pre-school classes attached to ‘comprehensive schools’ catering for children from seven to sixteen. Class sizes ranged from seven to twenty-two, the latter being one of the classes attached to a comprehensive school. The average size of the classes was 12.5. All the pre-school classes consisted of children who were six in that academic year, although the teaching groups were more fluid on some occasions when, for example, younger children would join a session or both age groups would have a rest period or play out of doors. All the kindergartens provided an extended day for children who needed it, in some cases operating from as early as 6.30 in the morning until late in the evening.

13 The settings visited in Denmark were all pre-school classes within *folkeskoler*, that is, schools catering for pupils from the ages of six to sixteen. The schools ranged in size from a developing new school with only 150 pupils at the time of the visit, to a school with 850 pupils. The pre-school classes ranged in size from 16 to 25 children with an average of 21. All the classes seen had two *pædagoger*, staff trained to work with young children. In addition to the pre-school classes within the *folkeskoler*, there was also extensive after-school provision (known as *Skolefritidsordning* or *SFO*), until around 5.30pm: children were likely to attend the pre-school class in the morning and then move directly into day-care provision for the afternoon.

Role of the headteacher

14 The heads in all three countries spoke confidently about their responsibility to ensure a sense of purpose and direction for their schools. They did not, however, have equal degrees of freedom to determine the direction to be taken, nor did they feel equally in control of the means of getting there.

15 In England, all the heads took an interest in the curriculum, but it was clear that some felt able to exercise more control over its organisation than others. Several, for example, described the things they would like to change, such as introducing more integration of subjects in curriculum planning, or including more play-based learning in Year 1, but felt unable to do so because of anxiety that this might jeopardise hard-won gains in standards in the core subjects. Others, however, were more prepared to follow their ideals and had the confidence to do what they believed was right. One head, for example, described how the school had made educational use of a heavy snowfall, encouraging the teachers to follow the children's interests and capitalise on the stimulus that, over an extended period, the snow provided.

16 In Finland, the majority of the heads regarded the educational aspects of the role as the most important part of their work, and one had overall responsibility for the curriculum and pedagogy in seven day-care settings and pre-school classes in the area. Only one head saw the role as purely administrative, with no involvement with the teaching and no responsibility for the curriculum. By contrast, the other heads had a clear vision for their schools and provided professional leadership through discussion with staff about their work with the children, leading staff meetings and consulting staff on proposals for change. There was a strong sense in the majority of the Finnish schools that the head had a key role in setting goals, developing the school's ethos and ensuring that everyone shared the same values and put them into practice in the classroom.

17 In Denmark, the significant degree of autonomy that the schools enjoyed showed itself in the heads' clear and confident expression of their vision and philosophy for their own schools. In the newest school visited, its vision had been formulated before the building had been planned; the architecture of the school realised this through the use of space and the way in which the three main buildings were organised. The head of the school wanted co-operation, for example, between the main school and the after-school provision; it was therefore planned that these should use the same buildings. To support this, his responsibilities included overall management of the person in charge of the after-school provision. The head believed strongly in allowing teachers to use a variety of working methods and expressed this belief by quoting a Chinese proverb: 'If you want to fly your kite high, you must have a long string'.

18 In another Danish school in an inner-city area with a large proportion of minority ethnic children, the head believed in the vital importance of socialisation, not just for the minority ethnic pupils but for all. He wanted children to learn how to be part of a group, feeling that they were often too self-centred. He expressed his vision for his school and its role in a metaphor of a house: the walls and the roof were life skills which everyone needs; the plumbing and electricity were social skills which made life comfortable for everyone; furniture – which could be old, new or replaced when fashions changed – symbolised the subjects of the curriculum.

19 Some aspects of the roles and responsibilities of the heads were common to all three countries. All had some responsibility for financial management, although the English heads had the greatest autonomy and freedom to deploy their resources in line with the needs and circumstances of the school. They had had a high proportion of the school's available funding devolved to them, while in Denmark some aspects of funding, especially for staffing,

remained the responsibility of the municipalities. All the heads were responsible for the general administration of the school, including liaison with parents, the deployment and development of staff, and the management of the buildings, materials and other resources.

20 The biggest differences were in the extent to which the heads were involved with monitoring and evaluating the effectiveness of teaching and learning. In the English schools, these activities were well-established features of the head's role, making a significant contribution to school improvement and teachers' professional development. The monitoring of teachers' planning, the observation of teaching in all classes, followed by feedback and discussion with individual teachers, and the scrutiny of pupils' work, were ways in which schools reflected on their own progress and achievements and took action to improve areas of weakness.

21 These roles were not common to the heads in Finland or Denmark. In the Finnish settings, there was a strong culture of professional self-regulation. As a result, the heads trusted their teachers to do the job well and they enjoyed high levels of autonomy in the classroom. As one Finnish teacher said, 'The door is open, but nobody comes'. Trust was also the principal reason for the lack of monitoring of teaching by the head in the majority of the settings, although there were a few exceptions. In three settings, the heads occasionally observed teachers in the classroom and used this as the basis for a review of their work and development needs. In two others, the heads regularly taught alongside staff; this was helpful to them when discussing pedagogical matters with the staff. They did not, however, use this as the basis for giving feedback to their colleagues in any formal way. In one setting, the head believed that self-evaluation by teachers was more important than their being observed by her, and that teachers' attention could be given more usefully to monitoring the learning of the children and supporting the professional development of their colleagues.

22 In Denmark, the heads had the title of '*Skoleinspektor*', literally 'school inspector', but this did not carry with it any expectation that the head would be the 'resident inspector' in the school. As in Finland, heads talked in terms of the trust they had in their teachers. In fact, the formal monitoring and evaluation of teaching were not part of the head's role in any of the Danish settings visited. Instead, evidence of the effect of teaching on children's learning was gathered in other ways. Some heads taught for some of the time themselves, gaining useful information about children's progress. Others monitored the children's work and spent time in staff meetings listening to staff discussions about planning, teaching and the children. In one school, where the staff were used to observing each other and there was a strong culture of openness, the teachers actually wanted the head to observe them teaching more than he did, but he felt there was insufficient time for this; among all the other things for which he was responsible, it was not a priority for him.

Teaching and adult support roles

23 All of the teachers in the three countries had responsibility for their own class of children. Teaching assistants worked alongside teachers in all the English classrooms and similar assistance was also provided in the Danish and Finnish classrooms. One important distinction, however, needs to be made. In both England and Finland there was a clear

professional difference in terms of qualifications (and, usually, responsibilities) between the qualified teacher on the one hand and the unqualified – although trained – teaching assistant on the other. In Denmark, however, both parties were trained as pre-school class teachers. Their training takes place in specialist institutions of higher education (*pædagogseminarium*) and lasts three and a half years – almost as long as the four-year training undertaken by the *folkeskole* teachers. The Finnish teachers had usually undertaken the kindergarten diploma course lasting three years or its more recent graduate equivalent, the early childhood degree.

24 In England, the teachers' role was confined largely to teaching their own class, although they usually also had special responsibility for the co-ordination and management of a subject or group of subjects across the school.

25 The teachers in the pre-school classes in Finland also worked with the younger children in the kindergartens at certain times during the day. In a few cases, the age composition of the teaching groups was fairly fluid, with four and five year olds mixing with six year olds from the pre-school class for music, play and physical education.

26 In Denmark, the pre-school class teachers generally stayed with their own classes, although a few of the schools reported that there was some shared teaching across the pre-school classes and the first two grades of the *folkeskole*. Because the classes were larger than 20 pupils, each class had two pre-school teachers. Despite their equality in terms of training and qualifications, the Danish teachers had unequal responsibilities: usually one took the lead in both planning and teaching while the other worked to the other's instructions, although there were occasions when they alternated roles.

27 The English teaching assistants undertook various roles. Some provided general assistance as directed, while others worked with a greater degree of autonomy with specific groups on an age or curricular basis (for example, with the younger reception children or a mixed age group doing art) or with individual children with a range of learning needs, including those with a statement of special educational need (SEN).

28 In Finland, teaching assistants were also allocated to meet the learning needs of specific children as well as, by right, to every class with more than 12 children. In Denmark, however, the allocation of the work tended to relate to the curriculum rather than to specific children.

29 Systematic tracking of all the adults present during sessions in all three countries frequently showed teaching assistants doing little more than watching. This was most notable during whole-class teaching, for example, in the literacy and mathematics lessons in England, but also in equivalent teaching in the other two countries. Overall, however, inspection evidence in England shows that the role of teaching assistants during whole-class teaching has become more active since the introduction of the two national strategies. Sometimes the teaching assistants fulfilled housekeeping or caretaking roles: setting out equipment, tidying up or keeping an eye on the class while the teacher worked with a group. The teaching assistants' support had more effect where they worked with specific children or took responsibility for particular curriculum activities with a group, although it was also highly variable. Some teaching assistants engaged directly with their groups, asking questions, following up interesting lines of enquiry and providing feedback, while others merely supervised.

30 It is clear that, in all three countries, there are questions about the efficacy of the way teaching assistants are deployed in classes of six year olds. It might be expected that the under-deployment of teaching assistants would be more marked in Finland, because the classes there were so small. To a degree this was the case, because teachers might have seen little sense in subdividing a group of seven or even twelve children. However, in England, the apparent pressure of larger classes did not seem to lead to proportionately greater levels of activity by teaching assistants, except where they supported children with very specific learning needs.

Professional development

31 The key difference between Denmark on the one hand and England and Finland on the other is that trained teachers are responsible for classes of six year olds in England and Finland. This is not the case in Denmark, where the pre-school classes are taught by *pædagoger*.

32 In England, the teachers usually had either a Bachelor of Education (BEd) degree, following four years of study, or a postgraduate certificate of education (PGCE) in primary education, preceded by a three-year degree course in one or more subjects.

33 In Finland, the teachers trained since 1996 had followed a three-year course leading to a Bachelor's degree. Those trained prior to this had completed a three-year course leading to a certificate in early childhood education, which was supplemented later by the equivalent of a 15-week study period. Teachers working in the comprehensive school, for pupils from ages 7–16, are required to have a Master's degree.

34 In Denmark, most of the *pædagoger* had undertaken a training course, lasting around three and a half years, which led to the award of the *Bevis for Pædagoguddannelsen*, the equivalent of a certificate in education. Such training prepares them to work not only with children in schools but also elsewhere, such as kindergartens, foster homes, in one-to-one care of pupils and in other institutions. Their training was not designed to prepare them to specialise in teaching pre-school pupils in particular and, unlike that in England, the training did not include the teaching of curriculum subjects. Experience to teach pre-school pupils might have been gained either during the course of training or 'on the job'. In all the classes seen, there were two *pædagoger*. For the assistant *pædagog*, this might have been her first placement in a pre-school setting (with one exception, all the *pædagoger* were female). The classes in the *Folkeskole* itself are taught by trained teachers who have undertaken a four-year training course.

35 In England, Denmark and Finland, the availability and take-up of in-service training varied from one individual to another.

36 In England, teachers had attended a wide variety of training courses, almost always including training for the National Literacy and Numeracy Strategies, as well as other courses. These included training in other subjects, including information and communication technology and also, for those teaching in mixed-age classes (Year R/1 or Year 1/2), training for the Foundation Stage or the national tests. Some teachers visited other schools or

acknowledged experts to observe teaching elsewhere. Newly qualified teachers had attended training organised by their LEAs. Teachers also referred to being supported by other teachers, for example through the sharing of curriculum plans. Occasionally, a teacher also referred to longer-term training, such as training to teach hearing-impaired pupils.

37 In Finland, most of the training that the teachers had received in recent years had been associated with the pre-school curriculum reforms introduced by central government in 2001. For the first time, the pre-school year was identified as distinct preparation for school and separated from the childcare which preceded it. The training was organised by the municipality and involved attendance in the daytime at local centres. The amount of the training varied between two and nine days, the latter including time given for distance learning in the teachers' homes. Other training included courses in mathematics and the curriculum for three to five year olds. Several teachers described training that had been provided in-house by their colleagues or, in the case of SEN and Finnish as an additional language, by visiting specialists.

38 In Denmark, pre-school teachers attended courses organised by their municipality. These included work on phonics, early reading, counting, socialisation, learning styles and the methodology of team teaching. These teachers frequently referred to their personal reading as a way of keeping up to date with developments and ideas, as well as meetings with others or regular courses organised by the municipality. One pre-school teacher estimated that she attended 50–60 hours of training each year; another quoted a course on phonics that lasted 20–25 hours. Training took place both at the end of the school day (that is, from about 2pm onwards) as well as during it. Since there were usually two teachers in the pre-school classes visited, one of them took the lead role when the other was absent on training.

Curriculum and assessment

Curriculum control and intentions

39 Compared with the other two systems, the curriculum, assessment and quality assurance in England are much more centralised. The curriculum for English six-year-old pupils (Year 1) is similar in breadth to those for six year olds in Denmark and Finland, but the statutory elements of it are expressed largely in terms of subjects rather than areas of learning. Pupils' spiritual, moral, social and cultural development are expected to be promoted across all National Curriculum subjects, as well as through religious education and the non-statutory framework for personal, social and health education (PSHE) and citizenship. A number of the English teachers in this study welcomed the guidance which came with a centralised curriculum, not just in literacy and numeracy but also through the curriculum frameworks and materials which are now available commercially and online. Yet they sometimes expressed considerable unease about the pressures which such prescription placed on them and their pupils and the distorting impact they felt this had on the wider curriculum. They also described the difficulty of covering everything in the National Curriculum Programmes of Study, including the National Literacy and Numeracy frameworks. They appeared to be unaware, however, that they already had the freedom to vary the amount of time given to each subject and to teach some aspects of the Programmes of Study in more depth than others. The publication by the Department for Education and Skills, in May 2003, of a national strategy for primary schools, *Excellence and Enjoyment*, draws attention to the existing and planned freedoms available to teachers in these respects.

40 Not only is there far less central government direction in Danish education, but the national temper itself seems historically opposed to it. Thus, reflecting on the possibility that the government might respond to anxieties about Denmark's position in international studies by exercising a greater measure of control over what is taught and how, one head said that this was unlikely, but that if it happened and the resulting prescription proved unacceptable, then Danish teachers would probably ignore it.

41 In Denmark, therefore, the curriculum framework for the education of six year olds is relatively generalised and permissive. Schools construct their own 'activity plans', taking account of guidelines published by their municipality. In one Danish municipality, the pre-school guidelines covered: the child's social and emotional development; physical development; language development (including communication, phonological awareness, early reading and writing); mathematical, scientific, aesthetic and environmental development; the child as learner; teaching methods; and co-operation between the pre-school teachers and parents.

42 Teaching in Danish pre-school classes is expected, above all else, to prepare children for the culture, routines and demands of formal schooling, concentrating especially on providing them with a secure and supportive environment in which they can acquire confidence, begin to take responsibility for their own learning and relate constructively and harmoniously to

other children and to adults. As one head expressed it, 'the whole person is important'; another said, 'When they start in this school at age 6 (that is, in the pre-school class), they are allowed to be children for one year.'

43 The Finnish day-care centres and pre-school classes worked within the framework of the pre-school core curriculum which had been outlined by government and filled out locally by each municipality. This provides a greater degree of direction than the Danish framework, but nothing approaching the level of detail of the National Curriculum in England, let alone its legal force. As in Denmark, the Finnish pre-school curriculum gives priority to children's personal and interpersonal development, the nurturing of a climate of tolerance and mutual respect, and active and collaborative learning, but it does so in the context of the specified key curriculum fields of language and communication, mathematics, nature and the environment, ethics, physical development, health and the arts. The ethical and physical aspects are given greater prominence than in Denmark.

44 The six areas of learning for the Foundation Stage in England are not far removed in their scope and emphasis from the Finnish pre-school core curriculum. They include language, literacy and mathematics, but balance them with personal development, environmental understanding, creative and physical development. The transition from the end of the Foundation Stage to the beginning of Key Stage 1 and the subjects of the National Curriculum is seen by some, however, to mark an abrupt shift in terms of the structure and content of the curriculum. In England, some of the teachers of six year olds and their heads were troubled by the fact that they had to deal with two curricula which they perceived to be not entirely compatible.

45 The most obvious consequence of decentralisation in Denmark and Finland is that attitudes to curriculum matters are more relaxed and teachers have greater freedom to determine the structure and content of the curriculum. Broadly, the Danish and Finnish teachers were happy with the frameworks within which they were expected to work and took advantage of the latitude available to them. However, there were wide variations in the approaches to teaching and learning in the Danish and Finnish classrooms. Expectations of six year olds for literacy and numeracy in Denmark and Finland were somewhat different to those in England. In Denmark and Finland, greater emphasis was given to speaking and listening, whereas the emphasis in England was on reading and writing. In Denmark there was growing concern that the country's modest showing in the PISA study might require changes both to the curriculum and the degree of external control to which it was subject, whereas the strong Finnish showing in this study was seen as an endorsement of the current system.

46 For the English teachers with mixed-aged classes of Year R and Year 1 children, the curriculum requirements, linked to accountability through testing and inspection, were felt to increase the pressures. Some teachers of Key Stage 1 reported anxieties about how to give enough attention to the non-core subjects when literacy and numeracy occupy half the time and much more than half the burden of expectations, testing and public accountability. In addition, those teachers whose classes bridged the Foundation Stage and Key Stage 1 felt that there were difficulties in reconciling the Foundation Stage curriculum and the National Curriculum within a single, coherent programme for the whole class.

47 Even in single-age classes, and notwithstanding the findings of Ofsted's report, *The Curriculum in Successful Primary Schools*, the English teachers and parents often expressed anxiety about the balance of the curriculum and the lack of time for creativity, play and discussion. The concerns expressed by the Finnish and Danish teachers were of a different order. They talked much less about curriculum logistics and much more about the goals and values of the curriculum and ways of realising them in practice. For example, Danish teachers and *pædagoger* described their belief in the importance of fostering collaborative learning, environmentally conscious habits and routines, healthy eating and the Danish language, literature and music. These teachers also believed that the curriculum in Denmark should counter undesirable social trends, particularly individualism, materialism, the vulnerability of the national language and the dilution of traditional Danish culture.

48 It is already clear that the three systems work with rather different ideas of what constitutes an appropriate curriculum for six year olds. There is common ground between the English Foundation Stage curriculum and both the Finnish pre-school core curriculum and the somewhat looser Danish pre-school curriculum, but much less between the latter two and the requirements of the National Curriculum at Key Stage 1 and, in particular, Year 1. This difference clearly reflects the stages at which compulsory education, and the more formal approach to teaching and learning that accompanies it, begins in the three countries.

Curriculum continuity and coherence

49 In terms of promoting continuity and coherence in the curriculum, teachers in England benefit from the fact that six-year-old pupils have already been in compulsory education for a year (or part of a year) and that they almost always know which classes the pupils have come from. This is obviously not the case in Finland and Denmark.

50 English pupils do not begin the National Curriculum until they enter Year 1, when they will all have reached the age of five. All the schools visited had detailed arrangements for passing on information from the previous class into Year 1 and, again, from Year 1 into Year 2. The Year 1 teachers received a wide range of information from the previous class. Typically, such information included assessments of the children when they entered school (baseline assessment); records of their reading, often including phonic knowledge; samples of work; records linked to the objectives of the National Literacy and Numeracy Strategies and, for pupils with special educational needs, their individual education plans. Some teachers also received targets for pupils in English and mathematics. Few teachers referred to receiving reports of discussions with parents, in contrast to Finland where teachers commonly mentioned such reports.

51 In Finland, the majority of children attend day care in the kindergartens in which the pre-school classes are located. If not, they join the pre-school class from day-care settings elsewhere, childminders or directly from home. Continuity between the day-care provision and the pre-school classes appeared to be good. As in the Danish schools, there was relatively little contact with childminders or other settings the children had attended, although, as in Denmark, there was a recognition that contacts might be improved.

52 Information passed to the Finnish Grade 1 class varied from school to school. In one it consisted of a summary of each child's strengths and weaknesses, which were discussed with the Grade 1 teacher before the child transferred. The two teachers met again in the autumn to discuss the child and for the pre-school teacher to hear the Year 1 teacher's views. In a few schools, parents and the pre-school teacher completed a form about the child, including information on his or her social skills, knowledge of Finnish and mathematics. The form was signed by the parents and passed to the next class.

53 Occasionally, as in England, the fact that the children remained with the same teacher improved continuity. In England, this was largely because the schools were small, but in one case in Finland it was a deliberate decision: the teacher moved with the children from the pre-school class into Grades 1 and 2, and the curriculum for the three-year period was designed as a whole.

54 In Denmark, there was relatively little contact between the pre-school classes and the settings, usually kindergartens, which children had attended previously. In some cases this was because of the large number involved. One school, for example, reported receiving children from 32 different kindergartens, observing that, 'We work from where the children are'. Schools were not allowed to seek information from the kindergartens without the permission of the parents and, sometimes, parents preferred their children to start in the pre-school class without the *pædagog* knowing anything about them.

55 However, the pre-school classes and the heads acknowledged that there was a need for information and contact and there were examples of good liaison. In contrast with England, there was less of a focus on academic continuity and more on making social links between one setting and the next. One school held a picnic for the kindergarten children and the pre-school children and their parents so that the new entrants could meet the pre-school *pædagog* before they joined the school.

56 Curricular continuity between the Danish pre-school class and Grade 1 was easier to develop because, by this stage, the pupils were in the same school and, often, in classrooms in the same part of the building as Grades 1 and 2. More than one school observed that having the pre-school class and Grades 1 and 2 nearby aided continuity; indeed, in the new school visited, this was part of the rationale for the organisation of the building. Schools referred to joint curricular work across pre-school, Grades 1 and 2, such as a joint topic on Impressionism or a day of games and activities.

57 In Denmark and Finland, the pre-school class teachers were very clear about the purpose of education in the classes they taught. They believed strongly that their role was primarily to prepare their pupils for compulsory schooling. This involved, in particular, the development of their social skills, positive attitudes to school and a disposition to learn. They saw the pre-school class as a distinct break from the more play-based environments from which their pupils had come, but, at the same time, it was not yet a part of compulsory schooling. The recognition that the pre-school year was different from what had preceded it and from what was to follow was evident in the responsibility given to the teachers to create a curriculum which best matched the needs of their pupils.

58 In contrast, however, several of the Year 1 teachers in England were concerned about curriculum coherence and continuity between the Foundation Stage and Key Stage 1 and,

indeed, they were less sure about what they were supposed to provide for their six year olds: a statutory national curriculum, with national tests for all seven-year-old pupils, as well as the guidance from the National Literacy and Numeracy Strategies, led them rapidly into providing formal teaching and learning early in the year. At the same time, however, they were very aware that their pupils had experienced the Foundation Stage curriculum only the year before. Some of the Year 1 teachers spoke of the tensions which were created for them by the different priorities of the curriculum in Year R and Year 2. The former were keen that the pupils who had just left them should continue to experience some play; the latter were anxious that the pupils who would move to Year 2 should have made good progress in Year 1, especially in the areas of national testing. The result was that some Year 1 teachers felt themselves to be caught in the middle of conflicting expectations. Such tensions were exacerbated in mixed-age classes, whether Year R/Year 1 or Year 1/Year 2.

Involvement of teachers in curriculum reform

59 The schools in all three countries were required to plan and teach a curriculum that complied with national expectations, but these were expressed in different ways and in varying degrees of detail. This, in turn, affected the scope for teachers and heads to decide, in the light of the needs and circumstances of their schools, the content of the curriculum and how it should be taught. In England, some heads and teachers interviewed said that they had had little influence on curriculum reforms or other aspects of school policy and felt that the curriculum had been imposed on them. This was most marked in relation to the introduction of and subsequent changes to the National Curriculum, including the National Literacy and Numeracy Strategies (NLNS). They felt they were not allowed to make sufficient use of their professional judgement to meet the needs of their pupils. They believed, mistakenly, that inspectors expected to see literacy and mathematics being taught exactly as recommended by the NLNS and that there was little room for flexibility. They failed to recognise, however, that the two National Strategies had been introduced to improve both the teaching skills and the subject knowledge of teachers. Without these improvements, a reliance on what they referred to as 'professional judgement' was misplaced.

60 By contrast, the English teachers felt that there had been more genuine consultation over the introduction of the Foundation Stage curriculum. A few of the Year 1 teachers preferred its approach based on areas of learning rather than subjects and felt that the greater emphasis in the Foundation Stage on learning through play would be of benefit to their six-year-old pupils.

61 In Denmark, schools were working from guidelines produced by the municipalities. One head summed up the view of many: 'Nothing is prescribed, except the requirement to create an activity plan based on the guidelines'. At present, a number of municipalities require an overall annual plan from schools, but this will change in August 2003 when the national reforms are implemented. One head, typical of others, reported that he was 'excited' by the prospect of the changes, which were due to be published in May.

62 In Finland, pre-school settings have been working to the national pre-school core curriculum since December 2000. Staff welcomed it and felt it had ensured greater

consistency across the country. They valued the local municipal guidelines which created a useful framework, but still gave them considerable professional autonomy to meet children's needs. The reforms required more detailed planning to ensure that they provided the full range of activities, but they had not changed their existing routines, teaching methods or use of a topic-based approach. Most settings had agreed broad objectives for the children, but staff felt 'free to do it in our own way'.

63 A minority of the Finnish teachers had attended national meetings which had influenced the reforms. Several had been members of municipal working parties and had commented on early drafts. These working groups included teachers from the comprehensive schools to help develop curricular continuity between the pre-school and Grades 1 and 2.

Parents and their children's education

64 Discussions with parents in the three countries revealed marked differences in their expectations of what they wanted for their six year olds and the extent to which they felt consulted.

65 Parents in England, in common with the parents in Denmark and Finland, wanted their children to enjoy school. However, in England there was a much greater diversity of expectations about the education which six year olds should receive and a greater level of concern about what was provided. In the main, this did not derive from any dissatisfaction with the quality of the teaching or the school's leadership but rather from an awareness that the Year 1 teachers were pulled in two directions, in the ways described in paragraph 58. This was summed up by a group of parents who felt that 'the school is up against the system'.

66 Parents in England were acutely aware of the differences in the age of pupils in Year 1, particularly between those born in the autumn term and those born in the following summer; the youngest pupils in Year 1 would have reached their fifth birthdays only a month or two before joining Year 1. A few parents also reported their children's awareness of ability groupings within the class; they were concerned that their children should develop confidence and not feel any sense of failure.

67 The English parents wanted a broad and balanced curriculum for their children and several held the view that there was too much formal teaching in Year 1, especially of literacy and numeracy. Not all the parents talked about the importance of their children making good progress in reading, writing and mathematics but this could not be construed to mean that they did not value these things. Of particular interest was the fact that, even within individual schools, there was not necessarily a shared view among the parents of what education was appropriate. Parents referred to others who wanted a greater concentration on basic skills, including the provision of homework, than they wanted for their own children. In England, parents were not at all sure that the views they expressed were shared by other parents; by contrast, in Denmark and Finland, they were confident that their views were representative. There was less consensus among the English parents about what kind of a curriculum was most appropriate for six year olds.

68 Parents in Denmark were unanimous in their belief that the pre-school class was about socialisation. They saw the pre-school class as providing different and greater opportunities for learning to socialise than had been provided in the earlier kindergarten, where the friendship groups had been smaller. One school described pre-school education as 'a face towards the community'. Parents wanted their children to learn to get on with other children and adults and were keen that they should learn how to sit still and listen to the teacher and to other pupils and how to take their turn in talking. The encouragement of positive attitudes to school and to learning was a high priority. They wanted their children to learn that it was 'interesting and fun to come to school' and they were keen to support this view at home.

69 A very small number of parents in Denmark qualified these strong views on the importance of socialisation by saying that they would also like their children to have some experience of 'letters and numbers' to prepare them for work in the Grade 1 class to which they would transfer. They also acknowledged current changing expectations of pre-school education.

70 The views of parents in Finland mirrored those in Denmark. Their priorities were that their children should be happy and learn to get on with others. This was particularly important if their child had previously been at home and had had little contact with larger groups of other children. Parents also saw the pre-school class as important preparation for the more formal learning styles that their children would meet in the first grade, but they were not concerned that their children might not encounter letters and numbers until then. If they did do so, this was in the context of play, not formal teaching.

Assessment, recording and reporting

71 Across the three countries, assessment practices ranged widely, from the regular use of proprietary test materials and the systematic sampling and moderation of children's work in relation to national curriculum requirements to group target-setting and child self-evaluation through discussion with teachers or *pædagoger*. These differences were as much about the need for and the timing of assessment at specific points of transition between the pre-school and compulsory stages of education, as about differences in the goals of teaching and learning and the aspirations of parents.

72 Most assessment practice in the Danish and Finnish settings was consistent with the emphasis on socialisation and the development of children's self-esteem in that it relied heavily on teachers' observations, children's self-evaluation and discussion between teacher and child. For example, in one Danish setting, notes about each child recorded whether the children were happy to socialise, their attitudes to learning, their behaviour, confidence and sense of security. In this example, only once a child showed interest were notes made on their achievements in reading, writing and mathematics. Differences in assessment practice between settings in Denmark and Finland were less to do with the manner of assessment than with what was recorded and reported. Often, especially where there was no change of class teacher on transfer, observations were passed on by way of discussion. In other cases, a notebook or logbook was passed on.

73 Some differences in practice were influenced by national and local policies. The extent and forms of assessment and recording for six year olds were dependent on the relative autonomy of the head or class teacher and the contributions or prescriptions of national government, local authorities or municipalities, or at school level. In England, both the National Curriculum and NLNS had had a significant effect on assessment and recording. Schools were also influenced by their LEA through transfer cards and Foundation Stage records and, at class level, by recording systems which had been agreed at school level.

74 There was no equivalent in either Denmark or Finland of baseline assessment or Foundation Stage Profiles. Instead, children were received into the day-care centres and pre-school classes on the basis of information of variable quality and usefulness (one Danish pre-school class received children from no fewer than 32 kindergartens, most of which provided the *pædagog* with no information at all). Subsequent continuity from pre-school to the first grade of school, however, was supported by more standardised information, although its precise form was for schools to determine. Records were passed from the Danish pre-school classes to the *folkeskole* and there was close liaison between the *pædagog* and first grade teachers.

75 In Finland there were similar arrangements, and the teachers of six year olds expected to meet the first grade teachers both during the year and once children had transferred to their schools. Teachers in both countries, however, stressed the importance of the discussions with parents which preceded children's entry to the pre-school class and punctuated the subsequent year.

76 Some of the Finnish teachers tested children at the start of the year, but for diagnostic rather than reporting purposes. They were also more likely to repeat this process during the year, although, again, the information was for their use only. The more public face of assessment – public, that is, in as far as parents and the children themselves were party to it – was provided by the sometimes extensive portfolios which teachers prepared, often jointly with the children, exemplifying their activities and achievements. Taken together, the assessment and profiling could be fairly extensive, even though they were voluntary.

77 In all three countries teachers had meetings during the year to review children's progress with their parents. The norm was two meetings.

Teaching and learning

Learning environment

78 The most striking differences in the physical settings for six year olds were the amount of space available and the quality of furniture and fittings.

79 The English settings were classrooms in buildings ranging from 1 to 150 years old. Some classrooms, although in buildings described as 'temporary', had used such accommodation for some time. Some classrooms were small; the problems were made worse not just by the numbers of children but also by the way furniture and resources were arranged, with anything from three to five groups of tables or desks competing for scarce space with designated areas for play (in the classes which included 4–5 year olds), various other subjects and carpeted areas for the class to come together. In some classrooms, storage units were placed at right angles to the walls to mark the boundaries between the different areas.

80 The Danish classrooms were generally larger than those for equivalent numbers of children in the English schools. In one *folkeskole*, which had an open plan design, the classrooms and the shared areas were of generous size. Furthermore, because there were fewer, if any, parts of the classrooms reserved for particular curriculum areas in Denmark and Finland, the available space was greater still. This released the Danish *pædagoger* from the need to manage their settings as tightly as did the English teachers and, indeed, several of the Danish classrooms were arranged and used in ways which, by English standards, looked distinctly casual. In Finland, settings varied in size in the classes attached to schools, although children had access to the schools' specialist accommodation. The space available in the day-care centres was exceptionally generous by English standards.

81 No less striking were differences in the settings' physical and visual qualities. In Denmark and, especially, in Finland, there was a clear commitment to good design and the furniture was attractive. Not all settings had the usual carpeted area of English classrooms, not because children did not come together – they did, frequently – but because the teachers did not see any need for them. Much attention had been given, especially in Finland, to ensuring that the furniture matched users' needs. Chairs were ergonomically suitable and visually pleasing. Lightweight sets of nesting benches allowed children to be grouped for different kinds of activities or the benches to be stacked to release space. In this and other respects, classroom layouts were more flexible in Finland than England.

82 Reflecting their links with the continental tradition of kindergartens, as well as the distinctively Finnish combination of early care and education, the day-care centres had foldaway beds for midday rest after lunch in addition to high-quality equipment for different kinds of play. Classrooms had attractive curtains as well as anti-glare blinds. Most had shaded lamps instead of the usual fluorescent tubes, and several of the Finnish settings, because of the long, dark winters, also had daylight lamps of the kind which are sold in Britain to combat seasonal affective disorder (SAD).

83 In all three countries, the rooms displayed visual aids for early literacy and numeracy. In Denmark, as in England, children's work was also displayed, although there was less of it. In Finland, relatively little of children's work was presented in this way. There, display was not seen as a means of extending or consolidating learning as it often is in the best English classrooms; in the Finnish settings, it was clear that considerable effort had gone into achieving the best intrinsic design through wall coverings, lighting, furniture, equipment, fabrics and plants.

84 The provision of information technology (IT) in classrooms for six year olds was variable in Denmark and Finland. Provision was more consistent and more plentiful in the English classrooms.

85 Typical classroom layouts from the three countries are illustrated in Figures 1–3. Compared with the Danish and Finnish settings, the English layouts were somewhat inflexible. This stemmed partly from the much less generous ratio of space to children, partly from design and partly from teachers' own choices. In particular, the combination of curriculum/activity areas and groups of tables in rooms which were barely large enough to accommodate either one of these arrangements was often counterproductive. Both arrangements are legacies from a very different era of primary education when there was a greater degree of choice for pupils about which curricular activities they pursued, and where the groups of desks signalled the absence of any whole-class teaching. Current classroom layouts are not always shaped enough by consideration of the relationship between layout, children, curriculum and the space available and certainly do not take enough account of changes in teaching methodology, including much more frequent work with the whole class. In contrast, the Finnish teachers were more ready to change classroom layouts to suit different educational purposes.

Figure 1. Danish classroom

There are no designated spaces for specific curriculum areas or activities. For whole-class teaching, the children sometimes sit at tables, at other times on the floor. The teacher positions herself in different parts of the room according to the activity and makes use of a wall-mounted whiteboard as well as a portable easel.

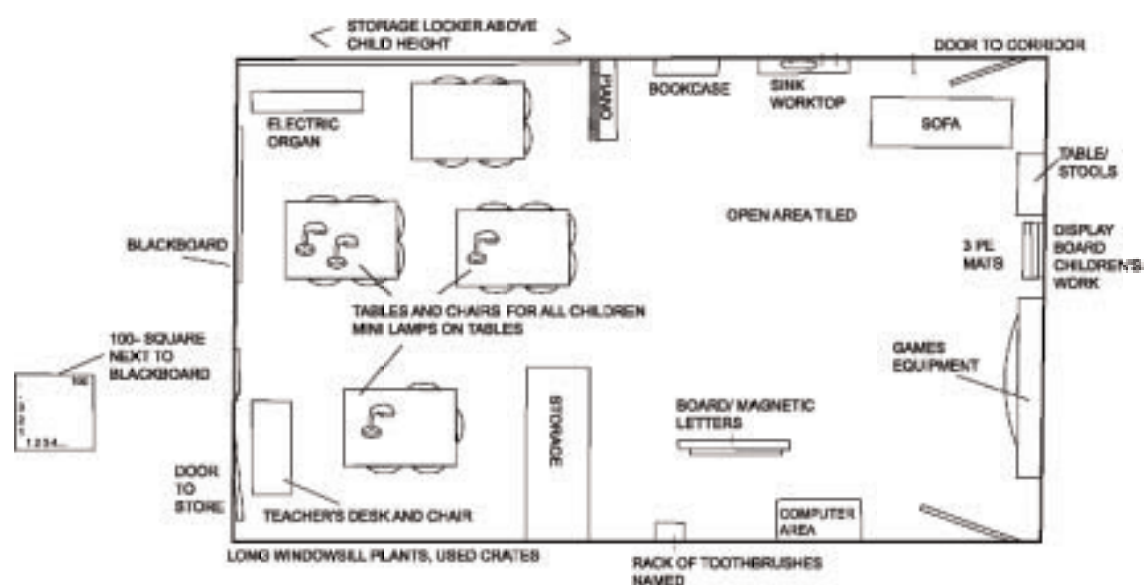


Figure 2. Finnish classroom

There are two rooms in one with a moveable partition between them, offering a very flexible teaching area and generous space. There are no designated spaces for specific curriculum areas or activities. Children sit on the floor and at tables for whole-class sessions.

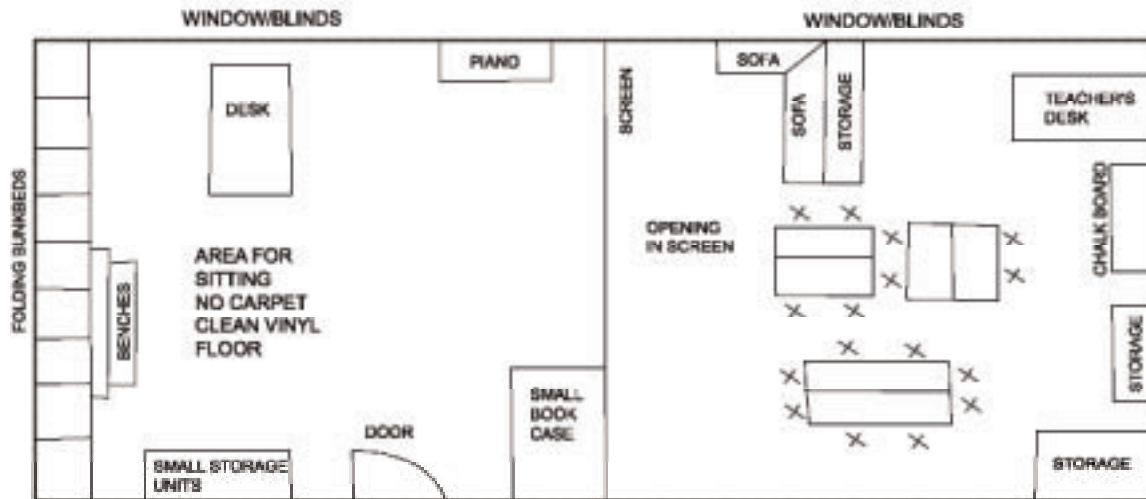
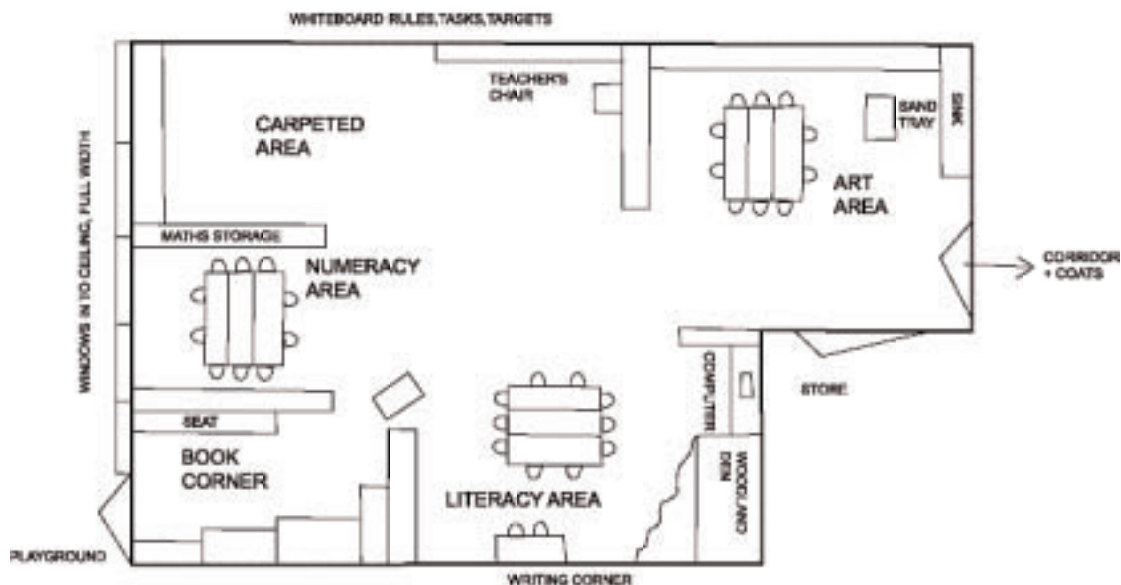


Figure 3. English classroom

There are designated areas for art, literacy, numeracy and the book corner. For whole-class sessions, children sit on the carpet in front of the wall-mounted whiteboard. Some activities are done on the carpet, others at tables.



Classes and groups

86 In all three countries, children sat together at tables in groups, although they also came together for whole-class introductions, conclusions and, indeed, complete lessons.

87 The mixed year groups in some of the English classes complicated teachers' decisions about groupings, especially for teachers who had to pay attention to the differing curriculum requirements of both the Foundation Stage and Key Stage 1. Some teachers responded by grouping children by age for part or all of the time, especially for literacy and numeracy. Others grouped by perceived ability, or mixed both age and ability. In addition, common tasks often had age-specific variation, allowing differentiation both by task and outcome.

88 In Denmark, children either sat where they wished or were placed in groups according to the teacher's criteria: these might be social, academic or a combination of both. With the strong emphasis on social development in the Danish settings, some *pædagoger* made a point of moving children around every week or month to enable them to extend their friendships and learn to work with children other than their first choice. Grouping by ability was firmly resisted. This was also the case in Finland, where the much smaller class sizes made the matter of grouping less critical; arrangements were, in general, more relaxed and fluid. In the one open-plan school in Denmark, children in the two parallel classes of six year olds moved between both *pædagoger* and teaching spaces.

89 In both Denmark and Finland, the age boundaries were blurred by the interaction which schools encouraged between both older and younger children and their teachers, and by the strong commitment to social and educational continuity in both systems. In one Finnish school, older pupils were paired with pre-school children in a protective, quasi-parental relationship. In the Danish pre-school classes within the *folkeskoler*, there were close links with the first grade teachers and pupils; this also happened in the two Finnish pre-school classes attached to comprehensive schools, one of which also paired senior and pre-school pupils. In the day-care centres, the six year olds were the oldest children and they were often linked with much younger ones.

Planning for teaching and learning

90 The teachers in the three countries took very different approaches to planning for teaching and learning. The English teachers worked within detailed published frameworks for literacy and numeracy, supplemented by guidance and support materials from the NLNS and the Qualifications and Curriculum Authority (QCA), as well as textbooks and other commercial materials. For the other subjects they worked from the National Curriculum programmes of study and commercial materials. Even with the support of all these materials, it requires skill to translate the combination of detailed requirements, recommendations, suggestions and models into programmes and tasks that are appropriate for particular settings and children. All the English schools used a combination of long, medium and short-term planning. Long-term planning covered at least a year, and in some cases was conceived as a two-year cycle. The medium term was usually defined as half a term, and these plans were then fleshed out weekly and daily. Written plans for literacy and numeracy were

extensive and detailed but much less so for other subjects. Teachers varied in their degree of dependence on frameworks and materials produced elsewhere. In some cases these were heavily modified or adapted; in others, especially in the non-core subjects, teachers printed out Internet plans and lessons and made use of them as they stood. Teachers' planning was closely monitored by heads and/or subject leaders.

91 The approach to planning in Denmark and Finland was, as the decentralisation would lead one to expect, variable. In the Danish settings there were yearly, monthly and weekly 'activity plans' which were generally less detailed than in England. School heads usually had copies of these, and sometimes discussed them with the *pædagog*, but this was not inevitable, and one head said that he received copies of plans because the *pædagog* wished him to have them, not because he requested them. What was deemed more important was that the planning process should be collective, reflecting at the pre-school stage the strong *folkeskole* commitment to teachers working in teams. Plans were also shared with parents.

92 In Finland the situation was even more variable, with yearly, monthly, weekly and daily plans on the one hand, and generalised 'ideas for the month' or retrospective records on the other. As in Denmark, plans were shared with parents. However, the general principle seemed to be to encourage teachers to plan in the ways that suited them best. For some this produced an incremental approach in which teachers started with broad themes and ideas at the start of the year and progressively fleshed them out in greater detail. Others aimed to plan in detail for the year as a whole, and in one case a teacher planned comprehensively, a year ahead, for every curriculum area and every week, at a level of detail that would be exceptional even in England. This, she said, was her choice and the extensive documentation was for her alone.

93 Whatever way the Finnish teachers chose to plan, they ensured that the various curriculum areas were treated equitably, without differentiating between planning for the 'basics' and the arts and humanities.

Curriculum in practice

94 Sharp contrasts are obvious in the curriculum which six year olds encounter, especially when England and the other two countries are compared. In England, all the teachers used the mornings to teach literacy and numeracy, although such practice is by no means universal across all primary schools. They made considerable use of NLNS guidance and suggested lessons, both in hard copy and from the Internet. The strengths of such teaching were its clear objectives, coherent structure and confident delivery. Children's growing familiarity with the NLNS pattern and routines reduced the time teachers needed to spend on procedural explanations and made the most of children's engagement with the tasks in hand. There was little evidence, however, of the teaching of speaking and listening in any of the lessons. These are intrinsic to successful literacy and numeracy as well as being of critical importance to effective learning in their own right, points which have been registered as a priority for action in the Primary National Strategy.

95 Reinforcing Ofsted's findings in *The curriculum in successful primary schools*, there were examples of outstanding teaching in the non-core subjects as well as in literacy and

numeracy: a well-planned and rewarding session at a local farm in which the farmer held the children's attention in spite of the intense cold and engaged them in dialogue of high quality; a physical education lesson which progressively increased the level of physical challenge in each task, while always taking care systematically to teach the skills required and to work within the capacities of every child; an art lesson which combined close observation of natural objects with study of paintings by established artists.

96 In accordance with the different emphases of the Danish and Finnish pre-school curricula, literacy and numeracy did not have the same weighting in those countries as they did in England. They were not neglected, however, and in Denmark there was teaching of literacy and/or numeracy in all the schools visited (although one *pædagog* made a point of insisting that she taught literacy not because it was specified by the municipality, but because she judged that the children were ready for it).

97 However, the contrasts with English NLNS lessons were very evident. Literacy and numeracy in the Danish pre-school classes were frequently embedded in sessions which included other curriculum activities rather than being treated discretely. They lacked the structure and predictability of the literacy hour and the mathematics lesson. In addition, the dominance of talk-based and collective tasks as part of the mainly social goals of pre-school education meant that there was less sustained independent work.

98 Literacy and numeracy also had their place in the Finnish sessions and the teaching of speaking and listening was well established in most of the classes. One teacher summarised the difference in emphasis by saying that six year olds in Finland learn to read rather than are taught to read: the latter starts in the following year in Grade 1. Most strikingly, children regularly spent time out of school. One centre's six year olds had an out-of-school day every week (while the English children's farm visit, described above, was an unusual opportunity) and children in all the Finnish settings made fortnightly trips in school time to the local municipal library. These libraries are attractive, well stocked and extremely well used by people of all ages. They represent an important part of Finnish education and civic life, and contribute to the national 'culture of the book' which some analysts believe lies behind Finland's pre-eminence in international comparative studies of attainment in literacy. It is reinforced in school and home where, in both cases, the daily reading of a story to children is firmly embedded. In this context the notion of a Finnish literacy 'strategy' along English lines would seem superfluous. By the same token, what would look to British eyes like relatively modest collections of books *within* the pre-school settings in Finland must be set in the context of the more extensive and extensively used municipal libraries outside them.

99 Two further points need to be made on the personal/social emphasis of the curriculum for six year olds in Denmark and Finland. In none of the three countries are literacy/numeracy and personal development seen as mutually exclusive, but a fundamental difference of approach concerns the respective views of what constitutes the core of the education of six year olds. In England, the centre of curriculum gravity for six year olds is, unarguably, literacy and numeracy, although of course there are also far wider curricular aims in both the early learning goals and the National Curriculum for Key Stage 1. In Denmark and Finland the situation is almost reversed. There, the curriculum for six year olds centres on children's social, physical, interpersonal and moral development, while literacy and numeracy are viewed as essential yet take their place alongside other early learning goals.

100 The second point is that, having made their commitment to the primacy of personal, social and moral development, schools and centres in Denmark and Finland seek to enact it outside the classroom as well as inside. In Finland, for instance, the concern with co-operation pervaded lunchtimes as well as the classrooms: teachers and children of different ages sat and talked together, behaviour was exemplary, and the atmosphere was one of voluntary calm. In Denmark, children mostly brought their own lunches to school and these were high in fibre and low in carbohydrate, while the school required snacks to be limited to fresh fruit and vegetables, so there were no sweets and crisps. In Finland, schools and centres provided cooked meals which were of high nutritional quality. In the English schools, lunchtimes were generally noisier occasions, to be got through as quickly as possible; teachers frequently ate apart from children, and the event seemed extraneous to the educational day rather than one of its central social occasions, as it was in the Finnish settings.

Structure of teaching sessions

101 In England, the literacy and numeracy strategies provided a predictable structure, both for the day as a whole and for those parts of it in which they took place. By and large, the observed literacy and mathematics lessons followed, respectively, the four and three-part structures recommended by the two strategies, with varying degrees of extension or contraction of the parts. The part that was most frequently shortened was the plenary.

102 Other subjects were structured less predictably. PE lessons usually consisted of a sequence of episodes, while arts and humanities sessions commonly had a loose tripartite structure, but with relatively brief beginnings, long central sections and short conclusions.

103 There were three main differences between these arrangements and what was observed in Denmark. First, generalisable patterns in lesson structure were harder to find, because it was up to teachers to create their own. Second, two devices were in common use: substantial interactive phases of circle time involving the whole class, and lessons in which groups rotated between several activities and therefore between the two *pædagoger* who jointly ran the session. Third, there was a relative absence of what in England is called the 'plenary' – a bringing together of all the children towards the end of the lesson to review the ground covered, to assess how far a lesson's goals have been achieved, and to crystallise the essence of what has been learned. The Danish lessons had little need to end in this way: they were much less goal-oriented. Thus, the *pædagoger* did not, as many English teachers now do, explain a lesson's learning objectives with the class at the start of the session and return to these at the end. Instead, they specified its purposes more loosely, and less in terms of the learning to be achieved than the ground to be explored.

104 The Finnish sessions were no less variable in structure than those observed in Denmark. As in England, whole class teaching of literacy and mathematics was part of the morning's programme in every setting. Usually it lasted between 15 and 30 minutes, and during this time children sat close to the teacher, usually on benches facing a board or easel. Whole-class episodes might be followed by individual activities, or a class – bearing in mind their small size by comparison with the other two countries – might be split into two groups, one working with the teacher and the other with the assistant. As in Denmark, and perhaps for the same reasons, final plenary stages were little in evidence.

105 If one version of the Finnish lesson structure was bipartite – whole-class teaching followed by group or individual activities – another was episodic yet thematic. In this variant, a session might consist of a succession of activities which were less about the building up of a range of specified concepts and skills than using an idea, or even a word (such as, in one session, *pajunkissa* or pussy willow) to link otherwise disparate activities ranging from mathematics and language to art, music and story. As in Denmark, the teachers seemed less concerned to teach specific number operations or language skills than to provide a variety of experiences through which, more by immersion than instruction, learning would be achieved.

Learning tasks and activities

106 Many of the learning tasks presented to the six year olds were common to all three countries. Thus, children in Finland recognised and blended the syllables in children's names; identified words that rhyme; counted up to ten and worked out the difference between pairs of numbers in that sequence; made a three-dimensional model of a fish; hopped, balanced and climbed in PE; sang in unison and moved their arms and legs in time. Such tasks could equally be undertaken by English or Danish children. In Denmark, children counted in twos, threes, fives and tens; practised number bonds at speed; identified and named sounds and wrote them as letters; matched words and pictures; cut out and pasted; drew and painted. In England, children collectively determined, wrote and/or illustrated the day's date and weather; identified words by their initial letters and placed them in alphabetical order; wrote sentences with attention to capital letters and full stops; read in pairs; counted in fives; planned and performed movement sequences in PE; examined and discussed artefacts which the teacher had brought back from her holiday; retold and sequenced a story; and discussed paintings of flowers by three different artists.

107 This is of course not the totality, but is catalogued in this way to show that the education of young children in the three countries has quite a lot in common. But there were differences too, in the *balance*, *differentiation* and *challenge* of the tasks to be undertaken. These differences deserve some illustration and comment, particularly in literacy and mathematics which were observed in every school in each of the three countries.

108 In the mathematics lessons, a high proportion of the work in Denmark and Finland was oral, involving counting, finding number patterns, addition, and a range of games using coins, die and other simple apparatus. None of the tasks required children to write numbers but they were occasionally asked to record some of the things they had done. In one lesson in Finland, for example, the children drew the hands on clocks to match the times (half-past and on the hour) shown on cardboard clock faces that they had made themselves. The level of challenge in most of the mathematical tasks was lower than in the lessons in England. In the settings observed, which, because of the considerable curricular freedom and variation in Denmark and Finland, may not have been typical of these countries as a whole, children tended not to work with such large numbers as do Year 1 children in England. In work with coins, for example, Danish children cut out paper coins and exchanged two 1-kroner coins for one 2-kroner piece and vice-versa, and exchanged one 10-kroner piece for ten 1-kroner coins. In the English mathematics lessons, the children worked

with numbers to 20 and, in a few cases, to 100. In one lesson, for example, they began by counting up and down in twos, starting with various numbers between 0 and 40. They progressed to counting in tens and fives up and down to 100, which most of them were able to do confidently. There was a combination of whole-class counting and paired work. In the independent work, most of the tasks involved the written recording of numbers and the work given to the more able children – finding strategies for adding two 2-digit numbers – had a good level of challenge.

109 In the literacy lessons, much of the work in Finland and Denmark was intended to provide the foundations for further work in literacy. There was a focus on different sorts of phonic work and on listening to and responding to stories. Almost none of the work in either Denmark or Finland required children to write. Much of it centred on oral language and, as with the mathematics lessons in these countries, there was relatively little writing, compared to that in England. One lesson in Denmark introduced the children to a story book that they would each take home to read with their parents. The teacher showed the children an enlarged version of the text, pointed to the words, read aloud and asked questions about what they could see in the pictures, ensuring that every child had an opportunity to respond. The children then drew three pictures of what they thought the cat in the story would like for dinner before the teacher read the surprising conclusion. The lesson continued with guesses about what a foil-wrapped parcel might contain, before the unwrapping of small versions of the same book for the children to take home. The children's motivation to read was high. A reading lesson in England, in contrast, began with a focus on three initial sounds blended in words such as 'spring', 'spray' and 'sprinkle', some of which were also read in the context of a poem in an enlarged version of a text. The children were then asked to complete a poem with similar consonant blends missing from some of the words. The teacher worked with children who needed help, questioning and giving clues, while the children who had finished the work were asked to write their own words beginning with the same sounds. As with the tasks in mathematics, the level of challenge was higher in England in terms of the demands on children's skills and knowledge in written language, but the reading lesson in Denmark made a significant contribution to developing pupils' positive attitudes towards reading.

110 In line with the different views of the curriculum which were discussed earlier, there was a more overt emphasis on the collective context of learning in Denmark and Finland. The most obvious manifestation of this collective commitment was in the greater incidence of whole-class teaching which sometimes occupied a complete session, unlike most sessions in England which included periods of group or individual work. The whole-class teaching in Denmark and Finland could take more subtle forms. In one Danish classroom, for example, a 'speaking and listening' task rehearsed strategies by which children could listen, concentrate and resist distraction as individuals within a group, regardless of the level of ambient noise, before putting these strategies to the test by singing a two-part round.

111 This example also serves to underline the greater incidence of music and musical tasks in the Danish settings, a difference which was also observed in Finland, where music was used as an adjunct to various kinds of learning. The tendency to make tasks multi-faceted, especially in Finland, was in line with the way learning was defined more in terms of the activities that the children would be doing rather than, as in England, the cognitive outcomes that the teacher expected from the planned activities. This approach met with mixed success

in Finland. A successful example was observed in which the task of deconstructing and reconstructing words was pursued in the context of a complex circuit of physical activities which included jumping, hopping, balancing and climbing on PE apparatus. On another occasion, however, the attempt to combine the cognitive with the physical – for example when children in groups lay on the floor to make letter shapes – was less successful.

112 The most notable difference in the balance of tasks and activities was the greater incidence of oral work, including wholly oral lessons, in Denmark and Finland. In the English classrooms, although the particular kinds of interaction associated with the whole-class parts of NLNS were everywhere in evidence, children overall spent the larger part of their time in reading, writing and text-based activities. The character and the variable quality of the oral episodes which dominated the sessions in the other two countries, however, raised a number of questions, and these will be considered under the heading of 'Interaction'.

113 In the English classrooms, especially in the literacy and mathematics lessons, group and individual tasks might be differentiated according to the teachers' perceptions of the children's ability. Such differentiation was most evident in mixed-aged classes. In lessons other than literacy and mathematics, differentiation was frequently by outcome rather than task. In the Danish settings, there was no task differentiation at all except for children with special educational needs receiving targeted support, and differentiation of children and tasks by ability was resolutely opposed. In Finland, teachers spoke of the importance of 'smoothing out differences', which the study team interpreted as holding back the more able children so that the others could catch them up. For example, those children who could already read and write were not, in some classes, given the opportunity to use and apply these skills in ways that would be common in Year 1 classes in England. Although there were a few examples of differentiation by outcome in Finland, in which more able children applied their knowledge and skills in open-ended tasks, teachers generally espoused the principle of respecting individuality, but emphasised bringing children along together rather than accentuating their differences. Further, in line with the communal ideal which informed so many aspects of the Danish schools' thinking and practice, children were expected to help each other tackle complex learning tasks rather than undertake them in isolation.

114 The lack of task differentiation raises the question of whether tasks were sufficiently challenging, or indeed too demanding for some children. Inevitably, given their greater knowledge of education in England, the study team were more confident about assessing the appropriateness of the demand of tasks in the English classrooms than in Denmark and Finland. In the English classes, there were examples of tasks that were well matched to meet the needs of different ability groups. There were, however, also occasions when tasks, especially in the independent work of literacy and mathematics lessons in mixed-age classes, had too great or insufficient challenge for some of the children.

115 On the level of challenge provided in the Danish and Finnish sessions three comments can be tentatively ventured. First, the level of task demand for the same age of children varied considerably from one setting, one teacher and one curriculum area to another, to the extent that it is reasonable to conclude that in some cases tasks were more appropriately judged in relation to children's learning capacities and needs than in others. Second, there was wide variation in children's engagement in the tasks set and, though the extremes of behavioural response included both perplexity and boredom, the latter –

signalling insufficient rather than excessive challenge – was more common than the former. Third, on the basis of strict age-to-age comparison, though many of the tasks in the personal, social and physical domains were if anything more demanding than those given to children in England, in the domain of literacy and numeracy they were markedly less challenging, especially in Denmark.

116 In any discussion about the differences in the expectations of six year olds in the three countries, it must be emphasised that the educational goals and curricular objectives in Denmark and Finland were very different to those in England. Nevertheless, in England, where literacy and numeracy are given a high priority, much more is expected of six year olds in reading, writing and mathematics. In these areas of learning, the achievement of the six year olds in England was generally well in advance of their counterparts in Denmark and Finland. The real test of these differences of expectation, however, is not whether the reading skills of a typical six year old in England are 'ahead' of or 'behind' those of a six year old in Denmark, but where the different versions of curriculum lead in terms of the developing child's capacities and predispositions, and indeed in terms of later outcomes in the individual's school career and adult life.

117 Neither Denmark nor Finland participated in the PIRLS international study of 10 year olds' reading in 2001, so it is not possible to assess the short-term effect of the different approaches and expectations described in this report. On the other hand, the 2000 PISA study of the reading literacy of 15 year olds showed Finnish students outperforming not just those in England and, by a much greater margin those in Denmark, but also all the other 31 countries that took part. Clearly, Finnish children make very good progress between the ages of six and fifteen, particularly when compared with Denmark. At the beginning of compulsory education in the English equivalent of Year 2, Finnish children appear to start from behind their English counterparts in literacy, yet by the age of fifteen, the Finnish students have overtaken them. This is not the case in Denmark, where the same degree of improvement does not appear to be happening. The question raised by these data is an important one in relation to the national debate about early education in this country. How much does the greater emphasis in the Finnish pre-school classes on social, moral and physical development, combined with lower expectations for six year olds in literacy and numeracy, contribute towards the strong progress of those children over the next nine years? A definitive answer to this question is beyond the scope of this report, particularly as there are a number of other factors that might also have a bearing on children's progress, including the regularity of the Finnish sound/spelling system and the strong national culture of reading. What this report does provide is analysis of the provision that is made for six year olds in the three countries, so that the national debate can be better informed.

Time and pace

118 It has already been noted that the English teachers and heads were in two respects more acutely conscious of the constraints of time than those in the other two countries: some felt that they had insufficient time to achieve genuine curriculum breadth and balance; and in respect of literacy and numeracy, they felt they had to respond to specific expectations about how time should be allocated, not just between subjects but also within each lesson.

119 Not surprisingly, therefore, the literacy and mathematics lessons in England conveyed a greater sense of urgency than those in the other two countries. This was especially marked in the contexts of the whole-class teaching which began and ended the NLNS lessons. Oral and mental work at the beginning of the mathematics lesson, and the shared text work at the start of the literacy hour, were in general briskly managed, whereas the pace of the equivalent episodes of whole-class literacy and mathematics teaching in the Danish and Finnish settings was generally slower and much more variable.

120 This general picture needs to be qualified. In this aspect of teaching as in all others, the higher levels of autonomy for schools and teachers in the other two countries guaranteed that to every general trend there would be significant exceptions. Thus, the initial whole-class phases of several of the Finnish lessons were as tightly managed as those in England. The more striking difference was between England and Finland on the one hand and Denmark on the other, where the pace of teaching and learning, including in whole-class episodes, was markedly slower all round.

121 Further, a closed or finite task imposes a deadline, but an open-ended task does not. Thus in the English literacy and mathematics lessons, unsupervised groups and individuals worked more slowly, and were more often distracted, than those who worked with the teacher; but the tendency was even more marked in the wider curriculum where tasks were often defined with less precision, or demanded less of the children. In the most extreme cases, tasks which should have been completed quickly simply expanded to fill the time available, and having done so remained uncompleted at the end of the lesson.

122 In Denmark, lessons contained a higher proportion of open-ended learning tasks than in the other two countries, so the trend towards a slower working pace was particularly marked. In Finland, a similar trend was mitigated partly by smaller classes and a closer degree of adult supervision, and partly by children's apparent capacity to stay on task for longer than their Danish and, especially, their English peers, regardless of the task set. In both Denmark and Finland, loss of interest or momentum, or flagging energy, were less likely than in England to lead to behaviour which distracted other children.

Interaction

123 Talk was a fundamental ingredient in all the lessons observed in all three countries, but its organisation, dynamics and character varied not just between the countries but also within them. At the simplest level of analysis, there was talk between adults and whole classes, adults and groups, adults and individuals, and among pupils themselves. On this basis, the first difference to note is that the repertoire was broader in England than in the other two countries. In particular, the English teachers talked and worked more extensively with small groups than did the Danish *pædagoger*, whose interactions with children were confined more commonly to whole-class teaching followed by supervision of groups (rather than extensive engagement with them) and/or the monitoring of individuals. The Finnish situation was more variable, possibly because smaller class sizes made dividing the class between the teacher and the assistant an obvious option. Yet, even here, extended group work led by the teacher was unusual and, in some sessions, teachers held back deliberately from intervening in group work, preferring to let the children tackle tasks unaided.

124 The two national strategies in England have encouraged the use of group work led by the teacher, as well as whole-class direct instruction and paired pupil-pupil discussion. Although both of the latter were also common in Denmark and Finland, in both countries whole-class teaching was the main mode of interaction.

125 In all three countries, teachers tended to dominate the exchanges with pupils in whatever context they took place. The whole-class episodes in the English literacy and mathematics lessons consisted mainly of questioning, instructing and explaining. In the majority of the classes seen, the questions were usually closed and yielded brief answers which were rarely followed up with the same child. In others, although a smaller number, teachers' questioning was more genuinely interactive and was associated with a higher degree of probing of children's thinking and understanding. Even then, there was very little talk of a kind which encouraged children to speculate or think aloud as part of solving a problem or seeking an answer.

126 The most striking feature of the whole-class teaching in the Danish classrooms was its relative openness by comparison with what was observed in England. It was more relaxed, lively, spontaneous and friendly. But it was also less insistently instrumental in its focus: there was less direct instruction and the boundary between what one might call task talk and social talk was more blurred. This, and the apparent confidence of the Danish children in whole-class settings, encouraged more speculative talk than was observed in England.

127 In Finland, the smaller class sizes gave the whole-class teaching a distinctive flavour. Surprisingly, however, extended interactions between teacher and individual children in this setting, which the smaller numbers might have encouraged, were relatively uncommon and, with certain very notable exceptions, children's answers in these settings tended to be brief, and it was teachers rather than children who asked the questions. Again, talk was relaxed, friendly and calm, and if children responded monosyllabically it was because that was all the teacher's questioning encouraged rather than that they felt inhibited.

128 The English children were, in some classes, less confident and more cautious in collective settings than their Danish or Finnish peers. The Danish and Finnish approaches to the education of six year olds share a strong commitment to children's interpersonal skills, to building their confidence and to encouraging them to co-operate with, support and help each other rather than to compete. In answering questions and volunteering opinions, they did not expect to be judged by either the teacher or their peers. In the English settings, children's answers were more likely to be followed by the teacher's evaluation of that answer. In this context, talking in front of the rest of the class carried a higher risk. In the Danish and Finnish settings, learning, and talking to learn, were essentially co-operative endeavours. The boundary between social talk and learning talk was blurred and, in many respects, social talk was learning talk.

129 Finally, the English children were at school. Pre-school was well behind them, and they had embarked on the serious business of acquiring knowledge and skills on which they would be tested; they, no less than their teachers and parents, knew all this. The Danish and Finnish children were not in *school* at all, but in pre-school classes, kindergartens and day-care centres. The more or less serious business of schooling still lay ahead.

130 The teacher's oral feedback is a particularly important aspect of classroom interaction because it provides children with the vital cues for consolidating and extending their understanding. Overall, however, the quality of such feedback was highly variable. In England, oral feedback in whole-class settings was often limited to praise, rather than diagnosis, and teachers tended to confine their formative comments to the more private context of one-to-one monitoring as they moved round the class. Even so, this monitoring was sometimes fleeting and superficial.

131 In Finland and Denmark, in this matter as in so many others, the situation was more variable. Some of the Danish *pædagoger* gave generalised praise, while others were more precise in their comments on children's responses and activities. In Finland, the range was as great. In one setting, a teacher made considerable use of peer assessment. There was also more written marking in Finland than Denmark.

132 It would seem that in the education of six year olds, even in the English context where formal assessment is a major preoccupation, teachers are concerned that day-to-day feedback should be positive at all costs. The more effective teachers in all three countries were those who maintained an encouraging ambience, yet used classroom dialogue and one-to-one monitoring to engage constructively with how children were thinking.

Children's engagement

133 The factors which stimulate children to engage in their learning, and to sustain that engagement over time, are many, and they interact in complex and sometimes unpredictable ways. In a given lesson, some children are interested and concentrate intently while others do not. Some are engaged all the time, or at least for longer periods, but others attend only intermittently. The same teacher, method or task will engage some children but not others. Children's motivation to engage in a task may be extrinsic, intrinsic or a combination of both. Child, teacher, parents, peers, tasks, materials, circumstances and all the elements of teaching discussed so far in this report play a part.

134 For this reason, simple measures of engagement like 'time on task' must be treated with the utmost caution, especially when children and teaching are being compared across different cultures. For example, children who have their heads in a book or a pencil in their hand may appear to be on task, but they may be thinking little and learning less. And this pre-supposes that the task itself is appropriate and stimulating. Yet if we isolate just the factors relating to teaching, it is clear that some classroom conditions are more conducive to children's engagement than others. Thus, the six year olds who were observed in the present study, across all three countries, appeared to be most fully and consistently engaged:

- at the beginning of lessons and sessions, rather than in their later stages, when concentration and energy levels began to flag
- when sessions were structured as a sequence of relatively short episodes rather than with a long central section sandwiched between a brief introduction and conclusion
- when they were interacting with the teacher or other children rather than undertaking individual reading or writing tasks

- when activities during a session varied in kind, such as talk, reading, writing, manipulative activity, singing, or physical activity as well as number, and no one activity went on for too long
- when tasks requiring thought and concentration could be undertaken without distraction
- when an adult monitored their progress on the task, discussed it with them and gave them regular and meaningful feedback.

135 Beyond such a list – which reinforces what most teachers instinctively know – there were four important differences. First, the Finnish children appeared to be able to sustain their concentration on a task or a session phase for somewhat longer than their Danish peers and for considerably longer than the English six year olds. Second, in respect of the same kind of task undertaken in the three countries, both the Finnish and the Danish children appeared to be more readily interested, to show enthusiasm or delight more spontaneously and frequently, and to have a higher boredom threshold than their English peers; and when they were bored or distracted, as they sometimes were, they did not show it so obviously, or project their boredom onto other children. Third, although unlike their Danish and Finnish colleagues, the English teachers frequently sought to tailor tasks to different levels of ability within the class, there were still many instances when English six year olds found tasks insufficiently or excessively demanding.

136 Fourth, and perhaps most striking to an outside observer, tasks and activities were overtly managed in the Danish and Finnish classrooms, but behaviour was not. There, teachers were not preoccupied by discipline and control to the extent that many were in England, and the willingly co-operative behaviour of most of the children demonstrated why. In the Danish and Finnish settings the classroom climate was consistently more calm and relaxed than in many of the English classrooms. The children complied with what was expected of them without obvious pressure from the teacher and noise levels were lower. It has to be said that in Finland the classes were small, no more than the size of a large group in some English and Danish classes, and this enabled the teachers and their assistants to manage the children more easily than if there were 30 in the class. Nevertheless, the Danish classrooms, with numbers similar to those in England, were just as calm as in Finland.

137 We should not necessarily conclude from this that Danish and Finnish six year olds are more passive and compliant than English, or that English children are inherently less well behaved than those in the other two countries, not least because of the small samples. There were individual lessons in England where, in spite of the classes being twice as large, the children behaved as well as any in Finland. Yet, placing the evidence of all the sessions observed in this study alongside that from international research, it seems fair to suggest that English teachers of six year olds expect to have to work to secure children's engagement in learning, while their colleagues in Finland and Denmark can more readily take it for granted.

Points for discussion

138 In this section, the key differences between the three countries are summarised and then taken forward as a series of questions for discussion about policy and practice in English settings.

139 The physical settings for teaching and learning varied considerably. Classrooms were smallest in relation to the numbers of children in England, large in Denmark and largest in Finland. Within the space available, classroom layouts were relatively complex in England, simpler in Denmark and most flexible in Finland. Furniture was adequate in England, good in Denmark and of a high quality in Finland. Equipment and resource levels were good in all three countries, with book resources most extensive in the English classrooms. On the other hand, the Danish *folkeskoler* pre-school classes had access to well-stocked school collections, and the Finnish children made regular use of the excellent municipal libraries. Computers were available in all the settings, but the English classrooms had the most extensive IT provision. The English concept of 'display' as a means of reinforcing and celebrating children's learning was not evident in the other two countries, and in Finland the emphasis instead was on a high standard of intrinsic design in buildings, fittings, furniture and decoration.

How can better use be made of classroom space in relation to the aims and circumstances of six year olds' education? Should tables and desks always be arranged in groups? Are curriculum-specific classroom zones really necessary? Can classroom furniture be better designed, both functionally and aesthetically? How important is good display, which includes pupils' own work, in stimulating early learning?

140 Classes were much larger in England than in Finland, and whereas those in Finland and Denmark contained only children whose sixth birthdays fell within that academic or calendar year, respectively, those in England often included Year R and Year 2 children as well. In England, children were grouped within classes on age, social and ability criteria. In Denmark and Finland the latter basis for grouping was explicitly resisted.

Teaching Year R and Year 1/2 children together may have social advantages, but it also poses considerable challenges to the teacher. In settings (for example, smaller schools) where mixed-age teaching is unavoidable, what is the best way to organise children so as to do justice to their age-related learning needs? How far should children's perceived ability be used as a criterion for within-class grouping? How can the potential of socially directed grouping be turned to full advantage?

141 In all the classrooms there were at least two adults present. In England and Finland these consisted of a teacher and teaching assistant; in Denmark there were two *pædagoger*, of whom one always took the lead. The training of the Finnish teachers and Danish *pædagoger* had concentrated on child development, childcare and generic teaching skills rather than subject knowledge. The use of teaching assistants raised similar questions in all three countries: they were not always used to best effect.

Teaching assistants may be widely used but they are not always well used. How can this valuable additional resource be turned to better educational advantage?

142 The curriculum for six year olds was closely prescribed by central government in England and the teachers in this study welcomed the support and guidance that was associated with this. However, there was less consensus about the substance and balance of the curriculum in England, among parents as well as teachers, than in the other two countries. Schools in England have considerably more freedom than they may realise to decide, for example, how long to spend on each subject or how to organise learning in the school day. Nevertheless, teachers were concerned about what they saw as the abrupt transition and ideological dissonance between the Foundation and Key Stage 1 curricula. These problems were aggravated for teachers of mixed-age classes by the fact that they had to plan for and teach both curricula simultaneously. The curriculum was expressed more briefly, loosely and permissively in the other two countries, where – especially in Denmark – teachers' autonomy in curriculum planning is substantial and highly prized.

How far, in any future review of the National Curriculum, should the balance between central control and school autonomy in curriculum matters be altered?

143 The curriculum for six year olds in England was influenced strongly by the national recommendations for a daily literacy hour and mathematics lesson which have contributed substantially to improvements in the quality of teaching and learning. Although literacy and numeracy were not neglected in the other two countries, curriculum priorities were expressed rather differently: personal and social development, learning to learn and preparation for school in Denmark; these, together with ethical and physical development, in Finland. In England, literacy and mathematics lessons filled most mornings, and some teachers and parents, while valuing this emphasis, were concerned that the arts and humanities were losing out. There was a pronounced sense of curriculum pressure: to squeeze in all that was required, and to achieve national, local and school-specific targets. In Denmark and Finland there was no such pressure. Here, too, the curriculum, in its important personal and social aspects at least, spilled out of the classroom into other aspects of school life, while in England it was more tightly confined to the classroom.

Children's personal, social, emotional, moral and physical development, and their acquisition of creative capacities and environmental understanding, are as important at Key Stage 1 as they are at the Foundation Stage. In the education of six year olds, what should be the balance of attention to these aspects of children's development and to literacy and numeracy? What kind of a curriculum will best secure consistency of purpose, and continuity and progression in teaching and learning, during the period currently covered by the later Foundation Stage and Key Stage 1? How can the perceived mismatch between the foundation and Key Stage 1 curriculum be eliminated? How can curricular breadth and balance be achieved in ways which are meaningful rather than cosmetic or tokenistic?

Literacy is not all that pupils need to learn about language; developing pupils' oral language and their ability to listen and respond to others are no less fundamental, as well as developing

pupils' lifelong commitment to reading for information and enjoyment. How can the concept of literacy be broadened to give greater emphasis to the enjoyment of reading and to the relationship between written and oral language?

PSHE may be a useful portmanteau term, but children's personal and social development do not start and stop with the formal curriculum. How can all other aspects of the life and work of classrooms and schools support and reinforce this vital aspect of early learning?

144 All teachers in the three countries planned to some degree for the long, medium and short term. Teachers' planning was detailed in England, less detailed in Denmark and variable in Finland. However, in England, planning was less detailed for other areas of the curriculum than it was for literacy and numeracy. In Denmark the emphasis was on the process of planning, which was collective, as much as on its outcomes. In England, teachers' planning was closely monitored by heads (or subject co-ordinators), but not in the other two countries; on the other hand, collective planning in Denmark secured peer monitoring and discussion, and Danish heads believed this to be both more important and effective than doing it themselves. These differences notwithstanding, planning was more consistent in England than in the other two countries.

Planning for teaching is necessary but should never become so time-consuming that it detracts from the teaching it is supposed to serve, or be done in some areas of the curriculum at the expense of the quality of what is provided in the others. How can greater consistency in the quality of planning be secured across the whole curriculum without increasing teachers' workloads? How can 'off-the-peg' schemes and lessons, such as are now widely available electronically, be used without leading to teaching which is inappropriate to particular circumstances, lacking in challenge, or merely mechanical?

145 In England, lessons were geared to explicit objectives, particularly in literacy and numeracy, and structured well for these two subjects. In the other two countries, lesson goals were expressed and pursued more loosely. The three- and four-part structures of the mathematics and literacy lessons contrasted with two-part structures in Denmark (whole-class teaching or circle time followed by group and individual work) and episodic structures in Finland. The NLNS concept of a plenary was unique to the English classrooms.

Is teaching in the curriculum beyond literacy and numeracy as focused as it needs to be? How can we bring the same quality of purpose and engagement to group and individual work that characterises the whole-class stages of lessons? Have the recommended three- and four-part lesson structures reduced teachers' flexibility in organising the teaching of English and mathematics?

146 The range of tasks and activities into which curriculum goals were translated was wide in all three countries. In Denmark and Finland, there was a strong emphasis on good behaviour and positive attitudes to learning and much less on cognitive development and the learning of skills which characterised the lessons in England. Although oral work was

counted important in England, especially in the literacy and mathematics lessons, the overall balance, across the curriculum as a whole, favoured activities based on reading and writing. In the other two countries there was a higher proportion of oral activities.

If oral and collaborative tasks and activities are both effective in securing children's engagement and vital to early learning, should we not give them much greater prominence in the education of six year olds? What is the scope for achieving meaningful integration, within specific learning tasks, of different domains of understanding and skill – for example, literacy and art?

147 There was some differentiation by task in the English classrooms, including for children with SEN for whom specific provision had been made. In the other two countries, similar tasks were given to all the children in most of the lessons. The teachers were more concerned to bring children along together and gave more emphasis to encouraging them to help each other.

How far should the learning of six year olds be individually differentiated, and what form should such differentiation take? Does too much differentiation encourage isolation? Should we do more to encourage children to support each other's learning?

148 Although assessing whether tasks were appropriately challenging is complex and risky in a comparative study, reading, writing and number tasks for six year olds tended to be less demanding in Denmark and Finland than in England. Given the different curriculum priorities, this was hardly surprising. However, more important than comparisons of the relative demands of tasks was the question of what kinds of children and adults the different versions of the curriculum produced. Finland's supremacy in PISA raised interesting questions in this context.

Do we tend to define 'challenge' too narrowly?

149 In all three countries, time was managed more effectively in whole-class teaching than in group and individual work. Lessons in England had a greater sense of pace and urgency than those in Denmark and Finland. Lesson tempo in Denmark seemed particularly unforced.

How can we manage time with greater consistency and effectiveness both within lessons and across the curriculum (that is, outside the context of whole-class teaching and the teaching of literacy and numeracy). How can we teach children to manage their own time when they are working alone or in groups? How can we balance pace in teaching with giving children time to reason and speculate?

150 The organisational repertoire of classroom interactions in all three countries included whole-class teaching, individual teacher-child monitoring and collaborative talk among pupils, usually in pairs rather than groups. Teacher-led group work was more common in England than the other countries. Whole-class interaction in England was dominated by closed questions and brief answers, with little extended interaction with individuals in this context. Whole-class teaching was more open and speculative in Denmark, where, as in Finland, talk had a greater affective and social emphasis. The children in England were noticeably less confident when speaking in whole-class settings, where the emphasis on identifying correct

answers and solutions may have inhibited them. In Denmark and Finland, moreover, the boundaries between social and cognitive talk were more blurred, and the strongly collective ethos supported rather than inhibited children's contributions.

How can we help teachers to reduce their dependence on closed questions and single-word/sentence recall answers? How can we create more opportunities for extended talk which builds on children's ideas and encourages children, as well as teachers, to ask the questions? How can we increase the cognitive power of classroom talk? At the same time, how can we create a climate in oral activity so that children participate in it freely and confidently, without fear of giving the 'wrong' answer?

151 There was no equivalent in Denmark and Finland of standardised baseline assessment or Foundation Stage profiling, and the emphasis from the start of the pre-school year was on discussion with parents rather than assessment. Thereafter, the situation was variable, although the Finnish teachers were more likely to test and profile their pupils. In all three countries there were regular discussions with parents on their children's progress. The diagnostic usefulness of teachers' oral responses to what children said, wrote or did was no less variable, although the English tendency to emphasise praise at the expense of feedback was replicated in the other two countries too.

Apart from questions about tests and summative assessment, how can we ensure that the assessments we make on a day-to-day basis really inform our teaching; and that the feedback we give to children really informs and structures their learning?

152 Finally, classroom observation in the three countries confirmed a number of familiar preconditions for securing children's attention and engagement. At the same time, it was clear that observable differences in children's engagement, both within classes and between countries, are satisfactorily explained only if one takes into account cultural values, social attitudes and educational policies as well as teachers' decisions. The complexity of the issue was highlighted by the fact that in the English classrooms children appeared to have shorter concentration spans and lower boredom thresholds than in Denmark and Finland, and that in England behaviour and discipline could be problematic in the education of six year olds while in the other two countries they were not.

What is a reasonable and productive concentration span for a six year old? What are the implications of this for the way we structure lessons and pace our teaching? If children's engagement is maintained most effectively through oral and collaborative tasks, what adjustments should we make to the range and balance of tasks which we devise? How can we ensure that we so manage our own time as teachers that we are able to provide children with the kind of assessment for learning which will maintain their engagement? If problematic classroom behaviour among six year olds is more widespread in England than some other countries, and if this reflects circumstances beyond the school as much as or more than those within it, what does this imply not just for teachers but also for parents, communities and policy-makers, including those responsible for aspects of social policy outside education?

Conclusion

153 The provision for six year olds seen in Denmark and Finland – and, it must be remembered, these children had not started compulsory education – generates important questions, outlined in the previous section. This report, however, is not about offering stark choices between English approaches on the one hand and those of the other two countries on the other. It is not possible to do simple or simplistic translations of policy and practice from one country to another: cultural, economic, political and historic factors all come into play. There were aspects of Danish and Finnish provision, for example, such as the small size of the classes and generous staffing ratios in Finland which, if adopted in this country, would have major economic implications.

154 In discussing provision for the youngest pupils in this country, there is frequently a tendency to polarise debate: for example, child-centred versus subject-centred learning; an early starting age versus later compulsory education. Such polarisation obscures the subtleties of the debate, as well as confusing teachers, early years practitioners and parents. This report uses international comparisons to contribute to discussion about how younger children in our primary schools might be educated. It does not take sides in a debate and certainly does not recommend a return to some mythical golden age of primary education. It simply describes what England might learn, particularly in terms of the curriculum, teaching and learning, from Denmark and Finland.

155 In considering what is appropriate for six year olds in England, the background to current educational policy needs to be recalled. The National Curriculum in 1989 and the two National Strategies in 1998 and 1999 were triggered by objective evidence from inspection and testing that too many pupils were not achieving their potential. Contrasts in approaches need to be considered, therefore, within those wider historical and educational contexts. It is hoped that this report will be useful in the context of the debate about the future character of primary and early years education, to which the government's 2003 Primary Strategy also aims to contribute.

Annexes

Annex A. Three national systems

England

There are 11 years of compulsory education in England. Children are required to start school in the term following their fifth birthday, although the majority begin school a year earlier: 80% of all four year olds attend state-maintained nursery and primary schools and the remainder attend private or voluntary settings.

Education for children 3–11 is organised into three stages: the Foundation Stage (3–5), Key Stage 1 (6–7) and Key Stage 2 (7–11). Almost 70% of three year olds attend maintained, voluntary or private settings, usually part-time. By September 2004, there will be a free part-time early education place for every three year old.

The majority of primary schools provide education for children aged 4–11. The maximum class size for children aged 4–7 is 30. Most of these classes are supported by a teaching assistant for at least part of the week. Children with a statement of special educational need receive additional support.

The curriculum and assessment

The 1988 Education Reform Act introduced a statutory national curriculum. For primary schools this comprises ten subjects in addition to religious education: English, mathematics, science, geography, history, design and technology, information and communication technology, art and design, music and physical education. The National Curriculum and religious education are compulsory from Year 1.

Before 2000, children aged five also followed the National Curriculum, but in 2000, the government introduced a curriculum for the Foundation Stage for children aged 3–5. This consists of six 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.

Central control over the curriculum was increased further in the late 1990s with the implementation of the National Literacy and National Numeracy Strategies (NLNS) in primary schools. Although the strategies were not statutory, they offered suggestions for not only the content of what should be taught but also the teaching methods. Government publications set out the detailed content and methods for teaching different aspects of reading, writing and number.

The outcomes are assessed by national tests taken by all pupils at the ages of seven (in English and mathematics), eleven and fourteen (English, mathematics and science). The results of these tests for all schools are published. Parents are able to use them in selecting schools for their children, but the results also form part of a broader framework of accountability to the public.

From June 2003 all schools and other settings providing funded education for five-year-old children are required to make detailed judgements about each child's progress and to report their judgements to the local education authority in the form of individual scores.

Accountability

Throughout the 1980s and 1990s, there was radical reform of every aspect of education including the curriculum and assessment, the appraisal of teachers' performance, teachers' conditions of service, school funding and teacher training. The reforms were monitored through an expanded inspectorate, the Office for Standards in Education (Ofsted), a government department established in 1992.

Ofsted inspects and reports on all schools on a four- to six-year cycle and publishes the inspection reports. Schools that fail to provide a satisfactory education for pupils are inspected more frequently and the weakest are monitored closely until they reach the required standard. These schools receive substantial financial and professional support. If, despite these measures, a school still fails to meet the required standard, it is closed and its pupils are offered alternative schools.

Ofsted also inspects local education authorities, registers and inspects the provision of childcare, and inspects teacher training.

Teacher training

To meet an acute shortage of teachers, the government has encouraged diverse training routes, including those based entirely in school, part-time courses and distance learning, although the two most common are the four-year undergraduate and the one-year (38 weeks) postgraduate courses. Entry requirements have also been made more flexible, although national standards must be met by all trainees at the end of training. For those intending to teach in primary schools, courses cover the age ranges 3–7 or 5–11; trainees who intend to teach six-year-old children can opt for either.

All training is provided in partnership with schools which are funded to allow them to carry out their teacher training responsibilities. Trainees on the 38-week postgraduate route spend 50% of their time working in school while those on the four-year route spend 25% of the time in school. There are blocks of school experience in each year of undergraduate courses.

The government regulates the selection of trainees, the time spent on practical teaching during training, the content of courses and the national standards that trainees must achieve to be awarded qualified teacher status. All providers of teacher training are inspected by Ofsted.

At present there is no national qualification for teaching assistants. With the exception of qualified nursery nurses, the majority of teaching assistants have no formal qualifications, although many are highly experienced and have attended short courses for particular purposes. There is a considerable discrepancy between the salaries of teachers and teaching assistants, many of the latter being paid at the minimum wage. In 2003 the government

announced new measures to recruit more teaching assistants so that, by 2004, there will be almost as many teaching assistants as teachers. Training will be provided for different levels of responsibility, including teaching the whole class.

Denmark

There are nine years of compulsory education in Denmark which start at the age of seven. There are three different types of settings for children under seven: day nurseries (up to the age of 3), kindergartens (3–7) and pre-school classes (6–7). About 90% of children attend kindergartens and 98% of six year olds attend a pre-school class known as a *børnehaverklasse*. These are attached to a *folkeskoler* which provides education for pupils aged 7–16. Some five year olds may be allowed to attend the pre-school class if they are judged to be mature enough. A small proportion of pupils, about 15%, attend private schools which are heavily subsidised by the state.

The pre-school classes prepare children for compulsory schooling and are the responsibility of the National Ministry of Education, unlike the other pre-school settings which are open all day, all the year round, and are the responsibility of the National Ministry of Social Affairs. Teaching is largely by *pædagoger* who complete the educator training programme. They are not qualified teachers, but they have the title of *børnehaverklasseleder* ('kindergarten class leader' but often translated into English as 'pre-school class teacher').

The integration of children with disabilities into mainstream settings and schools is official policy.

The curriculum and assessment

Statutory national guidelines for the pre-school curriculum will take effect from August 2003, alongside revisions to the *folkeskoler* curriculum. The new guidelines will continue to emphasise play, personal and interpersonal development and learning. There will be statutory national minima for the number of hours taught per year in the pre-school class and the *folkeskoler* itself.

The central guidelines for the pre-school classes will include the teaching of pre-reading skills and 'emergent reading and writing' which will complement existing non-statutory national guidelines on activities to promote play, personal and social development and preparation for school – a major function of pre-school classes. Municipalities are required to adapt the national guidelines into local guidelines and schools are expected, in turn, to adapt these as they see fit.

In the *folkeskoler*, there are curriculum guidelines with compulsory subjects and topics. The core curriculum for the first two years comprises: Danish, mathematics, Christian studies, physical education, music, creative arts, science and topics on traffic safety, sex education, health and family and vocational education. Thereafter, compulsory subjects are introduced gradually, including English from the age of 11. From the age of 13, pupils choose from a number of options.

There are few external assessments or formal examinations until the end of compulsory education.

Accountability

Decentralisation is embedded in both the culture and politics. There are 235 municipalities which have considerable autonomy to interpret central government guidelines. Municipalities collect only statistical information about schools, teachers and pupils, and there is no inspection system. The Danish Evaluation Institute focuses firmly on evaluation not research. Danish teachers have a great deal of autonomy and the observation and monitoring of teachers are virtually unknown.

Teacher training

There is no specific training to teach in the pre-school class. Those who undergo a three-and-a-half-year training programme and who work in a pre-school class are *pædagoger*, but the term *børnehaveklasseleder* (kindergarten class leader) describes their role. From this year, they will be awarded a Bachelor's degree. The training is generic and prepares students to work in childcare centres, as youth workers, with people with learning difficulties and with the elderly. There is no specialisation and those who become pre-school teachers do not necessarily have placements in pre-school classes. The training does not cover how to teach young children or the teaching of early literacy or numeracy and is mainly focused on the creative arts. The *pædagoger* have similar status and pay to teachers.

Students training to teach in the *folkeskoler* train for four years and study four main subjects. The first two years of training provide basic courses in the subjects of the *folkeskoler* curriculum and educational theory. This is followed by more specialised study of their chosen subjects and educational theory. About 10% of the time is spent on school experience in the first two years and 15% in the final two years. New teachers serve a three-month probationary period and are observed during this time.

Other factors

Differentiation on the basis of pupils' ability has been prohibited until now, but the new statutory guidelines will allow it from the first grade of the *folkeskoler*. Danish parents have not accepted any form of setting or streaming until now. Differentiation has to be met through the teaching and, even under the new regulations, it will only be permitted for short periods and in particular circumstances.

There is a concern about schools with very high proportions of minority ethnic pupils, and measures are being taken in some areas to distribute such pupils more evenly between schools to promote integration. Since 1998 it has been mandatory for municipalities to provide additional language support for bilingual children.

Finland

In Finland, compulsory education starts in the year that a child becomes seven years of age and ends when the syllabus of basic education has been completed or after 10 years from the beginning of compulsory education. Basic education for pupils aged 7–16 is in comprehensive schools with upper secondary education provided separately for pupils aged 16–19.

Every child under school age has a right to day care provided by the local authority. The settings include combined day-care centres (kindergartens) which comprise 63% of publicly funded places, family day-care settings organised by childminders, childminders' homes, drop-in centres for children cared for at home, playgroups run by the Lutheran Church and mobile kindergartens in rural areas. Fees are based on parental income and the number of children. Day-care centres open from early morning until the evening throughout the year.

Since August 2001, every child has been entitled to free pre-school education, although it is not compulsory. It generally begins one year before the start of compulsory education, in the year the child turns six. Pre-school education is attended by 94% of all six year olds: 15% of it is provided in comprehensive schools and the remaining 85% in day-care centres. Pre-school education in comprehensive schools can take place in a separate pre-school class or in a combined class.

The maximum pre-school class size is 20. There is an additional assistant if there are more than 13 children in the class. Children with special educational needs or those who are not Finnish speakers are counted as the equivalent of two children. The integration of children with special educational needs into mainstream education is official policy and there is strong multi-agency support for them.

The curriculum and assessment

Pre-school education is provided in pre-school classes in day-care settings or, in a minority of cases, in classes attached to comprehensive schools. Its objective is to build a bridge between day care and compulsory schooling by preparing children for school. It is quite distinct from early childhood education which precedes pre-school education. There is no prescribed curriculum for early childhood education.

The reform of pre-school education in 2000 was followed two years later by the curricular reform of the first two years of basic education. The aim was to integrate pre-school education and Grades 1 and 2 of basic education, based on early childhood education and care, to create a foundation for compulsory basic education.

From 1 August 2000, pre-school education has had to be organised in accordance with local guidelines prepared by the local authority and based on the guidelines of the national pre-school core curriculum. Each pre-school setting must follow the guidelines but has considerable autonomy in interpreting these to meet the needs of its own children.

The core curriculum does not specify subjects but rather 'subject fields' of language and communication, mathematical concepts, nature and the environment, religion, ethics, physical

education, health and the arts. The content of the curriculum is identified in broad terms and local authorities are responsible for fleshing this out in terms of the experiences that must be provided for children.

Topics are studied holistically in the different subject fields. General learning outcomes are not specified, but personal goals for each child are identified. Teaching methods and activities have to be as varied and versatile as possible and methods that develop self-esteem and accustom children to teamwork are considered very important.

There is little external assessment or formal testing of pupils until the end of compulsory education. Informal tests for five-year-old children are completed in the kindergarten or by health workers in the child's home and the results passed on to the pre-school class. In most parts of Finland, teachers and parents complete a brief, summative assessment of each six-year-old child which, with the parents' consent, is passed on to the comprehensive school. More detailed assessments are made of children with learning difficulties and used to develop education plans for them. Finland has national guidelines for grading pupils' achievement, but pupils' effort and activity are also taken into account when the grades are decided.

There are no national targets. The learning outcomes of compulsory education are monitored by sample-based surveys. These are published at system level only, with schools' individual results being given only to the schools themselves. In recent years, more evidence of attainment has become available, mainly as a result of international comparative studies.

Accountability

Finland has a decentralised system of education. It has a population of 5.2 million, six provinces and 446 local municipal authorities which enjoy extensive autonomy. The size of the municipalities varies from 130 inhabitants to half a million. Each local municipal authority must provide pre-school education for at least 700 hours per year, equivalent to approximately 18 hours a week. The school year, the number of school days, the length of the day or the duration of periods of pre-school teaching are not centrally prescribed, however, but are partly the responsibility of municipalities.

Until the 1990s, the Finnish national core curriculum was detailed and textbooks were meticulously controlled, the goal being to ensure equality across schools and classrooms. In the 1990s, the national curriculum was decentralised and became more flexible and less detailed. Changes in Eastern Europe resulted in a significant shift towards decentralisation in all public services, including education, and the ending of a prescribed school curriculum and the inspection of schools. This trend is now being reversed, with greater government direction over the school curriculum.

There is no inspection system. Information about education is collected through statistics, feedback from parents and evaluation commissioned by the Board of Education and universities. The local municipal authority is responsible for ensuring that the pre-school curriculum is taught according to the law and that the school curriculum follows local guidelines.

Local authority officials do not observe teaching or examine individual teachers' planning or records. Monitoring is largely through discussion with the head and therefore information about the quality of teaching and learning is not readily available.

There is no national system of teacher appraisal. Teachers have a great deal of autonomy in pedagogical and curricular practices. They have far more say than their colleagues in other OECD countries, on average, in determining course content, establishing policies for the assessment of pupils, deciding what courses to offer and allocating budgets within the school.

Teacher training

In 1995, the non-graduate qualification of kindergarten teacher was replaced by the three-year Bachelor in Early Childhood Education degree. The degree focuses on practice and research, the ability to analyse the needs of children and families and to meet them through education. The content of the degree includes the subjects of the pre-school curriculum, child development and pedagogy. Work experience occurs in each year of training.

Non-graduate pre-school teachers who qualified before 1995 can update their qualification by completing 15–20 credits worth of studies, depending on their work experience, or by participating in school-based training that is not accredited but which focuses on recent and relevant research.

Kindergarten teachers can extend their education and training by completing a Master's degree. The latter requires four-and-a-half years' study and is the qualification of class teachers in comprehensive schools (7–16). Owing to fierce competition for places, only 10% of all applicants are admitted to universities to train as teachers. Where pre-school education is provided in conjunction with the first two years of comprehensive education, teachers must be qualified as class teachers.

Other factors

Finland is a largely homogeneous society with two official languages, Finnish (94%) and Swedish (6%). Other minorities are relatively small, but there are increasing numbers of immigrants, particularly from Russia, who do not speak either language.

Finnish society places a high value on literacy. The impact of parents' socio-economic background on pupils' performance is reported to be low and the differences among schools between different urban and rural areas and between regions are said to be small. The small differences between schools result in minimal tension around parental choice since schools have similar intakes.

Annex B. Methodology

Data sources

The three main data sources were documentation, interviews and classroom observation. The documentary evidence consisted of policy material from national governments and/or national agencies, local administrative agencies, together with school-level documentation in the form of prospectuses, curriculum guidelines, teachers' schemes and lesson plans, assessment proforma and examples of children's work.

From each school visited, the team compiled detailed records of interviews with the head, the teachers/*pædagog* whose lessons were observed, and a group of parents. To these were added observation records on the activities of the teacher, the class as a whole and, in greater detail still, two of its members selected at random.

This material was supplemented by oral and written responses from education officials to specific queries raised by the team.

The data were analysed manually.

National school and classroom samples

A sample of 12 primary schools, representing a range of size and socio-economic circumstances, was selected for the English part of the study. The LEA was chosen because its characteristics were similar to those of the municipalities to be visited in Finland and Denmark. Eight schools were chosen by local officials to represent provision for six year olds in Denmark and eight in Finland, although, in the event, it was not possible to visit one of the Danish schools. The team worked in pairs, which changed each day, spending a full day in each school. Specially designed observation schedules were used systematically to observe and record the activities of adults and children during the two sessions in each school, and, in greater detail, the activities of one boy and one girl from each class visited. In all, 54 sessions were observed, mainly literacy and numeracy, in addition to small numbers of lessons in physical education, art, science, music and history. In each setting the team held discussions with the head, the class teacher and a sample of parents.

Piloting

The interview and observation procedures were piloted in each country, using the same LEA/municipality as in the main study, but different schools. Piloting took place during June 2002 in England, in October (Denmark) and November (Finland), after which modifications were made to the study's instruments and procedures as necessary. The study proper took place during March 2003.

Interviews

All interviews were conducted in pairs, using schedules specially devised and piloted for the purpose. One member of the team posed the questions while the other recorded the responses on a copy of the interview schedule. In Denmark and Finland, the team were supported by interpreters for both the interviews and the classroom observation. The interviews were conducted in accordance with open-ended questions set out on the schedules. Each schedule was headed by a proforma for basic factual information.

The head interviews covered the following themes: *context* (school environment, children's background); *the institution* (organisation of building, children and staff, professional roles and responsibilities); *goals and values* (the institution's philosophy and aims, its views of children's needs and ways of learning); *curriculum* (scope, priorities, position of literacy and numeracy, prescription/control/consultation); *continuity and coherence* (between this setting and those to which children go before and after it, effect of current reforms on continuity and coherence); *training* (teachers' initial training, in-service/CPD provision for teachers and other adults); *teaching* (preferred forms of classroom organisation and teaching, monitoring and quality assurance); *assessment, recording and reporting* (main kinds of formative and summative assessment and their uses within and outside the class, reporting to parents, transfer of records between classes and schools, involvement of children and parents in the assessment process); *parents* (expectations of the school, involvement in the school's work); *other issues raised by the interviewee or interviewers*.

The teacher interviews included: *training and qualifications* (nature and appropriateness of pre-service training, nature and appropriateness of in-service training, especially in relation to recent reforms); *the class* (the children, their organisation, the learning environment, children with specific needs, division of labour between teacher and other adults); *continuity and coherence* (building on what precedes this year, records to and from this class, effect of recent policies); *curriculum* (scope and priorities, language and literacy, continuity and progression); *planning and timetabling* (kinds of long/medium/short-term planning, organisation of the year, week and day, external monitoring of planning); *teaching* (methods used, sources of ideas about teaching, constraints on preferred ways of teaching, monitoring of teaching); *assessment* (kinds of formative and summative assessment used, uses to which they are put); *parental involvement* (before children's entry to the class, in planning, in assessment, in reinforcing school work at home, in the classroom); *other issues raised by the interviewee or interviewers*. The teacher interviews always took place after the observation sessions so that the interviewers could relate their questions to specific circumstances and events.

The parent interviews were conducted with groups of parents, so they took the form more of discussions than formal interviews. The themes covered were: *parents' expectations of their six year olds' schooling* (especially the relative importance of personal/social/affective education and basic skills in literacy and numeracy); *perceived representativeness of their views*; *degree to which the setting meets their expectations, and reasons if it does not*; *children's previous educational experiences*; *adequacy of this setting's preparation of children for the next stage of education*; *extent and manner of consultation between the setting and parents on the purposes, content and methods of provision for six year olds*; *other issues raised by the interviewees or interviewers*.

Classroom observation

The classroom observation deployed a modified form of procedures and schedules which had been used in two separate research studies undertaken by the study's consultant, one in the UK, and one in the UK and four other countries. In each school, two lessons/teaching sessions were observed from beginning to end by pairs of observers. One focused on the teaching as a whole and the other on two randomly selected children, one boy and one girl. The identity of the two children was not known by the teacher, although the teacher was consulted before the observation session to ensure that target children did not include individuals whom the teacher perceived as having serious learning, behavioural or social difficulties. Where possible, the observation continued into periods of play before and after the specific lessons observed. Entries on the observation schedules were made in longhand, for manual analysis.

For the **observation of teaching**, observer 1 first entered on the teaching observation schedule basic information about the setting, the teacher and other adults present, the children, and the focus, goals and content of the session to be observed. He/she then drew a sketch plan of the room, showing seating/grouping arrangements and the location and kinds of resources and visual materials. The observation itself used an event-sampling technique which required a note to be made at every point when there was a change in the task or activity set, or in the actions of the adults and/or children present. The time of each schedule entry was logged, as were, under separate headings, the *task/activity* at the time of the entry, the actions of each *adult* present, and of the *children* as a whole. The schedule also contained a space for *comments and queries* about each entry for subsequent use (for example, in the teacher interviews).

The **child observation** used a different technique, that of time-sampling. Here, observer 2 recorded in detail all the actions of the first target child for a five-minute period before switching to the second target child for five minutes, then back to the first and so on throughout the lesson. Observations were recorded under the headings of *time, child, task, activity, interaction* and *engagement*, with a further column for *comments and queries* as in the teaching observation schedule.

As soon as possible after the observed lesson, the two observers jointly completed an **observation summary form** which, in essence, provided the first stage of the observation data analysis. The form invited description and comment under the following headings: *setting layout, organisation and resources, session structure and sequence, learning tasks, teaching/learning activities, time and pace, interaction, assessment and feedback, routines and rituals, children's engagement and behaviour, adult roles*. The headings, most of which were followed by a series of subheadings, were derived from a model for the holistic analysis of teaching developed for an international comparative research project by this study's consultant. At the end of the observation summary form, the observers were invited to offer an assessment of the session as a whole and identify any issues, comment or queries which they wished to refer to the teacher or the study team.

Consistency and moderation

The pilot study was used to familiarise and train the team as well as to help refine the procedures. As in the main study, all school visits were undertaken in pairs, and pairs switched between procedures (interviewing/recording, observing teaching/observing children) to ensure absolute procedural familiarity. The schedules were accompanied by a key defining the operational meanings of all the terms used on the various schedules (for terms like 'task', 'activity', 'interaction' or 'engagement' can mean different things to different people), and care was taken to ensure shared understanding of these.

For both the pilot and the main study, school visit pairings were changed daily to enable each member of the team to work with each of the others and so to maximise the consistency with which the various procedures were used.

The fieldwork in England was undertaken by the entire team of seven inspectors, one LEA adviser and one consultant. For logistical reasons, this was not possible in Denmark and Finland and there the team split into two groups of four. However, to consolidate the study's comparative element and to moderate for methodological consistency, three team members worked in both of these countries: two for the pilot, and one (the consultant) during the main study.

